UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT

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TRADE AND DEVELOPMENT REPORT 2019

FINANCING A GLOBAL GREEN NEW DEAL

UNITED NATIONS

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FINANCING A GLOBAL GREEN NEW DEAL

Report by the secretariat of the
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Foreword

The deep and widespread economic and social damage caused by the global financial crisis has been followed, in most advanced economies, by a decade of austerity, sluggish productivity growth and stagnant real wages. Growth has also slowed in most developing countries, albeit with considerable variation across regions. The struggle to create good jobs has intensified, with rapid urbanization, premature deindustrialization and rural stagnation accompanying rising inequality and growing political tensions.

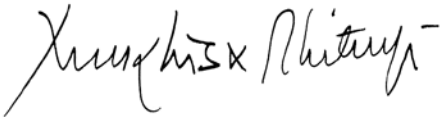
Everywhere, anxiety over the prospect of increasing economic insecurity is compounded by the impending threat of environmental breakdown. The Intergovernmental Panel on Climate Change has recently raised the stakes by starting the clock on a climate meltdown; but a shortening time horizon is just part of a growing recognition of a wider and deeper ecological crisis.

Efforts to address these challenges have aligned around a series of goals and targets, which the international community agreed in 2015, to ensure an inclusive and sustainable future for all people and the planet. But with little more than a decade left to achieve Agenda 2030, meeting these goals has already fallen behind schedule and there is broad agreement that what is now required is a coordinated investment push on an unprecedented scale and across the entire global commons. The financing numbers are daunting, from "billons to trillions", requiring an additional 2.5 trillion dollars a year, just in developing countries, on UNCTAD estimates.

A decade ago at the G20 gathering in London, the world's major economies came together to stem the global financial panic triggered by the collapse of the sub-prime mortgage market in the United States and to establish a more stable growth path going forward. Their talk of a fresh start was an acknowledgement that the existing multilateral system had failed to provide both the resources and the coordination needed to underpin stable markets and a healthy investment climate.

A decade on, that effort has stalled, leaving those tasked with meeting the SDGs wondering whether the multilateral system is fit for purpose. Their concern is compounded by the deteriorating state of the global economy. Increased disagreements over trade rules, currency movements and technology flows are fostering uncertainty and instability, draining trust from the multilateral system at the very moment consensus and coordination are key to scaling up the resources needed to meet the massive economic, social and environmental challenges we all face.

This year's Trade and Development Report suggests that meeting the financing demands of the Agenda 2030 requires rebuilding multilateralism around the idea of a Global Green New Deal, and pursuing a financial future very different from the recent past. The place to begin building such a future is with a serious discussion of public financing options, as part of a wider process of repairing the social contract on which inclusive and sustainable outcomes can emerge and from which private finance can be engaged on more socially productive terms.



Mukhisa Kituyi
Secretary-General of UNCTAD

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Classification by country or commodity group

The classification of countries in this *Report* has been adopted solely for the purposes of statistical or analytical convenience and does not necessarily imply any judgement concerning the stage of development of a particular country or area.

There is no established convention for the designation of "developing", "transition" and "developed" countries or areas in the United Nations system. This *Report* follows the classification as defined in the *UNCTAD Handbook of Statistics 2018* (United Nations publication, Sales No. E.19.II.D.1) for these three major country groupings (see https://unctad.org/en/PublicationsLibrary/tdstat43_en.pdf).

For statistical purposes, regional groupings and classifications by commodity group used in this *Report* follow generally those employed in the *UNCTAD Handbook of Statistics 2018* unless otherwise stated. The data for China do not include those for Hong Kong Special Administrative Region (Hong Kong SAR), Macao Special Administrative Region (Macao SAR) and Taiwan Province of China.

The terms "country" / "economy" refer, as appropriate, also to territories or areas.

References to "Latin America" in the text or tables include the Caribbean countries unless otherwise indicated.

References to "sub-Saharan Africa" in the text or tables include South Africa unless otherwise indicated.

Other notes

References in the text to *TDR* are to the *Trade and Development Report* (of a particular year). For example, *TDR 2018* refers to *Trade and Development Report 2018* (United Nations publication, Sales No. E.18.II.D.7).

References in the text to the United States are to the United States of America and those to the United Kingdom are to the United Kingdom of Great Britain and Northern Ireland.

The term "dollar" ($) refers to United States dollars, unless otherwise stated.

The term "billion" signifies 1,000 million.

The term "trillion" signifies 1,000,000 million.

The term "tons" refers to metric tons.

Annual rates of growth and change refer to compound rates.

Exports are valued FOB and imports CIF, unless otherwise specified.

Use of a dash (–) between dates representing years, e.g. 2016–2018, signifies the full period involved, including the initial and final years.

An oblique stroke (/) between two years, e.g. 2017/18, signifies a fiscal or crop year.

A dot (.) in a table indicates that the item is not applicable.

Two dots (..) in a table indicate that the data are not available, or are not separately reported.

A dash (–) or a zero (0) in a table indicates that the amount is nil or negligible.

Decimals and percentages do not necessarily add up to totals because of rounding.

Abbreviations

ADB	Asian Development Bank
AIIB	Asian Infrastructure Investment Bank
ASEAN+3	Association of Southeast Asian Nations plus Japan, the Republic of Korea and China
BDEAC	Banque de Développement des Etats de L'Afrique Centrale / Central African States Development Bank
BEPS	Base Erosion and Profit Shifting
BIS	Bank for International Settlements
BOAD	West African Development Bank
BRICS	Brazil, Russian Federation, India, China and South Africa
CAF	Corporación Andina de Fomento / Development Bank of Latin America
CDB	China Development Bank
CRAs	Credit-rating agencies
DBSA	Development Bank of Southern Africa
DRM	domestic resource mobilization
EADB	East African Development Bank
ECB	European Central Bank
EFM	Emerging and Frontier Markets
EPG-GFG	Eminent Persons Group on Global Financial Governance
FDI	foreign direct investment
FfD	financing for development
G20	Group of Twenty
GDP	gross domestic product
GFC	global financial crisis
GHG	greenhouse gas
GST	goods and services taxes
HICs	high-income developing countries
IFFs	illicit financial flows
IFIs	international financial institutions
IMF	International Monetary Fund
KDB	Korean Development Bank
LICs	low-income countries
LMICs	lower-middle-income countries
MDBs	multilateral development banks
MICs	middle-income developing countries
MMT	modern monetary theory
MNEs	multinational enterprises
NDBs	national development banks
NFA	net foreign asset
ODA	official development assistance
OECD	Organisation of Economic Co-operation and Development
OPEC	Organization of the Petroleum Exporting Countries
PNG	private non-guaranteed debt
PPG	public and publicly guaranteed debt
PPP	public–private partnership
ppp	purchasing power parity
R&D	research and development
SDGs	Sustainable Development Goals
SDR	special drawing rights
SDRMs	sovereign debt restructuring mechanisms

SMEs	small and medium enterprises
SWF	sovereign wealth fund
TDB	Trade and Development Bank
UMICs	upper-middle-income countries
VAT	value added tax
WTO	World Trade Organization

OVERVIEW

Seventy-five years ago, in the cool mountains of New Hampshire, the international community came together to forge a new world order with one central aim: to constrain financial markets and empower states in their place. The immediate goals of the Bretton Woods institutions were to deliver full employment, keep trade flowing, regulate speculative capital and prevent imported deflation. The system would promote policy coordination in support of global economic stability and discourage beggar-thy-neighbour policies that could upset that stability, while leaving policy space for sovereign states to pursue their national priorities.

Forty years ago, market forces struck back. From the early 1970s, a series of hard economic hits unsettled the post-war policy consensus and triggered political strife. As the decade came to a close, a newly elected British prime minister promised to bring harmony and hope by freeing markets and releasing entrepreneurial energies; and to emphasize that doing so would require a clean break with the Bretton Woods era she instructed her Cabinet colleagues to brush up on Friedrich Hayek's The Constitution of Liberty.

Mrs. Thatcher was joined six months later by a kindred spirit in Washington who – less attuned to the ruminations of the Austrian school of economists – succinctly captured the shifting ideological mood by proclaiming that "government is not the solution to the problem, government is the problem".

A coterie of academics and think tanks, on both sides of the Atlantic, were ready at hand with market-friendly policies for every economic problem, both real and imagined. Theirs was a simple message: that everything had a price and, if markets were free to determine that price, prosperity and social harmony would follow.

The debt crisis of the early 1980s provided an opportunity to spread the message to the developing world, joined shortly thereafter by the collapsing centrally planned economies of Eastern Europe. The attrition of the public realm went global.

But while economic ideas were the spark plug of the neo-liberal project, the newly liberated financial sector was its engine. Setting capital free from the constraints of government regulation and oversight opened up rent-seeking opportunities for an energized banking sector, while a new set of trade rules (covering financial services, investment and intellectual property rights) extended greater protection to footloose capital.

Alan Greenspan, a one-time disciple of neo-liberal scribbler Ayn Rand, had no doubt that the expansion of cross-border finance along with a new generation of innovative financial products would turbocharge the global economy by improving the worldwide allocation of scarce capital, unbundling and dispersing risk and boosting hedging opportunities. This was, he claimed, Adam Smith's invisible hand working at the international level; "unregulated global markets do clear" he opined and, "with rare exceptions, appear to move effortlessly from one state of equilibrium to another".

Things did not turn out quite as smoothly as Greenspan anticipated. Booms and busts punctuated the economic landscape, culminating, in 2008, in the deepest economic crisis since the 1930s, and revealing the darker side of a world driven by private credit creation, underregulated banks and financial chicanery.

With markets in freefall, government, it turned out, really was the solution to the problem. And both separately and collectively (through the G20) they threw resources at the problem on an unprecedented scale; financial institutions were saved, markets stabilized and economies righted. In high policy circles, the era of financial greed was pronounced over and a new set of priorities was promised to tackle the inequities and insecurities of rampant hyperglobalization.

The international community has responded with a set of ambitious and transformative goals, and an exacting delivery date of 2030. But in a dramatic reversal of fortune, the overlords of mass financial destruction are now being asked to avert the threat of mass environmental destruction.

Money still talks but governments apparently have lost their voice. Rather, tapping the hearts, minds and wallets of the moneyed elite – whether through a sense of corporate social responsibility or impact investment or financial innovation – is deemed the only way to deliver the big investment projects that are required for a more inclusive and sustainable future. Everything, it seems, has had to change, for things to stay as they were.

This is not only wishful economic thinking; it is, if history is any guide, a recipe for making the world less inclusive and less sustainable. The way to deliver the public goods we need to achieve the Sustainable Development Goals (SDGs) by 2030 is to create a healthy, democratic and inclusive public realm at the global as well as the national level.

Much as it was for the architects of Bretton Woods, restoring "faith in the wisdom and the power of Government" needs to be the first order of business of the international community. But this can't be framed simply as a return to the Bretton Woods era. The original project had too many flaws of its own; it was run as a rich man's club that widened technological gaps, failed to address unequal trade relations, tolerated wasteful military spending and was indifferent to environmental pressures.

If we want to reverse the polarization of income within and across countries, create a stable financial system that serves the productive economy, mitigate the threats and seize the opportunities associated with new technologies, and undertake massive investments in clean energy, transportation and food systems, we need a Global Green New Deal.

Good times, bad times

Prospects for the global economy are currently shrouded in a fog of international trade tensions and geopolitical disputes. But, the bigger story a decade after the G20 stepped in to contain panic in markets and salvage a battered financial system, is that growth has failed to find a firm footing.

The United States is in its longest recovery on record but it is also one of the weakest, and the impact on incomes has been subdued. The pick-up since the 2017 tax cut is fading, with little sign of the promised investment boom. Elsewhere in the developed world, the pick-up has been even more short-lived. The eurozone is slipping back towards stagnation, with the German economy showing clear signs of fatigue; and while Brexit is an unwanted distraction for the entire European economy, the United Kingdom looks set for a particularly traumatizing 2019.

There is a good deal of speculation that recessionary winds will blow the advanced economies, and with them the global economy, off course in 2020. Monetary normalization has already been put on hold by leading central banks but there are growing concerns that even another round of quantitative easing will fail to provide the needed boost to overall demand.

Whether or not pushing down on the monetary accelerator would again help emerging economies is also an open question. The slowdown this year, 2019, is apparent across all developing regions, with Latin America particularly hard hit. Talk of "decoupling" and "convergence" which briefly united the chattering and investor classes after the global financial crisis (GFC), as developing (including so-called emerging) economies bounced back quickly, has gone quiet. The BRICS economies, which as a group saw average annual growth over 10 per cent immediately after the GFC, grew at 6.3 per cent last year.

With debt levels higher than ever across the developing world, totalling around $67 trillion, keeping interest rates on hold would ease servicing pressures. But financial markets are fickle and under the wrong circumstances can turn feral; against a backdrop of rising uncertainty and investor anxiety, a flight from emerging markets to the relative safety of the United States could still trigger a self-reinforcing deflationary spiral.

Not surprisingly, policymakers everywhere are scanning the horizon for possible shocks. Heightened trade tensions are one likely source of increased friction. Trade has stalled with the weakening of global demand; growth in the first quarter of 2019 relative to the corresponding quarter of 2018 is estimated at just 0.4 per cent. Unilateral tariff increases by the United States, which began in early 2018 on specific products and have subsequently been extended on a broader range of imports from China, have not helped. Retaliation has followed in a number of countries. While the impact to date has been contained, a resumption of tit-for-tat tariff increases could prove very costly if combined with a further slowdown in investment.

There are other dangerous currents beneath these already troubled economic waters. There is a growing awareness that the dispute between the United States and China is less about tariffs and more about the technological ambitions of a middle-income developing country. Accessing foreign technology helped today's advanced economies climb the development ladder and efforts to kick that ladder away by further reducing their policy space will face resistance from developing countries. This could add to the already diminished levels of trust in the multilateral system, with further damage to global economic prospects.

Currency movements are adding to the sense of economic anxiety. These have become much more volatile in the era of hyperglobalization with the financialization of currency markets. The Morgan Stanley Emerging Market Currency Index rose significantly at the beginning of 2019 but fell sharply between mid-April and late May, only to climb again thereafter. Three factors are behind this volatility: sharp fluctuations in crisis-hit countries such as Argentina and Turkey; the volatility of capital flows to emerging markets resulting from policy uncertainty in the developed countries and weaker growth prospects in emerging markets; and more generalized pressure from the United States Administration to keep the dollar "competitive". In an international financial system still heavily dependent on a predictable role for the dollar, turning that role – long recognized as an "exorbitant privilege" – into a source of economic ordnance could bring more destabilizing consequences. An immediate worry for many developing countries is that any sharp loss of confidence in their own currency coming after a rapid increase in external debt could expose them to much deeper deflationary pressures, as has already occurred in Argentina and Turkey.

Commodity markets have been on a rollercoaster ride since the financial crisis; these are now in a softer phase, with prices well below post-crisis highs. While depressed demand underlies the absence of price buoyancy in many commodity markets in recent months, medium-term volatility has been influenced by the wide fluctuations in oil prices, by the financialization of commodity markets and by the concentration of market power in a small number of international trading companies.

The UNCTAD commodity price index fell from 134 in October 2018 to 112 in December that year, and since then has risen to reach a level in the neighbourhood of 120. Fuel prices drove the fall in the index in the last quarter of 2018, with the index of fuel prices falling from 149 in October to 115 in December. The subsequent recovery has been partially on account of higher oil prices affected by sanctions on Iran and partially because of mild buoyancy in the prices of minerals, ores and metals.

A spluttering North, a general slowdown in the South and rising levels of debt everywhere are hanging ominously over the global economy; these, combined with increased market volatility, a fractured multilateral system and mounting uncertainty, are framing the immediate policy challenge. The macroeconomic policy stance adopted to date has been lopsided and insufficiently coordinated to give a sustained boost to aggregate demand, with adjustments left to the vagaries of the market through a mixture of cost-cutting and liberalization measures. Ephemeral growth spurts and financial volatility have been the predictable results. But there are deeper challenges ahead that are truly daunting for people and the planet.

Sign o' the times

Financial insecurity, economic polarization and environmental degradation have become hallmarks of the hyperglobalization era. These are, moreover, closely interconnected and mutually reinforcing, in ways that can give rise to vicious cycles of economic, social and environmental breakdown.

This threat coincides with a worrying erosion of political trust, as income gaps have widened across all countries and the policy agenda perceived as catering to the interests of the winners from hyperglobalization, with scant attention paid to those who have seen limited gains or have fallen further behind. Even after the GFC, the rules of the game that had generated high levels of inequality, insecurity and indebtedness prior to that crisis have remained largely intact, adding further layers of resentment, often aimed against outsiders, and widening political divisions. This breakdown in trust has occurred at the very moment the collective actions needed to build a better future for all depend on a greater sense of shared responsibility and solidarity.

The SDGs, agreed at the United Nations in 2015, were designed as a guide to that future. But with their delivery – planned for 2030 –already behind schedule, frustration is growing across different policy communities and at all levels of development. The perceived problem is a shortage of finance to achieve the scaling-up of investments on which the 2030 Agenda ultimately depends. With government finances burdened by increased debt levels and a fractured politics impeding long-term planning, pushing the financial envelope from billions to trillions of dollars each year will, it is claimed, have to rely on tapping the resources of high-wealth individuals and private financial institutions.

At first glance the signs are encouraging. Global corporations are sitting on an estimated $2 trillion cash pile, while high net worth individuals have access to more than $60 trillion in assets. The OECD estimates that institutional investors in member countries hold global assets of US$92.6 trillion and while figures for institutional investors in developing countries are harder to come by, estimates for the assets held by Brazilian pension funds exceed $220 billion and some $350 billion for combined African pension funds. Redirecting a relatively small portion of these resources to meet the SDGs should, the argument goes, be able to solve the financing challenge facing the 2030 Agenda.

A string of measures, marshalled under the call to "blend" and "maximize" finance, have been proposed that would channel public money into "de-risking" big investment projects while employing securitization and hedging techniques to bring in the private investors. If only things were that simple; the evidence suggests that blended finance fails to mitigate risk and instead boomerangs back to the public purse and the tax payer.

In fact, vast amounts of public resources have already been used to save banks (and other financial institutions) that proved too big to fail after employing these same techniques to indulge a frenzy of speculative activity in the run-up to the financial crisis. Moreover, underpinning the vast trove of private assets is a tangled web of financial funds and debt instruments. Channelling a portion of these assets into long-term productive investment, whether in the public or private sectors, is not a matter of appealing to the better nature of those managing such funds nor establishing a more welcoming environment in which they can do business.

In reality, too many governments, at all levels, have for decades been extending incentives and protections to international finance in the hope of boosting capital formation. Instead, they have been sucked in to an unstable financial world geared to short-term trading in existing assets, prone to boom and bust cycles, with baleful distributional outcomes and large debt overhangs that act as a persistent drag on the real economy. Re-engineering financial stocks and flows to support productive investments (whether private or public) will not happen without a fundamental change in the rules of the game.

The current global economic environment – where austerity is the macroeconomic default option, liberalization the favoured policy tool for affecting structural change and debt the main engine of growth – is heading in the wrong direction when it comes to delivering on the ambition of the 2030 Agenda. Accordingly, this year's

Report seeks to make an alternative case for delivering the 2030 Agenda through a Global Green New Deal with a leading role for the public sector.

A climate for change: The case for a global green expansion

Beyond the immediate risks that could stall the global economy are a series of macrostructural challenges that predate the GFC and have gone largely unattended since then. Four stand out because of their high degree of interdependence: the falling income share of labour; the erosion of public spending; the weakening of productive investment; and the unsustainable increases in carbon dioxide in the atmosphere.

International economic-policy gatherings, where fidelity to the virtues of open borders, capital mobility and market competition is often a condition of participation, have largely neglected these challenges. But if trends continue along current lines, the global economy in 2030 will have gone through another decade of substandard and unstable growth, income gaps within and across countries will have widened further and the natural environment will be stretched to breaking point.

As labour shares across the world continue to fall, household spending will weaken, further reducing the incentive to invest in productive activities. At a minimum, this will mean lacklustre job creation and stagnant wages in developed countries as well as slow expansion (or outright contraction) of domestic markets in developing countries. Both outcomes will worsen if governments keep promoting cuts to labour costs as their adjustment strategy of choice. Aggregate demand will be weakened further, as governments continue to reduce social protection and abstain from infrastructure investment, which will also make supply constraints tighter. Unchecked private credit creation and predatory financial practices will continue to fuel destabilizing financial transactions, while failing to stimulate private productive investment. In the meantime, absent sufficient investment and international agreement on technology transfer, carbon emissions will push the climate closer towards a point of no return.

Against these trends, it is critical for governments across the world to reclaim policy space and act to boost aggregate demand. To do so, they must tackle high levels of income inequality head on, adopting more progressive fiscal arrangements, and directly targeting social outcomes through employment creation, decent work programmes and expanded social insurance. But they must also spearhead a coordinated investment push, especially towards decarbonization of the economy, both by investing directly (through public sector entities) and by boosting private investment in more productive and sustainable economic activities.

The threat of global warming requires immediate action to reduce greenhouse gas emissions and stabilize the Earth's climate. Recent studies by the Intergovernmental Panel on Climate Change (IPCC) and the United States Global Change Research Program, among others, have made it clear that if we fail to change course, we are only a few decades away from disastrous climate-driven losses.

A successful response to the climate crisis will have multiple benefits, including environmental "co-benefits" such as cleaner air and oceans and forest reclamation. Less obvious, but also important, is the economic impact of climate policy. Climate protection requires a massive new wave of investment, reinventing energy and other carbon-emitting sectors. New low-carbon technologies must be created, installed and maintained on a global scale.

That wave of green investment would be a major source of income and employment growth, contributing to global macroeconomic recovery. Many, though not all, of the jobs created by green investment are inherently local to the area where investment occurs and involve training in new skills. Recent discussions call this strategy (in combination with high wages and standards, social services, and employment opportunities for all) the "Green New Deal" recalling the 1930s New Deal, which tackled unemployment and low wages, the predatory nature of finance, infrastructure gaps and regional inequalities, in the context of recovering from the Great Depression.

There are certainly numerous opportunities for investment in energy efficiency and renewable energy supply, many of them already cost-effective at today's prices and in new patterns of high-density, transit-centred urbanism. This implies new configurations of housing, work and public services, connected by more extensive mass transit. A full-scale transition to electric vehicles will also require a more extensive infrastructure of charging stations, and continued progress in reducing vehicle costs. New technologies, not yet commercialized, will be needed to complete the decarbonization of the global economy, along with new agricultural practices, tailored to minimize emissions. A just transition will also require big investments in communities that have become dependent on resource-intensive livelihoods.

Developing countries may face lower conversion costs as they are still building their energy systems. As a result, the available resource savings from clean energy may be greater in developing countries. Clean energy is of great potential value to developing countries for another reason. Delivering energy to remote communities via an urban-centred national grid, as is usually done in developed countries, entails the substantial expense of long-distance transmission lines. Developing countries may be able to move directly to more efficient microgrid systems without the sunk cost of running wires far into remote areas. Still, they will need technology transfers and significant financial support from the international community to make the transition.

Such an investment push requires governments to use all policy instruments at their disposal, including fiscal policies, industrial policies, credit provision, financial regulation and welfare policies, as well as international trade and investment policies. International coordination is critical to counteract the disruptive influence of capital mobility, contain current-account imbalances and support the transition to a low-carbon economy, especially in developing countries.

Strategies for sustainable development and economic growth can take a variety of paths but they must all correct current patterns of aggregate demand. Leveraging the multiplicative effects of government spending and higher labour incomes is a straightforward approach.

First, raising the shares of labour income towards the levels of a not-so-distant past can by itself lead to significantly faster growth (0.5 per cent annually on average) thereby also increasing capital incomes. This effect will be strongest if all or most countries act in a coordinated manner.

Second, a fiscal reflation financed by progressive tax increases and credit creation would boost growth even more, owing to fiscal multipliers in the range of 1.3 to 1.8 (or even higher if fiscal expansion takes place in many countries in a coordinated way). In particular, with many economies currently experiencing weak or insufficient demand, fiscal stimulus is likely to elicit a strong response of private investment.

Third, public investment in clean transport and energy systems is necessary to establish low-carbon growth paths and transform food production for the growing global population, as well as to address problems of pollution and environmental degradation more generally. This requires the design of appropriate industrial policies, using subsidies, tax incentives, loans and guarantees, as well as investments in R&D and a new generation of intellectual property and licensing laws.

Based on the existing estimates, an internationally coordinated policy package of redistribution, fiscal expansion and state-led investment can realistically yield growth rates of GDP in developed economies of at least 1 per cent above what could be expected without it. In developing economies other than China, growth rates will increase by about 1.5–2 per cent annually. China will have a more moderate acceleration as its growth axis bends towards the household, with lower growth rates than the earlier East Asian tiger economies experienced when they had the current per capita income of China.

By 2030, employment would increase above projections from current trends by approximately 20 million to 25 million jobs in developed countries and by more than 100 million jobs in developing countries (20 million to 30 million of which would be in China). These are conservative estimates that probably underestimate

the employment gains, because existing econometric estimates based on decades of job-shedding strategies cannot incorporate the potential of a globally coordinated strategy centred on state-led investment and social spending, the expansion of service employment and a new energy matrix.

Data on growth and employment as well as on environmental factors, suggest that bold efforts are necessary to achieve global growth and development that are sustainable economically, socially and environmentally. Estimates of multipliers for the world's 20 largest economies and the remaining regional blocs indicate that this is a matter of pragmatic policy choice, not of immutable financial constraints. A Global Green New Deal would require additional financial resources – for less than a decade – generated through a mixture of domestic resource mobilization and international cooperation agreements. Estimates also indicate that the growth impact of social spending is high in all countries, while progressive taxation has little or no cost in terms of growth, pointing to a future of higher labour incomes, lower inequality, stronger growth and a healthier environment that is available for policymakers to choose.

International coordination is key both to mobilizing the required resources and to expanding policy space to manage the changes involved. Today's economic and geopolitical tensions do not bode well in this respect. But it bears remembering that Franklin Delano Roosevelt called the founding of the International Labour Organization at the end of the First World War "a wild dream"; and wild dreamers are exactly what may be needed to deliver on the bold promises of the 2030 Agenda.

All dried up and drowning in debt

Finance is a matter of faith; and at the heart of that faith is credit – whose etymological origins lie in the Latin verb "to believe". History has demonstrated the effectiveness of credit in fostering economic development by financing investment supported by present and future income flows, rather than by pre-existing saving, leading to higher productivity and, in turn, increasing revenues from which the debt could be repaid. But there is a darker side to debt that carries a more cautionary tale and this poses a persistent challenge to policymakers.

Once banks got involved in the process of credit creation, its economic possibilities began to expand. Using deposits (and other short-term loans) to create longer-term loans has been a standard practice of banks for centuries. But even when existing assets, such as land or houses, can be mobilized as collateral to back borrowing to finance investment, maturity transformation is inherently risky. That has typically meant commercial banks restricting their credit activities to smaller-scale and more short-term lending. Large-scale and longer-term lending, particularly to governments and corporations, was traditionally left to more specialized institutions.

This entire system is founded on trust: that borrowers will honour their commitment to make good on future payments; that banks will honour their liabilities; and that the state will provide secure assets for banks to hold, monitor bank behaviour and discipline them if there is a breach of trust, and provide liquidity through the lender-of-last-resort facility in the event of unforeseen difficulties.

Managing debt thus involves a focus on banks as creators of credit, but also on a set of robust institutional practices that can help build trust between lenders and borrowers and can employ regulatory firewalls and disciplines that keep the system in check. In their absence, credit creation can drag the economy through damaging episodes of boom and bust and can embolden irresponsible or predatory behaviour of one kind or another. Critically, policies to generate sustainable and equitable growth by managing debt require a state with the fiscal capacity to issue and service its own debt, which can borrow directly from the central bank at varying maturities and can manage, to some degree, the inflow and outflow of capital. This further requires that the state's tax base expands with the productive opportunities being financed by credit and direct government expenditure. But the more open the economy and the more limited the domestic wealth base, the greater the constraint on government finances. Financial deregulation has a long history of undermining the trust on which a healthy system of credit depends and it has done so on every occasion by allowing an unchecked process of private credit creation. This time is no different. Since the 1980s, when deregulated

finance grabbed the reins of hyperglobalization, global debt has risen more than 13-fold from $16 trillion in 1980 to a staggering $213 trillion in 2017, dominated by private debt, which rose from $12 trillion to $145 trillion.

Rather than promoting productive and inclusive growth, private credit creation has been heavily concentrated in speculative activities, channelled through shadow-banking practices and leading to deeper income inequalities. While this rise of shadow banking is lionized in some quarters as an indication of the value of financial innovation, in practice these products have proved to be a source of instability. But, particularly when the purpose of credit is to purchase financial assets that in turn are used as collateral for further borrowing to purchase more financial assets, the greater concern is about financial instability, fuelled by speculative excess and the pursuit of assets of diminishing quality, followed by the inevitable defaults by borrowers and falling asset prices.

While these trends have raised alarm bells across international organizations, including UNCTAD, many proponents of the 2030 Agenda have nevertheless turned to private finance to fund the public goods and investment needed to deliver the SDGs. Simply put, without deep-seated reforms to the financial system, this will not do the job; the real question is how to make debt work better for development and its possible role in a Global Green New Deal.

Credit creation works when it is accompanied by long run relationships between the lender and the borrower, giving the former inside knowledge of what the latter is doing with the money and encouraging a degree of patience with the management of their debts but also allowing them to exert strategic pressure through their repayment. This is particularly the case when credit creation is used to support the kind of robust domestic profit–investment nexus that has been part of a successful structural transformation over time. By providing advance means of payment, thus purchasing power, the provision of credit backed by claims on future incomes frees current capital accumulation from the shackles of past saving and becomes a central vehicle to unlock future growth potential. But for credit to play this developmental role requires governance and regulatory structures of domestic and international credit creation that put the long-term requirements of structural transformation at the centre of their operations. This, in turn, necessitates that policymakers have the space to build appropriate public institutions to direct domestic credit creation towards productive investment, as well as sustained efforts by the international community to recover public control of the management of international credit and to redirect public finance towards development-friendly goals.

The current international agenda for the financing of development, instead, subordinates developmental policy to timely debt servicing and the minimization of future repayment risk. This agenda seeks to enhance the ability of developing countries to attract private wealth through "financial innovation" that safeguards investor (and creditor) risk by diversifying and insuring such risk. While measures to improve the quality of developing country debt data and debt transparency are generally welcome and long overdue, the focus of the development finance agenda on complex – and mostly non-transparent – new financial instruments and on securitized finance, does not bode well for its ability to deliver reliable financing at the required scale to where it is most needed.

This is a greater concern as the 2030 Agenda entails unprecedented investment requirements, particularly in developing countries. UNCTAD estimates, for a sample of 31 developing countries, that meeting the basic SDG-related investment requirements to address poverty, nutrition, health and education goals, would result in an increase of public debt-to-GDP ratios from around 47 per cent at present to no less than 185 per cent, on average, if current expenditure and financing patterns prevail. Alternatively, to achieve these SDGs without an increase in existing debt-to-GDP ratios by 2030, developing countries would have to grow at an average annual rate of 11.9 per cent per year. Clearly, neither scenario is remotely realistic.

The *Report* estimates that improved domestic resource mobilization could raise between one fifth and one half of this SDG financing gap while stabilizing debt-to-GDP ratios at current levels (depending on country-specific circumstances). "Leveraged" international private finance is not anywhere near on track

to provide the trillions needed to close the remaining gap. Substantially scaling up public international development finance, including through development assistance and debt relief, should therefore be an urgent priority, if a massive new developing country debt crisis is to be avoided and the 2030 Agenda achieved on time.

Such steep demands on the mobilization of international public finance will require the international monetary and financial system to open up more policy space for developing countries to develop and manage their own banking and financial sectors in the interest of structural transformation. At the international level, progress can be made by leveraging old instruments to facilitate increased liquidity provision and international funding for climate change mitigation and combating the wider environmental crisis, in developing countries. Region-specific "debt-for-nature" swaps are already gaining traction, and a step further could be to extend these regional initiatives to the creation of Special Environmental Drawing Rights at the international level. While there seems little political appetite at present to use or expand these facilities for short-term crisis management, there is a growing consensus on the need to manage international credit creation in the interest of combating an unfolding environmental crisis that affects us all.

Furthermore, and in the absence of a political consensus to rein in global financial rentierism in the interest of development, developing countries can and should leverage the power of credit creation (and debt financing) at the regional (including South–South) levels. This, too, is not a new proposal, as Southern regional payment systems and clearing unions have a fairly long history of facilitating public credit creation and liquidity provision for late development. Regional payment systems that use some form of internal clearing mechanism can make a difference in a number of ways: they can simply lower the costs of intraregional trade by allowing for settlement of corresponding financial transactions in domestic currency. More ambitiously, such arrangements can prop up national self-insurance against exogenous financial shocks through pooled reserve-swaps and by providing temporary liquidity relief within clearance periods and extending credit lines beyond these, for final settlement in domestic currency rather than the United States dollar. Finally, full-blown regional clearing unions can leverage the power of home-grown credit creation to systematically coordinate regional adjustments between deficit and surplus regional economies, thereby shielding entire developing regions from the nefarious influence of short-term rentierist international capital flows. How and when regional credit creation can provide an effective buffer for developing countries against their exposure to private credit creation in speculative international financial markets largely depends on current regional trading patterns and the political will to shape these in future.

Last, though not least, debt restructuring and relief need a revived hearing in light of the demands of the 2030 Agenda. Remarkably, given that the current state of highly complex and fragmented debtor–creditor relations has already generated rising debt and financial distress across developing countries, discussions of their management have been confined to debt reprofiling and renegotiation. Practicable ways forward are now needed to facilitate equitable and efficient sovereign debt restructurings that could, in future, also pave the way to an international regulatory framework to govern sovereign debt restructurings.

Complete control

Private foreign capital is, as suggested earlier, increasingly being cast as the Good Samaritan in the resource gap story around the 2030 Agenda. But increased financial integration has already exposed developing countries to global financial cycles and volatile capital flows. This has tended to widen macroeconomic imbalances, create financial vulnerabilities, and impair monetary autonomy in ways that work against productive investment, particularly in the public sector.

Under the current international monetary and financial arrangements, developing countries have sought some degree of protection by accumulating external assets, usually in the form of short-term dollar-denominated bonds, as self-insurance to prevent a sudden capital-flow reversal and/or to contain its adverse effects. In some cases, countries have used current-account surpluses to build up reserves but in many other cases, they have borrowed on international capital markets to do so. However, the return differentials between safe

external assets held to insure against risky external liabilities create a resource transfer from developing to developed countries which, for the period 2000–2018 and the 16 developing countries examined in the *Report*, amounted to roughly $440 billion a year, or 2.2 per cent of these countries' GDP.

An alternative form of protection against volatile capital flows is the use of capital controls. Having in place legislation providing for comprehensive capital controls allows policymakers to act quickly and avoid lengthy debates and procedures, especially during surges of capital inflows when the build-up of macroeconomic and financial vulnerabilities is greatest and when the political forces against regulation tend to be strongest. Such capital controls can be effective tools for altering the composition of flows to ensure a close match between gross external assets and liabilities, as well as for countercyclical management.

The International Monetary Fund (IMF) is moving, somewhat cautiously, in this direction. It now acknowledges that capital controls form a legitimate part of the policy toolkit, stating that, in addition to their potential benefits, capital flows carry risks, and that full liberalization is not always an appropriate goal. It recognizes that capital-account liberalization should be sequenced, gradual and not the same for all countries at all times. However, despite the lack of a strong correlation between capital-account liberalization and economic growth, especially in developing countries, the IMF still treats capital-account liberalization as a policy goal.

Given the multiple financial vulnerabilities linked to hyperglobalization, developing countries need multiple instruments to integrate effectively into the global economy, without preconditions for their use. These instruments should combine macroeconomic policies that secure economic growth and sustainable macroeconomic and external conditions with prudential policies, comprehensive and lasting capital controls, and other regulatory measures that insulate domestic conditions from externally generated destabilizing pressures. Such insulating measures, including capital controls, will need to be country specific, determined by the nature and degree of a country's financial openness and by the institutional set-up of its financial system.

To enhance the effectiveness of these domestic policies, two supportive measures seem to be indispensable at the international level. First, policymakers' ability to use capital controls requires keeping capital-account management out of the purview of regional and bilateral trade and investment agreements, or at least establishing safeguards in such agreements that allow countries the right to regulate capital flows without conflicting with their contractual commitments.

Second, capital controls would be much more effective if capital flows were controlled at both ends. This could be achieved through multilateral endorsement of specific cooperative mechanisms, which would particularly help recipient countries with limited capability to enact capital controls, either for lack of institutional capacity or because of legal constraints, such as from trade and investment agreements. Source-country governments may wish to regulate outflows, in order to enhance the effectiveness of monetary policy by steering credit towards productive investment in their own economies and preventing the leakage of monetary stimulus into financial investment abroad. Coordinating capital controls might achieve greater stability in capital flows with relatively lower levels of restrictions at both ends, instead of stricter controls at one end. The recognition that such changes may be essential for achieving the SDGs may provide additional motivation for their enactment.

Another way in which foreign investors can help boost the resources available for meeting the SDGs is by paying their taxes. Illicit financial flows on the part of multinational enterprises (MNEs) are estimated to deprive developing countries of $50 billion to $200 billion a year in fiscal revenues. These flows are facilitated by international corporate tax norms that consider affiliates of MNEs as independent entities and treat taxable transactions between the different entities of MNEs as unrelated. Instead of such an inefficient tax system, it is time to think of a system of unitary taxation that recognizes that the profits of MNEs are generated collectively at the group level, combined with a global minimum effective corporate income tax rate on all MNE profits. This could be set at around 20–25 per cent, which is the average of current nominal rates

across the world. To distribute these taxes on corporate profits across countries, the option most promising for developing countries is that of "formulary apportionment", whereby the total taxes of the MNE group are allocated across countries according to an agreed formula, ideally one that prioritizes employment and productive physical assets over total sales.

Another drain on fiscal resources has emerged with the digital economy. The losses are already high for developing countries, because they are less likely to host digital businesses but tend to be net importers of digital goods and services. Addressing these leakages requires reviewing several features of existing international corporate tax norms, such as the nexus rules (which determine which jurisdiction has taxing rights); the profit allocation rules (which determine how cross-border transaction between the different entities of an MNE are treated) and the measurement of value creation when intangible assets are significant in economic transactions and when users become a significant source of value. Determining fair taxing rights in a digital economy requires using the concept of significant economic presence, which would create a taxable nexus for a company operating in a digital environment if it generates revenue from sales or transactions that exceed certain levels. This would also facilitate the unitary taxation of MNEs, since it would enable the inclusion of values created from using a company's intangible assets and from user-generated content.

While waiting for international consensus on this matter, several developed and developing countries have explored temporary unilateral domestic tax measures for the digital economy. One example is the excise tax, equalization tax or levy that several countries (many of which are European Union members) have considered or started to apply. A simple estimation of potential additional tax revenues from such unilateral measures ranges between $11 billion and $28 billion for developing countries alone. Similarly, while consensus at the World Trade Organization has not been reached, terminating the moratorium on custom duties on electronic transmissions could provide additional fiscal revenue of more than $10 billion globally, 95 per cent of which would go to developing countries.

All in all, implementing these various proposals could increase resource availability in developing countries by roughly $510 billion to $680 billion a year, an amount similar in size to their total foreign direct investment inflows.

Banking on the public

Banking stopped being boring during the financialized transition to a globalized world, and it also stopped serving the needs of the productive economy. The transformation of banking into a high glamour, high paid, globalized industry came with financial deregulation and a surge of cross-border capital flows. As a result of deregulation, retail banking activities blended with investment activities to create financial behemoths operating with an "originate-and-distribute" business model whereby loans were securitized and a range of financial services boosted the rents they could earn. The resulting shift to packaging, repackaging and trading existing assets created a system in which the bulk of transactions involved other financial institutions, predatory practices became acceptable and contagion effects were aggravated.

The fragility of this system was exposed during the GFC as an estimated $50 trillion was wiped off asset values. But the social cost that followed the bailout of banks that had become "too big to fail" was, if anything, even more corrosive. At the same time, the damage to the environment and the cost of mitigating this is becoming more and more visible and is also serving to weld together a broad coalition seeking a new way forward and more responsible practices from the world of banking, alongside other spheres.

The 2030 Agenda requires the biggest investment push in history and banks will be called upon to do their bit. Banks can offer the benefits of scale and reach because of their ability to create credit and their modus operandi of forming partnerships with other financiers and investors. But despite the use of taxpayers' money to bail out the banking system and the recognition that current practices work against them serving the productive economy, serious banking reform has not taken place since the crisis. This is raising new questions about how to make banks work for people and the planet, with growing

attention to the potential role of public banking, because it is distinctively different – or should be – from private banking.

The important distinction is that public banks' goals include social and developmental objectives, and this is the case as much for public banks operating along commercial lines as it is for development banks. They can fulfil these objectives best when operating within an articulated system with other banks and in close alignment with government policy objectives and instruments; however, even where this articulation is lacking, recent history shows public banks are expected nonetheless to be able to leap into action. They are the first line of defence in times of crisis when credit becomes scarce, providing countercyclical and additional finance to mitigate the economic effects of a shock.

For the Global Green New Deal, the task is more of a marathon than a sprint. Here public banks have another advantage, because they have a more diversified portfolio and broader geographic reach to underserved areas and segments of the economy and (especially development banks) take a longer-term approach. By contrast, private (and especially foreign) banks are known for avoiding such lending as they pick profitable cherries elsewhere.

The paradox is that, just as governments are calling out for much more long-term investment, they are at the same time exhibiting little willingness to give their public banks the tools for the task. Banks need to be able to scale up, to lend in the desired directions, and to be evaluated by performance metrics that fit their developmental mandate. However, these three things do not often come together.

The lead shareholders in the large multilateral financial institutions are underwhelming in their support for capitalizing these banks, and continue to divert significant revenues when profits are made rather than reinjecting them into the equity base. Instead, scaling up is being promoted through securitization and balance-sheet optimization, which potentially bring a whole new set of problems. Southern governments have been much more willing to take the lead in expanding the role of public banks, in part out of a sense of frustration with the inadequate response from the North. They have established new public banks, and expanded existing ones, scaling up so quickly that even though they only started to become actively engaged since the early 2000s onwards, they have surpassed the older multilateral banks. The stock of outstanding loans made by the China Development Bank was $1,635 billion in 2017, much larger than the total loans by the World Bank (for 2017, the net outstanding loan of IBRD and IDA are $177 billion and $138 billion respectively).

Southern-led multilateral initiatives have been just as significant – the BRICS countries' New Development Bank and the Asian Infrastructure Investment Bank have been in operation for just a few short years but are already making their presence felt. These Southern-led banks are well capitalized with reliable funding sources, which permits them to have a longer-term horizon and thereby finance long-maturity projects such as infrastructure, which more commercially oriented banks may not be so ready to support. They have also shown speedier response, taking on average six months to approve loans from initial application as compared to one or even two years for the big multilaterals. While some banks in the North have similarly upped the ante, a lot more is needed in order to meet the vision of the Global Green New Deal.

Some encouraging noises are being heard from the different levels of the banking ecosystem, including central banks, which may have more space than is sometimes envisaged to resume their traditional role of creating and guiding credit to the areas of the economy where it is needed most. Indeed, central banks played this role in several of the successful examples where countries managed to transform themselves from agricultural to industrial economies. It is only in recent years, under the rubric of "independence", that the traditional interlinkage between banks and government development goals has been cut.

The extent to which governments provide support to "their" development banks is an important factor in their success. Many governments require their banks to maintain high credit ratings – typically AAA, even if this is higher than the rating of the sovereign itself. This gives banks two masters: they must please credit-rating agencies and also meet their developmental goals, which by definition include riskier projects. If governments

were perceived by credit-rating agencies as being more willing to "stand by" their banks, a more favourable rating would ease their costs of borrowing and free up hundreds of billions of dollars for development lending. Ironically, governments themselves are facing falling credit ratings thanks to the entirely predictable failure of the austerity policies that were designed, in part, to please credit-rating agencies' expectations. This mess reveals once again that the notion of "independence" between governments and the banks they own is an illusion – and not a desirable one. UNCTAD has in the past called for a review of the power of credit-rating agencies and today's challenges reinforce this. It is perhaps time to design a new metric for evaluating large public investment projects that more accurately assesses their social and economic dimensions, rather than being based on narrow financial measures and ideological biases.

What is also important is the wider regulatory environment in which public banks operate. Global rules need also to be refigured in light of the new needs. The need to review trade and investment agreements that bind the ability of policymakers to use capital management policies was suggested above. The Basel norms and rules, a standard internationally designed regulatory framework adopted by virtually all countries around the world, similarly need to be more flexible. At present they treat all types of banks the same, and hence penalize institutions with long-term or riskier exposures – which is the usual terrain chosen for public and particularly development banks. Moreover, although Basel rules are adopted by national jurisdictions, they also affect multilateral and regional development banks, at least indirectly.

The banks that suffer most are the smaller regional banks that end up holding too much capital for the total of loans they provide. At the same time there is the paradox that, even as regional developmental needs are so severe, the banks that serve such regions are often dismally small. There is, therefore, an urgent need to find ways to capitalize such banks so that they can support national country needs and also regional projects. One possible route is to align better with Sovereign Wealth Funds, which are currently holding at least $7 trillion of assets by recent estimates, but typically not directed towards developmental lending. Others include increasing the pool of resources by bringing in new countries as shareholders; or seeking a more integrated approach between such financial institutions and regional capital markets, whose potential has, to date, been underexplored.

All this requires rejection of the notion that markets always know best. There is a growing acknowledgement of the idea that governments should underwrite risks, staunch leaks and fill gaps left by private banking but public banking in the past has proved to be catalytic and game-changing; the current situation offers opportunities to play this role again.

Pull up the people, cool down the planet

In 1930, John Maynard Keynes speculated on "the economic possibilities for our grandchildren" a hundred years hence. Keynes was pessimistic about immediate economic prospects but on the long-term possibilities he was much more hopeful. Indeed, thanks to a combination of compound interest, technological progress and the bounties of the natural world, Keynes believed that this would be a privileged generation free from the day-to-day chores of economic life, preoccupied instead with how to fill their long hours of leisure time with more fulfilling pursuits.

As chance has it, 2030 is concentrating the minds of those very grandchildren who now occupy positions of political influence and policymaking. Technological progress, as Keynes anticipated, has over the passing decades given a massive boost to the productivity of the economy and the efficiency of day-to-day life. However, the problem of technological unemployment is not proving to be the "temporary phase of maladjustment" he had expected. Moreover, the dominant social customs and economic practices around moneymaking are still very much with us, along with the destabilizing financial forces and widening wealth and income gaps that Keynes predicted would follow.

He would no doubt be reconsidering the consequences of his own cavalier attitude to the natural world, as the grandchildren of his era come to terms with the mounting threat of environmental collapse; and would

also be reminding them that the massive social investments still needed for a more inclusive and sustainable world would require taking a much firmer hand over the rent-seeking proclivities of the financial sector along with the large public investment programmes to, as he wrote in an open letter to President Roosevelt, "get across the crevasses before it is dark". In a similar vein, this *Report* has set out some of the elements needed for financing a Global Green New Deal and to deliver the 2030 Agenda.

But to this should be added a bold industrial vision and a new social contract that embraces the needs of the many and not just the interests of the few. While Keynes was less than enthusiastic about Roosevelt's National Industrial Recovery Act, which set out such a vision, a green industrial recovery programme would seem to be one way forward, for developed as much as developing countries. And just as, 75 years ago at Bretton Woods, bold thinking animated the discussions around establishing a multilateral system that would extend the new deal to the international economy, this is once again needed to combine the desire of prosperity for all with a determined commitment to heal the planet.

TRENDS AND CHALLENGES IN THE GLOBAL ECONOMY

A. The global conjuncture

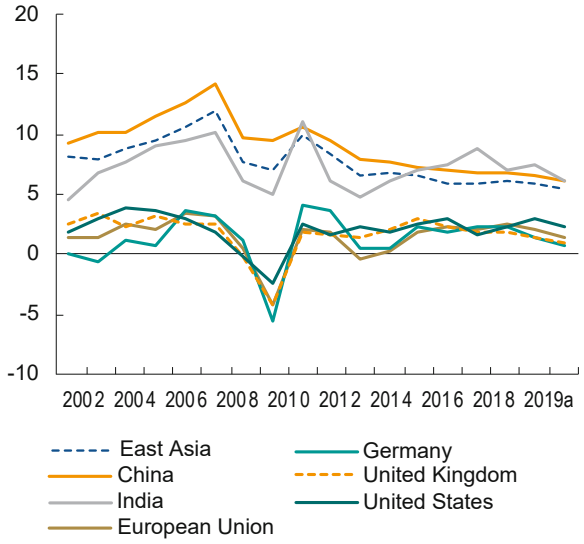
1. *Happy days are here again … and again … and again*

Once again, the question of whether the world economy is finally breaking free from the gravitational pull of the global financial crisis (GFC) is being asked. There is no consensus, with answers hinging on whether the current robust growth of the United States economy is here to stay the course.

For those of a more bullish disposition, strong quarterly growth figures since mid-2017, combined with an unemployment rate at a 49-year low, signs of renewed wage growth, a still-buoyant stock market and rising house prices, provide solid grounds for optimism. On more bearish accounts, growth is the product of one-off tax cuts and unsustainable deficits, made all the more precarious by a rapid build-up of private debt positions, particularly in the corporate sector, while the unemployment figures hide problems of insecure jobs and discouraged workers; on these trends a slowdown – and possibly even a recession – looks likely, with an inverted yield curve (with yields on longer-terms bonds lower than yields on short-terms bonds) already forcing the United States Federal Reserve to signal a reversal of monetary normalization.

While the bulls may be still holding on in the United States, elsewhere among the advanced economies the picture looks more troubling. In Western Europe, unemployment, although falling in recent years, remains generally much higher than in the United States and while the growth figures for the first quarter of 2019 (relative to the previous quarter) for the eurozone and the European Union were marked up slightly to 0.4 and 0.5 per cent respectively (Eurostat, 2019), these are hardly reassuring numbers. Moreover, the German economy is faltering in the face of weakening exports and the French economy has been unable to get out of second gear since the beginning of 2018. The European Central Bank has already signalled a possible return to quantitative easing, although the prospect is complicated by an impending change of leadership. In May, the Bank of England (2019) marked up its estimate of growth in the United Kingdom in 2019 to 1.5 per cent though there is too much political uncertainty surrounding Brexit to hold to any figure with much confidence and most observers anticipate a significant hit if no deal is reached by the latest deadline. Slowing external demand, especially from China, has seen real growth in Japan in 2018 slip to 0.8 per cent (from 1.9 per

FIGURE 1.1 Annual growth rates: Developed and developing countries
(Percentage)



Source: Same as table 1.1.
Note: a: Forecasts.

cent in 2017) and it is forecast to stay around that level in 2019, with inflation remaining stubbornly low (table 1.1).

If the situation with respect to growth and employment is uncertain in the advanced world, it is decidedly more fragile in developing countries. Even before trade tensions and oil prices began to rise, growth rates were slipping (figure 1.1) and anxiety levels were increasing due to an easing of capital inflows, and in some cases capital outflows, which followed announcements of the unwinding of unconventional monetary policies by leading central banks. According to the Institute for International Finance, portfolio flows to emerging markets, which amounted to $51 billion in January 2019, fell significantly from that level in subsequent months, even turning to a negative $5.7 billion in May (IIF, 2019). To date, uncertainty over economic performance has outweighed any confidence-building effect from the pronouncements of leading central banks of a return to monetary easing.

TABLE 1.1 World output growth, 1991–2019
(Annual percentage change)

Country or area	1991–2000[a]	2001–2008[a]	2009–2018[a]	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019[b]
World	**2.8**	**3.5**	**2.7**	**-1.7**	**4.3**	**3.2**	**2.5**	**2.6**	**2.8**	**2.8**	**2.5**	**3.1**	**3.0**	**2.3**
Developed countries	**2.6**	**2.2**	**1.6**	**-3.5**	**2.6**	**1.5**	**1.1**	**1.3**	**1.9**	**2.3**	**1.7**	**2.3**	**2.2**	**1.6**
of which:														
Japan	1.2	1.2	1.0	-5.4	4.2	-0.1	1.5	2.0	0.4	1.2	0.6	1.9	0.8	0.8
United States	3.6	2.6	2.0	-2.5	2.6	1.6	2.3	1.8	2.5	2.9	1.6	2.2	2.9	2.2
European Union (EU 28)	2.2	2.2	1.2	-4.3	2.1	1.8	-0.4	0.2	1.8	2.3	2.0	2.5	2.0	1.3
of which:														
Euro zone	2.1	1.9	0.9	-4.5	2.1	1.6	-0.9	-0.2	1.4	2.1	1.9	2.4	1.9	1.1
France	2.0	1.8	1.0	-2.9	2.0	2.2	0.3	0.6	1.0	1.1	1.2	2.3	1.6	1.1
Germany	1.7	1.3	1.6	-5.6	4.1	3.7	0.5	0.5	2.2	1.7	2.2	2.2	1.4	0.6
Italy	1.6	1.0	-0.2	-5.5	1.7	0.6	-2.8	-1.7	0.1	0.9	1.1	1.6	0.9	0.0
United Kingdom	2.8	2.5	1.7	-4.2	1.7	1.6	1.4	2.0	2.9	2.3	1.8	1.8	1.4	0.9
EU member States after 2004	1.9	5.0	2.4	-3.4	1.6	3.1	0.7	1.2	3.0	3.9	3.2	4.7	4.3	3.6
Transition economies	**-4.9**	**7.2**	**1.6**	**-6.6**	**4.5**	**4.6**	**3.5**	**2.4**	**0.9**	**-1.9**	**0.7**	**2.1**	**2.8**	**1.4**
of which:														
Russian Federation	-4.7	6.8	1.2	-7.8	4.5	4.3	3.7	1.8	0.7	-2.5	0.3	1.6	2.3	0.5
Developing countries	**4.8**	**6.3**	**4.8**	**2.7**	**7.8**	**6.2**	**5.0**	**5.0**	**4.5**	**4.0**	**3.9**	**4.4**	**4.2**	**3.5**
Africa	2.6	5.8	3.1	3.4	5.4	1.4	6.0	2.2	3.5	2.7	1.6	2.7	2.8	2.8
North Africa (excl. Sudan and South Sudan)	2.9	5.0	1.6	3.6	4.3	-6.1	9.6	-3.4	0.3	2.5	2.8	3.3	3.7	3.6
Sub-Saharan Africa (excl. South Africa)	2.7	7.0	4.5	5.3	7.0	5.1	5.4	5.2	5.6	3.2	1.4	2.7	3.0	3.3
South Africa	2.1	4.4	1.8	-1.5	3.0	3.3	2.2	2.5	1.8	1.2	0.4	1.4	0.8	0.3
Latin America and the Caribbean	3.1	3.8	1.7	-1.9	6.0	4.5	2.8	2.8	1.0	-0.4	-1.5	0.9	0.7	0.2
Caribbean	2.2	5.1	2.5	-0.9	3.0	2.3	2.1	2.8	2.8	4.1	1.8	2.1	3.1	2.5
Central America (excl. Mexico)	4.4	4.5	4.0	-0.5	4.0	5.7	5.0	3.8	3.9	4.2	3.9	3.7	2.7	2.6
Mexico	3.2	2.2	2.6	-5.3	5.1	3.7	3.6	1.4	2.8	3.3	2.9	2.1	2.0	0.4
South America	3.1	4.3	1.2	-1.0	6.4	4.9	2.5	3.2	0.4	-1.8	-3.2	0.4	0.1	-0.1
of which:														
Brazil	2.8	3.7	1.1	-0.1	7.5	4.1	1.9	3.0	0.5	-3.6	-3.3	1.1	1.1	0.6
Asia	6.3	7.5	6.1	4.3	8.8	7.5	5.6	6.1	5.7	5.5	5.8	5.6	5.3	4.5
East Asia	8.8	9.1	6.8	7.0	10.0	8.3	6.6	6.7	6.5	5.9	5.9	6.2	5.9	5.4
of which:														
China	10.6	10.9	7.9	9.4	10.6	9.5	7.9	7.8	7.3	6.9	6.7	6.9	6.6	6.1
South Asia	4.8	6.7	5.8	4.1	8.9	5.4	2.9	4.8	6.0	6.0	8.8	6.3	6.0	4.4
of which:														
India	6.0	7.6	7.0	5.0	11.0	6.2	4.8	6.1	7.0	7.5	8.7	6.9	7.4	6.0
South-East Asia	4.9	5.6	5.1	2.0	7.8	4.9	6.0	5.0	4.5	4.6	4.7	5.2	5.0	4.5
West Asia	4.1	5.7	4.4	-1.9	5.8	9.1	4.6	6.0	3.4	4.3	3.0	2.8	2.3	0.7
Oceania	2.7	2.8	3.1	1.8	5.8	1.7	2.4	2.6	6.6	4.7	1.1	0.9	1.4	2.8

Source: UNCTAD secretariat calculations, based on United Nations, Department of Economic and Social Affairs (UN DESA), *National Accounts Main Aggregates database and World Economic Situation and Prospects : Update as of mid-2019; ECLAC, 2019; OECD.* Stat, available at https://stats.oecd.org/Index.aspx?DataSetCode=EO (accessed 29 May 2019); IMF, 2019; Economist Intelligence Unit, *EIU CountryData database*; J.P.Morgan, *Global Data Watch*; and national sources.

Note: Calculations for country aggregates are based on GDP at constant 2010 dollars.

a Average.

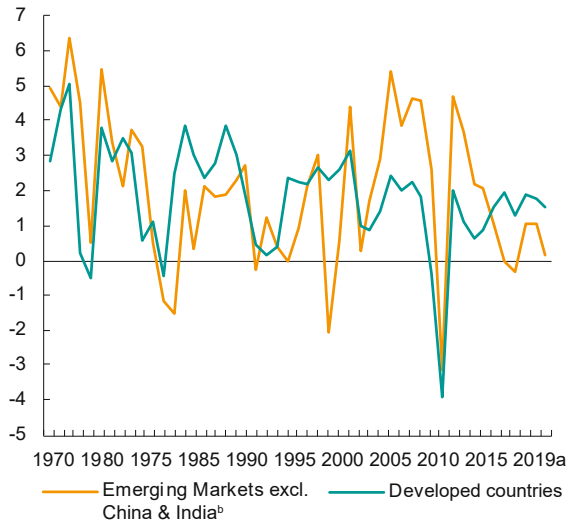
b Forecasts.

Talk of "decoupling" and "convergence", which briefly united the chattering and investor classes after the GFC as developing (including so-called emerging) economies bounced back quickly, has ended (figure 1.2). There is a real possibility of further setbacks for many countries. In some, already close to or in recession, economic and political uncertainties are compounding existing fragilities. In Turkey, pre-election spending and enhanced lending by public banks helped push growth up to 1.3 per cent in the first quarter of 2019 (relative to the preceding quarter), after three quarters of negative growth. But with the elections over, growth is expected to turn negative, and this could have further adverse effects on capital flows and interest rates, as in the recent past. In Latin America, Argentina is already deep in recession despite the largest International Monetary Fund (IMF) loan on record, and the return of investor confidence seems unlikely with elections planned later in 2019. The situation is gloomy elsewhere on the continent: in both Brazil and Mexico, GDP fell by 0.2 per cent in the first quarter relative to the preceding quarter, with political uncertainty a contributing factor (OECD, 2019a).

The geopolitics of energy complicate the situation, with the blockade in the Bolivarian Republic of Venezuela and heightening tensions in the Middle East putting upward pressure on oil prices since the beginning of 2019, reversing the decline in the last quarter of 2018. While the Russian Federation is expected to benefit from higher oil prices, production cuts and subdued domestic demand are still likely to keep growth in 2019 well below the 2.3 per cent registered in 2018. On the other hand, the adverse impact of price hikes on oil-importing economies, such as Pakistan, which is preparing for an IMF-agreed adjustment programme, will probably be significant.

Elsewhere in Asia, the two economies that were among the fastest growing in the world, China and India, are showing signs of a loss of growth momentum. Growth projections for India have been marked down, because of a sharp fall to 5.8 per cent in the first quarter of 2019 (relative to the corresponding quarter of the previous year) (National Statistics Office, 2019). This continues a decelerating trend which began four years ago. Meanwhile, growth in China fell from 6.6 per cent in 2018 to 6.4 per cent in the first quarter of 2019 and 6.2 per cent in the second quarter (relative to the corresponding quarter of the previous year) (Yao, 2019), confirming expectations

FIGURE 1.2 Convergence blues: GDP per capita growth, 1971–2019
(Annual percentage change)



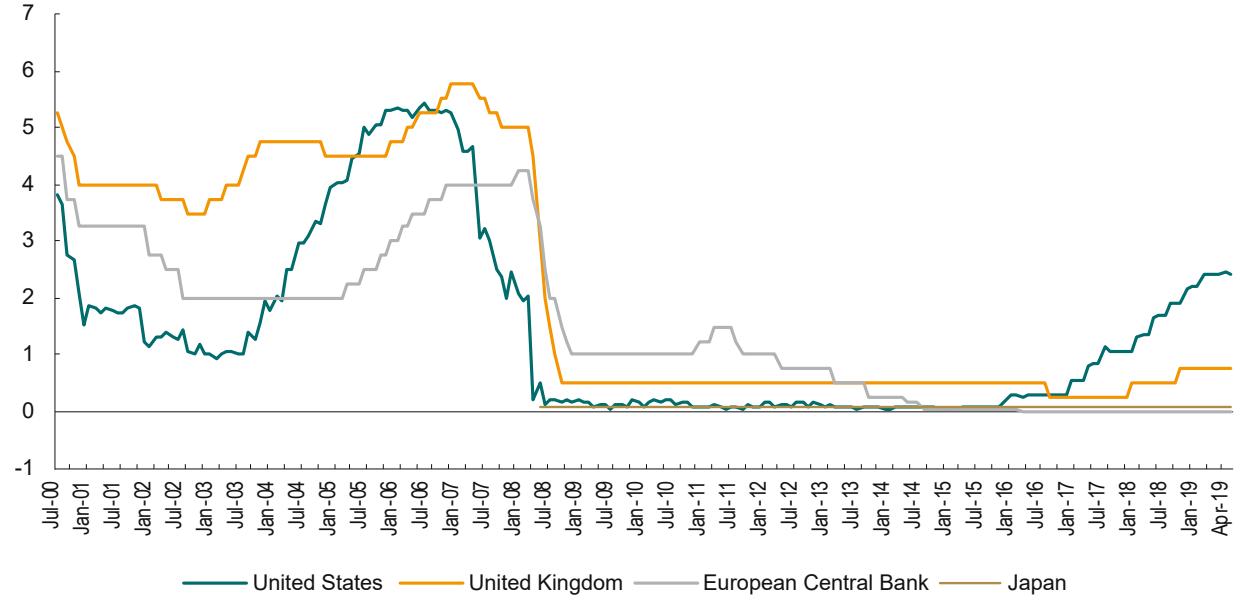
Source: UNCTAD secretariat calculations, based on UNCTADstat; and table 1.1.
Note: a: Forecasts.
b: Based on UNCTAD's definition of EMs.

that the ongoing trade tensions with the United States will weigh on growth in 2019. In addition, domestic debt pressures remain an ongoing concern for Chinese policymakers. Given the strong linkages these high-growth countries, especially China, have with the rest of Asia, their slowdown will have region-wide ramifications.

All in all, talk of a new growth trajectory for the global economy seems wishful thinking. Rather, a pattern of unstable growth looks set to persist, as a mixture of financial exuberance and debt despondency leaves many economies lurching between ephemeral spurts of varying intensity and financial retrenchment. Global growth is also projected to fall to 2.3 per cent in 2019. Even if the United States eschews further tariff increases, optimistic forecasts are likely to miss the mark, as has happened repeatedly in the past.

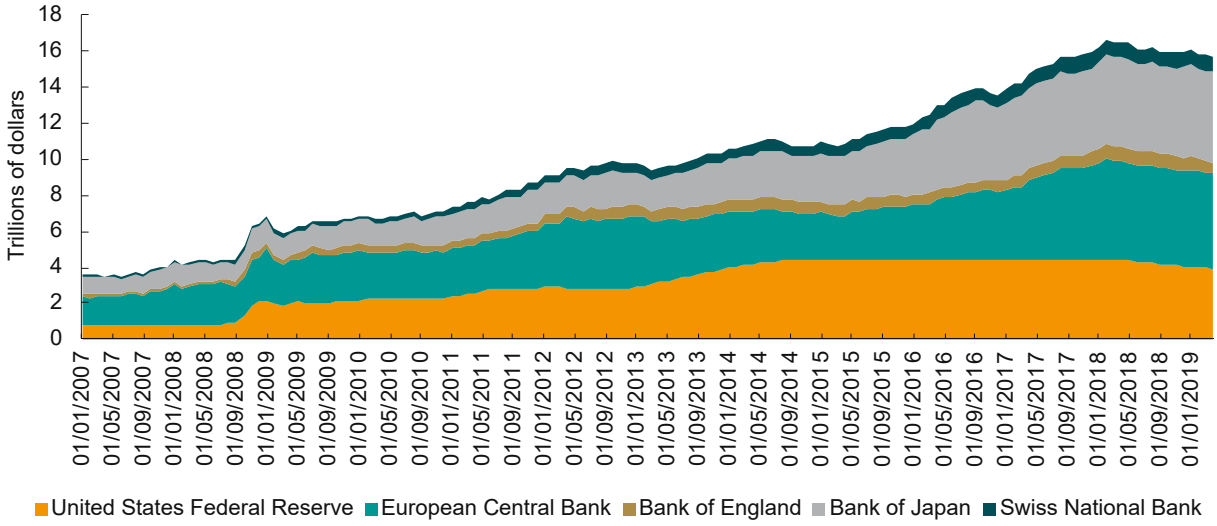
What is of immediate concern is the presence of multiple sources of vulnerability, such as unsustainable corporate debt, disrupted supply chains, volatile capital flows and rising oil prices – all of which could feed off each other and transform a growth slowdown into another recession. Not surprisingly, those who had positive assessments of the global economic situation are again turning downbeat, with increasing talk of a global recession in 2020.

FIGURE 1.3 Central bank policy rates, 2000–2019
(Percentage)



Source: CEIC data drawn from national central banks.

FIGURE 1.4 Total assets of selected central banks, 2007–2019



Source: Thomson Reuters EIKON.

Underlying this pessimism is a recognition that the policy instruments favoured in the battle for recovery since the financial crisis have not only failed to deliver robust growth but are facing ever-diminishing returns. The reliance on such instruments was heavy. As figure 1.3 shows, central bank policy rates were slashed in the immediate aftermath of the crisis and have been maintained at or close to those low levels since. Quantitative easing has resulted in a huge expansion in the assets of central banks, especially in the case of the Federal Reserve, the Bank of Japan and the European Central Bank (figure 1.4).

The United States Federal Reserve, which in December 2018 had announced that it would opt for another three interest-rate hikes to take the range to 3–3.25 per cent and continue to unwind its balance sheet by selling bonds and securities to the tune of $30–50 billion every month, has now changed its

position. In March 2019, noting that "growth of economic activity has slowed from its solid rate in the fourth quarter" (Board of Governors, 2019a), the Fed decided to hold back on rate rises and scale down the planned monthly reductions in its bond holdings. Since then, this revisionist position within the Fed has further strengthened, leading to a cut in the benchmark short term interest rate by one quarter of a percentage point to a target range of between 2 and 2.25 per cent at the end of July 2019.

Despite the weakness of the recovery, the urge in policy circles to stick to easy monetary conditions and avoid proactive fiscal measures still rules. The argument is that there is no alternative, even though the evidence is clear that there is little headroom for further reliance on monetary instruments. Interest rates are near or at zero and central bank balance sheets are bloated beyond early repair. So the debate has been reduced to arguments on whether (if at all) and if so how far and when, the so-called "unconventional" monetary policies should be unwound or withdrawn.

In Europe too, the mood is similar. The European Central Bank has officially announced that it will not reverse its interest rate policy and, perhaps, reduce interest rates further. This implies a negative interest rate, currently at 0.4–0.6 per cent on deposits held by banks, which adds to costs of banks and affects their profitability in the current situation of abundant liquidity. The European Central Bank has also hinted at a return to its bond-buying programme (quantitative easing), which it had previously promised to withdraw, as has the Bank of Japan.

2. The limits of debt-dependent growth

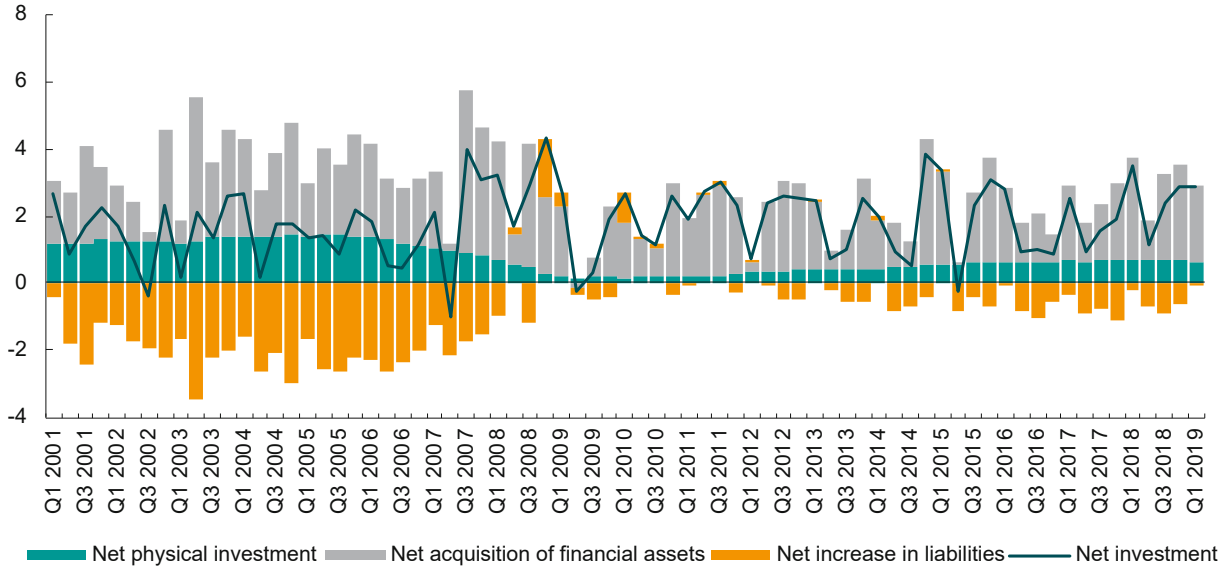
One consequence of the long-term adherence to cheap and easy money policies in the developed countries was a surge in investments into equity and debt markets. In August 2018, the New York Stock Exchange marked the completion of the longest bull run in its history. Over 3,453 days, the S&P 500 index of United States stocks rose cumulatively by more than 300 per cent when compared with its post-crisis low value on 9 March 2009, and did not fall by a cumulative 20 per cent anytime in between. Though the magnitude of the rise has fallen short of previous records, a bull run of nearly 10 years is a remarkable record. All the more so because, over much of this period, the United States economy was struggling to recover from the depths of the recession created by the financial crisis. Even after August 2018, though the index has fluctuated, the average value for June 2019 was at almost the same level as it was in August and September 2018.

Throughout 2017, across all major economies, there were synchronized and steep increases in stock market indices, which either stabilized at high levels or continued to rise through roughly the first half of 2018 (except in China, where markets experienced a decline throughout the full year 2018). Subsequently, these indices fell over the second half only to rise again and reverse that decline. It was partly this boom in stock markets that generated the expectations that found expression in the enthusiastic GDP growth forecasts issued a year ago by most institutions. At the same time, a sustained rise in house prices pushed real estate markets to record highs in many parts of the global economy (Evans, 2019).

As argued in *TDR 2018*, behind such dramatic and synchronized stock market and housing price appreciation lies the excessive reliance on monetary easing in the major economies as an instrument to ensure recovery. However, the Flow-of-Funds accounts of the United States (a major player in the liquidity expansion experiments of the post-crisis period) show that household acquisition of physical assets, which mainly takes the form of housing investments and was largely matched by household borrowing (increase in liabilities), has been relatively small and lower than earlier (figure 1.5). This suggests that the segment of the housing market, sustained by credit, was possibly not as buoyant as the luxury segment and commercial real estate. On the other hand, overall household net investment was much higher because of the purchase of financial assets, which, being much larger than the increase in liabilities, must have been financed with savings. The evidence that household savings were invested in financial assets also points to the consequences of the increase in inequality, as the wealthy tend to allocate a significant portion of their income to savings and the acquisition financial assets. This feature of household behaviour has been an important driver of financial markets.

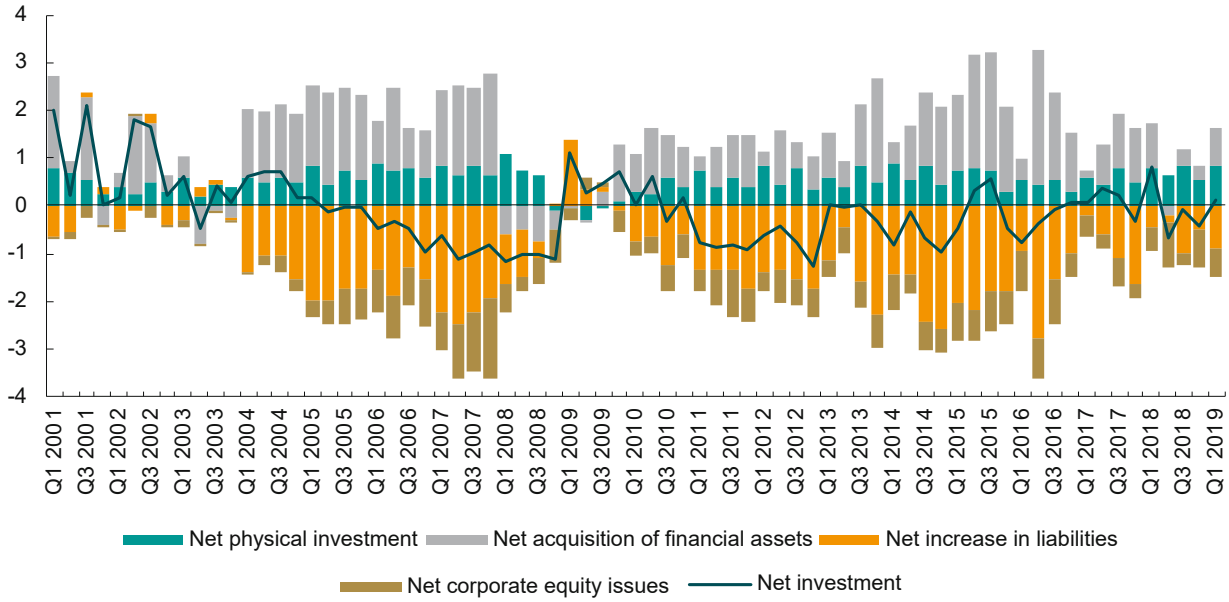
An even more striking conclusion can be drawn from the financial allocations of the corporate sector in the United States (figure 1.6). Net (financial) borrowing of the corporate sector has been largely devoted to acquisition of financial assets, not physical

FIGURE 1.5 Decomposition of net investment of households and non-profit organizations of the United States, 2001–2019
(Percentage of GDP)



Source: UNCTAD secretariat calculations, based on the Federal Reserve of the United States, Financial Accounts of the United States database.
Note: 'Net increase in liabilities' appears as negative in the figure.

FIGURE 1.6 Decomposition of net investment of the United States, 2001–2019
(Percentage of GDP)



Source: UNCTAD secretariat calculations, based on the Federal Reserve of the United States, Financial Accounts of the United States database.
Note: 'Net increase in liabilities' appears as negative in the figure.

investment. This pattern has actually worsened compared to the pre-2008 boom: financial investment on average amounted to 1.78 times physical investment of the United States corporate sector in the period from the first quarter of 2001 to the last quarter of 2007, but that figure increased to 2.11 in the period from the first quarter of 2010 to the first quarter of 2019. The liquidity experiments of the post-crisis period have not led to more productive activity: productive investment has been limited

and mostly financed by retained profits. Net equity issues were negative because of the speculative activity characteristic of the post-crisis period, with the corporate sector using its own and borrowed funds for "share-buy-back" (SBB) operations.[1] This focus of both the household and corporate sector on acquisition of financial assets, especially equity, underlay the buoyant trend in the stock market. Other forms of speculative activity encouraged by the availability of cheap liquidity are an increase in mergers-and-acquisitions and growth of the leveraged loan market, or lending to poorly rated companies that are already heavily in debt. According to the Financial Stability Report of the United States Federal Reserve (Board of Governors, 2019b) the United States leveraged loan business has grown rapidly over the past decade to touch $1.1 trillion. Such activities, which were, in effect, the only observable result of quantitative easing, were replicated in other advanced economies that continued monetary expansion through 2018.

While the debt-driven, low-investment growth model has been good for asset owners, it has not been good for the majority of people who depend on labour income. Even when growth has picked up since the financial crisis, labour incomes have lagged behind. According to the *Global Wage Report 2018/19* of the International Labour Organization (ILO, 2018), in 2017 the rate of growth of average monthly earnings adjusted for inflation of workers across 136 countries registered its lowest growth since 2008, well below peak figures recorded in the pre-crisis years. What is more, if China – where wage growth has been rapid and whose size substantially influences the global figure – is excluded, wage growth in 2017 (1.1 per cent) was much lower than the figure for all countries including China (1.8 per cent). The deceleration in wage growth outside China is apparent for both developed and developing countries. The *OECD Employment Outlook 2018* (OECD, 2018) has concluded that, outside China, wages no longer appear to respond to declining unemployment given the informal and precarious nature of many new jobs.

3. Looming threats

Against this backdrop of a fragile growth path, the rising anxiety of policymakers reflects their concern that temporary disruptions could quickly turn into more vicious downward spirals.

(a) From tariff tantrums to technology turbulence

Trade figures suggest that the world economy is still locked into a low growth trajectory. The World Trade Organization's *World Trade Outlook Indicator* (WTOI) released in May 2019 (WTO, 2019), for example, stood at 96.3, well below its baseline value of 100, which is its weakest level since 2010, and a clear sign that world trade growth has dropped in the first half of 2019. This is because much of the world economy outside the United States is slowing down, and because, barring the outlier year of 2017, global trade has been on a downward trend relative to GDP since 2011 (Shin, 2019). The fact that growth in the United States has not helped lift global trade, as it did in the past, points not just to the tepid nature of its recovery but to the weight of dampening influences originating elsewhere in the global system, including from the Chinese slowdown. These effects have been compounded by the added shocks to the trading system from resort to tariff measures and sanctions by the United States Administration (Caceres et al., 2019).

While this policy shift has been couched in a wider discourse on unbalanced trade that also called for a rewrite of the North American Free Trade Agreement (NAFTA) and exit from the Trans-Pacific Partnership negotiations, the focus of the United States Administration has been on trade with China, in particular, its large bilateral deficit with that country. While this is, to a large extent, the consequence of macroeconomic imbalances within the United States that have seen domestic demand running ahead of domestic output, a series of tariff increases have aimed at limiting imports from China into the United States, provoking a series of measured responses from China. A large volume of trade between the two nations has been directly affected and this has rippled across the world economy through the networked organization of trade in global value chains.[2]

The overall loss suffered by the United States and the rest of the world depends on the responsiveness of consumers to price increases, on whether and which firms would absorb part or much of the effects of the tariff increase, and which countries would gain from trade diversion, if any. Not surprisingly, estimates vary.[3] To date, the impact on global growth has been limited, although that is likely to change if the tariffs persist or, worse still, a further round of tit-for-tat tariff increases ensues. As suggested in *TDR 2018*,

this would probably lead to a slowdown in investment demand.

This possibility has grown over the course of the first half of the year with the realization that trade measures are aimed as much, if not more, at technology flows than current-account imbalances, with the United States Administration accusing the Chinese Government of stealing intellectual property from American companies (USTR, 2018a, 2018b). Putting aside the mercantilist logic behind these accusations and ignoring the lack of clear evidence to justify the use of national security measures as a tool for managing economic relations, the fact that the electronics sector and other high-technology sectors are among the most networked parts of the global economy raises the economic risks attached to unilateral trade actions.

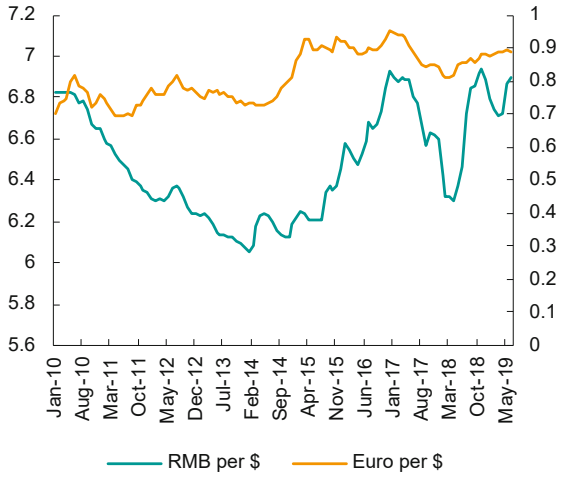
Trying to stymie efforts by China to break through the middle-income economic barrier by further upgrading and diversifying its economy raises the very serious danger of heightened turbulence around technology issues and a rapid deterioration in trust and confidence in the wider workings of the multilateral system. Moreover, China has not only served as the final-stage export platform for firms located in other Asian countries producing intermediates and components but has also been a major source of demand for the goods of many developing countries. To the extent that tensions between the United States and China affect growth prospects in the latter, reduces its imports and accelerates the turn inward as part of a strategy of rebalancing growth, some of these countries could face a sharp deterioration in their external position, with a heightened threat of a slowdown turning into a more serious recession.

(b) From currency clashes to debt debacle

Tariffs are not the only, or the most significant, policy measure impacting on the scale and direction of trade flows. As the United States Administration has widened the list of countries it sees as having benefited asymmetrically from bilateral trade, it has also raised the possibility of these countries manipulating their currency for economic gain.

The Morgan Stanley Emerging Market Currency Index rose significantly over January but fell sharply between mid-April and late May, only to climb again thereafter. Three factors underlay this volatility.

FIGURE 1.7 Renminbi and euro per dollar, 2010–2019



Source: Bank for International Settlements. Available at https://www.bis.org/statistics/xrusd.htm?m=6%7C381%7C675.

Note: Scale is decreasing so an upward movement represents a depreciation and a downward movement indicates an appreciation.

The first is the presence of crisis-hit countries such as Argentina and Turkey in the index, with these currencies recording sharp fluctuations at different points in time. The second is the volatility of capital flows to emerging markets, resulting from the uncertainty surrounding monetary policy in the developed countries and growth prospects in emerging markets. Finally, there is pressure from the United States Administration on all concerned to keep the dollar "competitive" vis-à-vis the currencies of its trading partners (*Financial Times*, 2019; Sobel, 2019). In an international financial system still heavily dependent on a predictable role for the dollar, turning that role – regarded as an "exorbitant privilege" – into a source of economic ordnance could bring more destabilizing consequences.

If Chinese and German trade surpluses were the result of currency manipulation, then the bilateral nominal exchange rates should have been reflecting unusual depreciation of these currencies vis-à-vis the United States dollar. Figure 1.7 charts the movement of the Chinese currency, the renminbi, and the German currency, the euro, relative to the dollar.

Between January 2010 and June 2014, the German currency (the euro) fluctuated around a largely stable trend, and thereafter it depreciated against the dollar, with subsequent fluctuations. So clearly the increase in trade surplus of Germany with the United States was despite changes in the relative value of its currency, not because of it.

Similarly, the renminbi appreciated continuously vis-à-vis the United States dollar from early 2010 to around September 2015. This was the period when the Chinese trade surplus with the United States was increasing. Thereafter, there has been a significant depreciation of the renminbi driven in part by capital outflows. However, in this phase marked by renminbi depreciation, exports from China to the United States and its trade surplus have both stagnated. In fact, to the extent that Chinese authorities have intervened in the foreign exchange market, they have attempted to prevent further depreciation of the renminbi.

Overall, the disruption caused by currency movements that are influenced significantly by capital flows rather than just trade flows, and the lack of policy coordination to mitigate such disruption is a long-standing concern for the international community (chapter IV). That concern is only likely to intensify with the "scourge of hot money" currently circling around cryptocurrencies (Foroohar, 2019; and see box 1.1) The danger of a sharp depreciation of currency feeding vicious deflationary spirals, as has already occurred in Argentina and Turkey, is real. In light of their current debt positions, emerging markets are likely to suffer the most from volatile currency movements.

However, over the last four decades, there has been a kind of implicit policy coordination among advanced

BOX 1.1 Cryptocurrencies: The democratization of money or libertarian scam?

In 1976, Friedrich Hayek published a slim volume entitled *Denationalisation of Money* in which he advocated a system of competing private currencies to replace central banks' monopoly on the issuance of legal tender and their (supposed) control over state-organized private banking and financial systems. Hayek paid little attention to the technical and operational detail of private currencies, focusing instead on the promotion of private competition as the (for him) core organizing principle of economically superior and democratic market economies, whose main enemies he saw as state intervention and the state-driven creation of monopoly powers, primarily in the form of trade unions and central banks.

Decades later, with digital technologies going mainstream, a similar spirit of wrestling the powers of money creation from state control and placing these in the hands of competing peer-to-peer digital currencies and payment systems has supported the emergence of cryptocurrencies. Starting with bitcoin in 2009, more than 1,500 cryptocurrencies and related digital "tokens" are now in play (Richter, 2018).

Cryptocurrencies rely on decentralized record-keeping systems or "distributed ledgers", the best known of which is blockchain, used by bitcoin. Through vast networks of connected computers, transactions are verified and time-stamped so that they become unalterable, with each new transaction added as a "block" to the list (or "chain") of peer-to-peer transactions. The process of confirming records is known as "mining" and the work of "miner" companies is paid for in newly created bitcoins. Bitcoin's code (or regulation, in old-fashioned terms) currently stipulates an upper limit of the equivalent $21 million in new bitcoin issuance for this purpose, and this has now almost been reached, as opposed to original expectations that this would not be the case until around 2040. This upper limit on the issuance of new bitcoins provides some kind of an "anchor" for this digital currency, at first sight not unlike gold. But while gold (and other precious metals) are an actual industry that will continue to produce economic value of some sort even when losing its attraction as an "anchor" for the issuance of means of payment, bitcoins will simply disappear if trust in their use as a means of payment evaporates (Häring, 2018).

As a decentralized alternative to state-led monetary and banking systems, cryptocurrencies also claim to protect the privacy (or anonymity) of citizens in matters of monetary transactions. But as with other Internet-based forms of digital money, this claim rests on assumptions about the willingness and technical ability of untested third parties to safeguard personal details behind digital "wallets" operating under codenames and numbers. It certainly should give pause for thought that it is the National Security Agency (NSA) of the United States that holds the patent on blockchain codes for Ethereum, the second-most popular cryptocurrency after bitcoin, and is happy to promote its use free of charge (Diedrich, 2016). A much more efficient payment mechanism, from the point of view of anonymity, is cash, that is also cheaper, safer and much less energy-consuming. But cash is an inconvenience for banks and fintech companies more interested in promoting corporate digital payments systems that generate higher fees as well as mostly free but lucrative user data.

In practice, most leading cryptocurrencies, including bitcoin and Ethereum, do not function as day-to-day payment systems but as yet another speculative financial asset. Headline-generating frenzy in the market mainly for bitcoins in 2017 and 2018 also gave rise to wider considerations about the impact of self-driving

computer-generated financial trading strategies on stock market volatility and even financial crashes, prompting comparisons with self-driving cars (Tett, 2017).

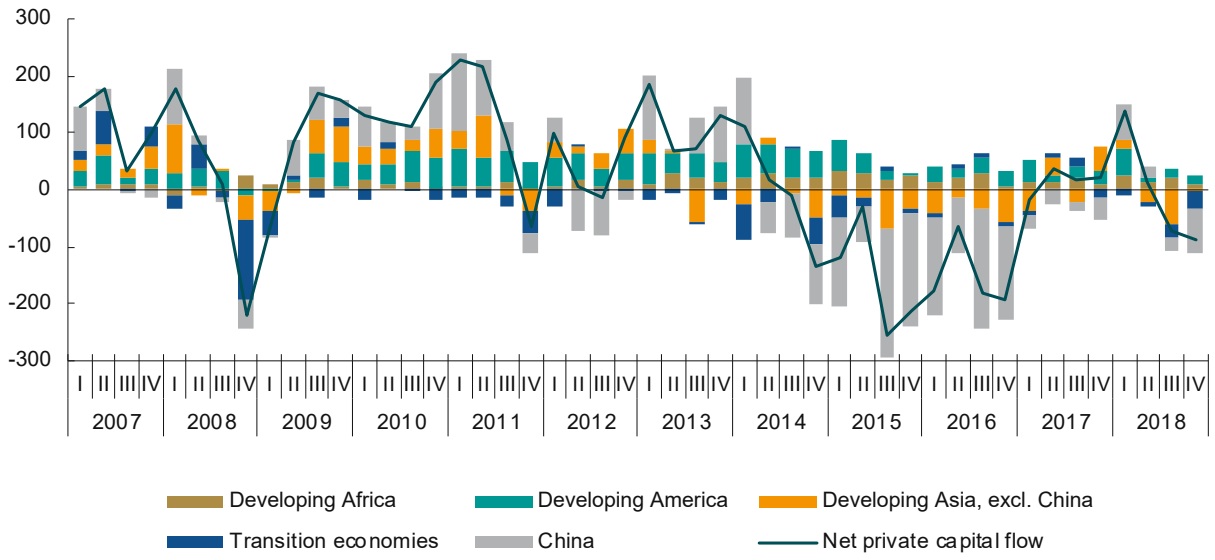
Whatever the reservations about the claims and realities of existing cryptocurrencies, the nature of this debate radically changed when, in June 2019, Facebook announced its plan to create its very own private money, called Libra. Libra is different from conventional cryptocurrencies not only in terms of its global reach resulting from Facebook's 2.4 billion active user base, but also from its centralized corporate operation, with PayPal as one of its main founding members, and with no pretence to anonymity. And while if Bitcoin ceased to function, the loss would be that of its investors, Libra would depend on the use of national currencies as collateral. To protect the Libra's value, the plan at present is to peg it to a basket of such currencies. This means that governments (and their taxpayers) would have to step in for liquidity support in the event of a run on the Libra. Given the massive scale at which the Libra would be launched, the risk and cost to the public of having to backstop this corporate money through liquidity provision in the event of a run on the Libra, would be enormous and possibly unprecedented (Pistor, 2019).

While some treat cryptocurrencies and even the Libra launch as yet another financial innovation, it is becoming more difficult to defend the idea that these currencies are democratic inventions that promote privacy and competitive efficiency. Instead, and unsurprisingly for the sceptics of financial inclusion and fintech, they are fast turning into rather old-fashioned corporate rent-seeking ventures designed to generate vast private profits but reliant on public bailouts when things go wrong.

nations, not as a result of a clearly negotiated consensus, but through a degree of policy conformity enforced by the rise of internationally mobile finance. That coordination involved abjuring proactive fiscal policies, focusing on monetary instruments for macroeconomic management, and leaving it to central banks to decide on whether the principal objective of inflation targeting could permit using monetary policy to stimulate growth.

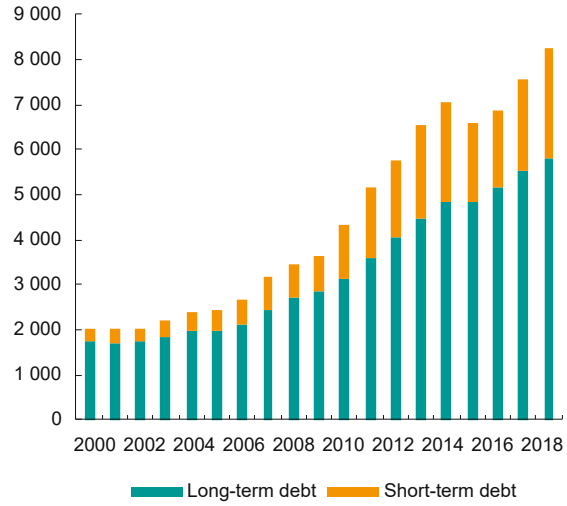
The easy money policy was initially designed to contain contagion after the GFC. It led to a post-crisis revival of capital flows to developing countries, especially the so-called emerging markets. Besides putting upward pressure on the currencies of some of these countries, such a surge soon led to increased fragility because of the possibility of capital reversal as unconventional monetary policies in advanced economies were ended. The extent of that fragility is seen in the volatility of aggregate capital flows (figure 1.8), affecting both equities and bonds (IMF 2019). Such volatility has persisted, with a substantial reduction of net capital flows to the emerging markets and developing economies between the first

FIGURE 1.8 **Net private capital flows by region, 2007–2018**
(Billions of dollars)



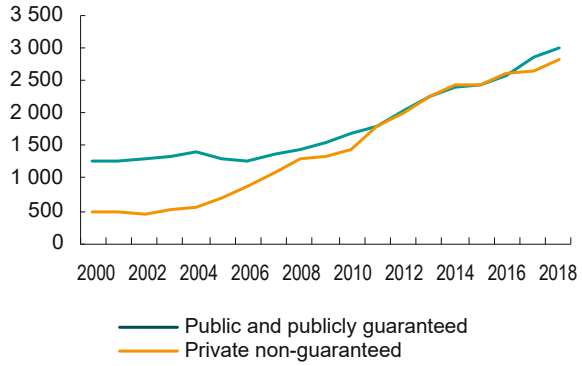
Source: UNCTAD, Financial Statistics Database based on IMF, Balance of Payments database; and national central banks.

FIGURE 1.9 **External debt of developing countries and economies in transition, 2000–2018**
(Billions of dollars)



Source: UNCTAD secretariat calculations based on World Bank, IMF and national sources.

FIGURE 1.10 **Structure of long-term external debt of developing countries and economies in transition, 2000–2018**
(Billions of dollars)



Source: UNCTAD secretariat calculations based on World Bank, IMF and national sources.

and fourth quarters of 2018, and then a recovery in inward capital flows in the form of both foreign direct investment and bank lending in the first quarter of 2019 (IMF 2019).

The reliance on cheap money to engineer the recovery also had the collateral effect of the return of unsustainable debt levels reminiscent of the years before the GFC. At first, the rebalancing of private debt positions resulted in the piling up of public debt, as governments borrowed to recapitalize banks, rescue financial firms and finance a stimulus in the form of increased public spending or large tax cuts. However, soon thereafter, private debt levels started rising once again. In particular, private non-financial sector debt in the G20, which fell from 151 per cent of the GDP in March 2008 to 139 per cent in December 2011, increased thereafter and stood at 151 per cent of GDP at the end of 2018.

The problem of persisting debt afflicts both advanced and developing economies. A specific aspect of the post-crisis debt explosion was the huge increase in the external debt of developing economies, driven by the excess liquidity originating in the advanced economies (figures 1.9 and 1.10). The total external debt of all developing countries and economies in transition, which had doubled to $4.5 trillion between 2000 and 2008, rose to $9.7 trillion in 2018. This increase was not only on account of borrowing by middle-income developing countries. The external debt stock of low-income developing countries fell slightly between 2000 and 2008, from $88 billion in 2000 to $83 billion in 2008, partly because of a round of debt write-offs under the heavily indebted poor countries initiative. But thereafter it has more than doubled, to $173 billion. Even in the case of the least developed countries, the stock of external debt has more than doubled, from $156 billion in 2008 to $341 billion in 2018.

The situation is particularly worrying in a number of Bank of International Settlements-identified emerging markets, where borrowing by the private, non-financial sector has exploded, with corporate debt rising from 83 per cent of GDP in the first quarter of 2008 to 145 per cent in the first quarter of 2018. This explosion of debt in a period when what could rather be expected was deleveraging from the highs of the pre-crisis years, has led to debt warnings flashing everywhere. The possibility of a perfect storm of rising debt servicing, weakening currencies and slowing economic growth is already keeping policymakers awake in many of these economies, with the outcome hinging as much on decisions taken in central banks of advanced economies as their own actions.

(c) From commodity price collapse to environmental breakdown

The extraction of natural resources remains a primary driver of development in many developing countries

where, since the start of the millennium, strong demand for commodities has contributed to growth surges. However, commodity markets have, in this period, also become more and more volatile, thanks to the highly financialized nature of the underlying assets. The resulting boom–bust cycles have held back diversification efforts in many of these economies, adding to their vulnerability to external shocks.

At the same time, growth across much of the global economy continues to rely on the intensive use of natural resources. The consequences of carbon-heavy growth on global temperatures is now fully recognized but this is just part of a wider environmental breakdown resulting from the exploitation of natural resources; soil degradation, deforestation, the pollution of oceans and the atmosphere, the loss of animal species, etc., are not only a growing concern for the health of the planet but carry increasingly high economic costs (IPPR, 2018).

The economic consequences of global warming are already apparent, with much of the damage felt by countries and communities with the least responsibility for the problem. Between 2010 and 2016, an average of around 700 extreme events each year cost an average of $127 billion per annum. This is the most visible part of a wider pattern of environmental destruction. For example, exposure to air and water pollution is estimated to have caused 9 million deaths annually. Meanwhile, the vulnerabilities created by financial liberalization and debt-dependent growth are undermining the ability of countries, rich and poor, to mitigate the costs of environmental damage.

4. We are all "populists" now

The interconnected nature of the threats facing the global economy cannot be met without large coordinated investments between countries, across the North and the South, improved policy coordination and increased transfers of technology (chapter III). But while circumstances demand such cooperation, many governments are reluctant, in the absence of a robust international framework and effective development cooperation, to respond to that challenge. The G20 meeting in Osaka in June 2019 exposed the weakness of the current arrangements.

The adherence to a policy agenda that prioritizes control of inflationary pressures and the interests of the financial sector has produced a sluggish recovery, growing inequalities and rising political tensions. Alternative policy prescriptions, such as demands for restoring a role for proactive fiscal policies and retreating from versions of austerity, adopting redistributive measures that stimulate demand and pushing for more managed trade as a means of national revival are dismissed as attempts by "populists" (whether of the right or the left) to register short-term political gains by capitalizing on the impatience of the population with no consideration for binding economic and financial constraints.

But this orientation to short-term political gains is no less true of the dominant policy agenda. Indeed, the populist foundations of today's conventional economic policy wisdom are often forgotten: trade liberalization, privatization and tax cutting have all been sold as bringing big gains for the majority against the resistance of narrow self-serving interest groups, whether they be government bureaucrats, organized labour or favoured industrial sectors. Adding unorthodox monetary policy to this mix, although couched in a more technocratic language, follows the same logic.

Much like the old trickle-down argument, the implicit case being made for a combination of free trade agreements, lower taxes and easy money is that galvanizing and rewarding the asset-owning class will also do good for the majority of their fellow citizens. This "centrist populism" promises a return to the "great moderation" with shared benefits for all while ignoring the long-term damage to distressed homeowners, discouraged workers and derelict local communities.

Like other brands of populism, this also has its villains. At the time of the crisis, "bad apples" and "rogue traders" were vilified (but rarely prosecuted) for abusing the financial system, but attention has since switched to governments who, it is alleged, are undermining the integrity of the rules-based liberal international order.

This narrative ignores the massive deployment of public capital, in the form of fiscal and monetary policy, in successfully mitigating the crisis-induced recession and triggering recovery. Financial firms and businesses were certainly able to use that cheap capital to speculate their way back to profit through asset-market investments in the developed countries and carry-trade activities in emerging markets. But there has been little sign of a recovery in productive

investment. And once profits were restored to "normalcy", there was a retreat to fiscal conservatism and a reliance on infusing large volumes of cheap liquidity into the system, that fattened the balance sheets of leading central banks.

The result is that while global asset markets have been buoyant and financial rents and the profits of the largest corporations have risen, incomes of the working and middle classes have been squeezed, profits in smaller enterprises have evaporated and government spending has been cut. As a result, aggregate demand has failed to pick up and the global economy has lacked a solid base on which to establish a robust recovery. The resulting inequalities and instabilities are triggering new economic, social and political tensions, which are then feeding back into economic uncertainties.

B. Trade trends

1. Deceleration mode

World trade is in deceleration mode. After having recovered smartly from 1.3 per cent growth in 2016 to 4.5 per cent in 2017, the average growth in the volume of world exports and imports slowed to 2.8 per cent in 2018 (table 1.2). Growth is projected by most agencies to slow further in 2019, with the figure likely to be much lower than the 2.6 per cent prediction made by the WTO in April 2019. This is because the deceleration in trade growth has been sharp in recent quarters. Data from the Netherlands Bureau for Economic Policy Analysis (CPB, 2019) show quarterly growth rates (relative to the corresponding quarter of the previous year) fell from 3.7 per cent in the third quarter of 2018 to 1.6 per cent in the fourth quarter and 0.5 per cent in the first quarter of 2019 (figure 1.11).

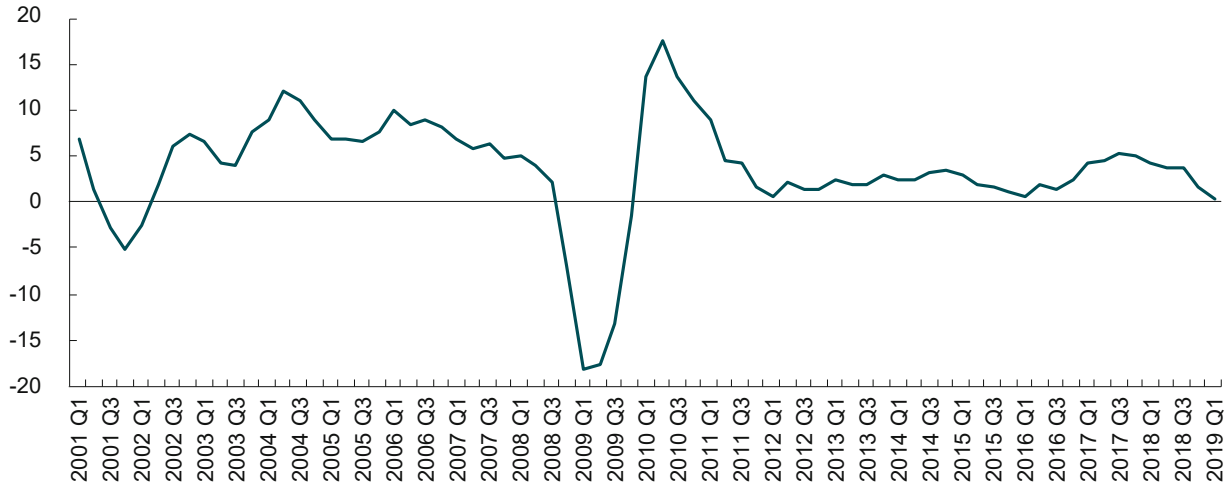
Given the intensification of the trade and technology tensions between China and the United States, the trade slowdown is often attributed to the disruption caused by that stand-off. While the disruption caused by actions taken by the United States cannot be denied, there is reason to believe that it cannot be the whole story, as world trade had started decelerating well before the eruption of these trade tensions. In addition, the effects of the trade tensions work in multiple ways, making the magnitude of the net negative effect on the volume of world trade uncertain.

TABLE 1.2 **Export and import volumes of goods, selected groups and countries, 2016–2018**
(Annual percentage change)

	Volume of exports			*Volume of imports*		
Group/country	*2016*	*2017*	*2018*	*2016*	*2017*	*2018*
World	**1.3**	**4.1**	**2.5**	**1.2**	**4.8**	**3.1**
Developed countries	**1.0**	**3.3**	**2.1**	**2.2**	**3.1**	**2.5**
of which:						
Japan	2,3	6.0	2.7	0.8	2.8	2.0
United States	−0,2	4.0	4.1	0.5	4.0	5.3
European Union	1.1	3.6	1.6	3.1	2.6	1.5
Transition economies	**0.0**	**4.5**	**4.1**	**5.8**	**13.0**	**3.9**
of which:						
Commonwealth of Independent States	−0.3	4.2	4.3	5.1	14.1	3.3
Developing countries	**2.0**	**5.2**	**2.9**	**−0.4**	**6.8**	**4.0**
Africa	0.5	3.7	−0.6	−5.4	−0.4	4.5
Sub-Saharan Africa	0.1	6.1	6.3	−10.4	1.1	2.1
Latin America and the Caribbean	2.5	3.0	2.5	−6.0	5.2	5.9
East Asia	1.3	6.5	3.3	1.7	6.9	4.6
of which:						
China	1.4	7.1	4.1	3.7	8.9	6.4
South Asia	5.7	5.8	2.5	1.3	11.5	2.8
of which:						
India	2.7	6.6	4.3	−1.8	11.7	3.1
South-East Asia	2.6	8.9	4.6	2.4	9.5	6.8
West Asia	2.5	−1.2	2.0	−1.7	2.5	−4.1

Source: UNCTAD secretariat calculations, based on UNCTADstat.

FIGURE 1.11 **Quarterly growth rates relative to corresponding quarter of previous year, 2001–2019**
(Percentage)



Source: CPB World Trade Monitor, March 2019.

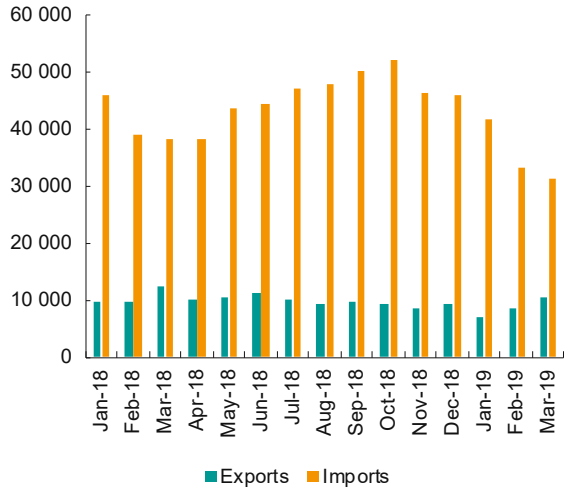
Rather, the overall deceleration of trade reflects a more generalized moderation of global demand, resulting in a loss of growth momentum. The signs of a medium-term loss in the momentum of trade growth signals persistent fragility in the post-GFC global economy.

China has been the main loser from the heightened trade tensions. Imports by the United States of Chinese goods fell from $52.2 billion in October 2018 to $31.2 billion in March 2019 (compared to $38.3 billion a year earlier). The effect on the United States was much smaller in absolute terms, with exports of the United States to China falling from $12.4 billion in March 2018 to $10.4 billion in March 2019 (figure 1.12). This is partly because China has been circumspect in responding to the measures adopted by the United States Administration, given its own persisting dependence on external demand, even as it seeks to rebalance growth away from exports and in favour of the domestic market and from investment in favour of domestic consumption.

There are wider implications for global trade beyond this bilateral action. The United States–China tensions have effects on aggregate import demand from both countries, which affect their other trading partners. China, because of its rapid growth and rising demand for raw material and intermediates, and because it has served as a final-stage export platform for global production chains, has been a major source of import demand in the world economy. So, any slowdown in China is bound to affect world trade adversely. In addition, measures by the United States have not been confined to China, but directed to other countries, as reflected in the adoption of similar measures for other countries, such as Mexico and those of the European Union.

However, the trade tensions also have some positive effects on growth both within and outside China. To start with, it has already resulted in a diversion of the export trade away from Chinese and American exporters to suppliers from third countries, thereby benefiting them. To the extent that there is such trade diversion, the total volume of world trade is unaffected. Further, to the extent that Chinese and United States producers who were restrained by import competition in the past benefit from the new protectionism, the growth-reducing effects of the protectionist actions would be neutralized. This only strengthens the view that the recent slowdown in world trade must in substantial measure be explained by factors other than the trade tensions, the effects of which are in any case still working themselves through. The slowdown in import growth is everywhere other than Japan and the United States, with the deceleration being significant in the euro area, other advanced economies, Eastern Europe / Commonwealth of Independent States and Latin America, and import volumes stagnating in Africa and the Middle East. Growth of imports in value

FIGURE 1.12 United States trade with China, 2018–2019
(Millions of dollars)



Source: US Census Bureau.

terms showed a better picture, largely because the prices of fuels which had fallen by 14.6 per cent in 2016, registered positive increases of 22.2 per cent in 2017 and 27.2 per cent in 2018.

The deceleration in import volume growth has been particularly marked in the emerging economies of Asia and Latin America, pointing to a loss of momentum in the countries that were expected to be new growth poles in the immediate aftermath of the 2008 crisis. China led the trend of deceleration, as its imports fell by 4.8 per cent in the first quarter of 2019, when compared with a year earlier.

2. Trade in commercial services

Trade in services, accounting for 23 per cent of global exports of goods and services, has remained buoyant. UNCTADstat estimates that the dollar value of global exports of services grew by 7.7 per cent to touch $5.8 trillion in 2018. This revival came after exports of services had only risen from a little less than $5 trillion in 2016 to around $5.4 trillion in 2017. All regions of the world registered increases in the export of services, with Africa and Asia and Oceania performing best with rates exceeding 9 per cent. Travel services, other business services and transportation were three of the dominant traded services. In most African countries, travel services dominated services exports, whereas the composition of services exports was more diversified in Asia.

Volume figures for two large components of trade in services, tourism and seaborne trade – which provide quantity data and thus avoid concerns related to valuation issues – offer additional insight on trends in the trade in services.

International tourist arrivals grew 4.4 per cent year on year during the first quarter of 2019, which represents about one fifth of the yearly total. This was below the 6.3 per cent average annual growth for the previous two years. The growth was spread across all main regions, with the Middle East registering the fastest expansion (8.2 per cent), followed by Asia and the Pacific (5.8 per cent), Europe (3.8 per cent), Africa (3.6 per cent) and the Americas (2.7 per cent). For 2019, UNWTO (2019) forecasts an expansion of 3–4 per cent.

Growth in international seaborne trade lost momentum after its volume expanded at a moderate rate of 2.7 per cent in 2018 to reach an all-time high of 11.0 billion tons (UNCTAD, forthcoming). This deceleration – which falls slightly below the historical average growth of 3.0 per cent – contrasts with the cyclical rebound of 4.1 per cent in 2017. This downside trend reflects various factors, including the global economic slowdown, the related heightened uncertainties and more specific idiosyncratic developments. For instance, growth in major dry bulk (iron ore, coal and grain) and tanker trade, each accounting for roughly 30 per cent of total seaborne trade, decelerated, from 4.7 per cent in 2017 to 1.9 per cent and from 3.0 to 1.5 per cent, respectively. Trends shaping dry bulk trade underscore the central role of China and the rebalancing of its economy, as the country imports more than 43 per cent of world trade in major dry bulk commodities and nearly one quarter of aggregate seaborne trade. Headwinds in tanker trade mostly relate to stagnating crude oil shipments. On the demand side, oil imports into the United States and Europe declined and decelerated in China, owing in particular to refinery capacity constraints suffered earlier during the year. On the supply side, disruptions involving the Bolivarian Republic of Venezuela and the Islamic Republic of Iran, together with OPEC-led cuts, have weighed on crude oil shipments. Meanwhile, containerized cargo remained relatively the most dynamic segment of seaborne trade, growing 4.3 per cent in 2018. Yet, its expansion also slowed from 6.4 per cent in 2017.

C. Commodity price trends

In keeping with the deceleration of global trade, suggestive of moderation in global demand, commodity prices that had registered gains of 17.4 and 16 per cent respectively in 2017 and 2018, were in decline (−4.3 per cent) in the first five months of 2019 relative to the corresponding period of the previous year (table 1.3). The differences between commodity price trends in the previous two calendar years and the first five months of 2019 were more marked at the disaggregated level (figure 1.13). In 2017 and 2018, the buoyancy in the aggregate commodity price index was driven largely by the rise in the prices of fuel commodities, influenced by production cuts by OPEC, the Russian Federation and other non-OPEC producers, geopolitical factors (especially United States actions against the Islamic Republic of Iran), and political instability in the Bolivarian Republic of Venezuela. The commodity group minerals, ores and non-precious metals also registered gains, especially in 2017. On the other hand, other non-fuel commodities, such as food and tropical beverages and vegetable oilseeds and oils, registered price declines in 2017 and especially in 2018.

These trends have persisted into the most recent period. The UNCTAD commodity price index fell from 134 in October 2018 to 112 in December that year, and since then has risen to reach a level in the neighbourhood of 120. Fuel prices drove the fall in the index in the last quarter of 2018, with the index of fuel prices falling from 149 in October to 115 in December. The subsequent recovery has been partially on account of the impact on oil prices of the United States action against the Islamic Republic of Iran and partially because of mild buoyancy in the prices of minerals, ores and metals. Prices of food, beverages and vegetable oils, on the other hand, showed no buoyancy and, in some cases, even experienced a decline.

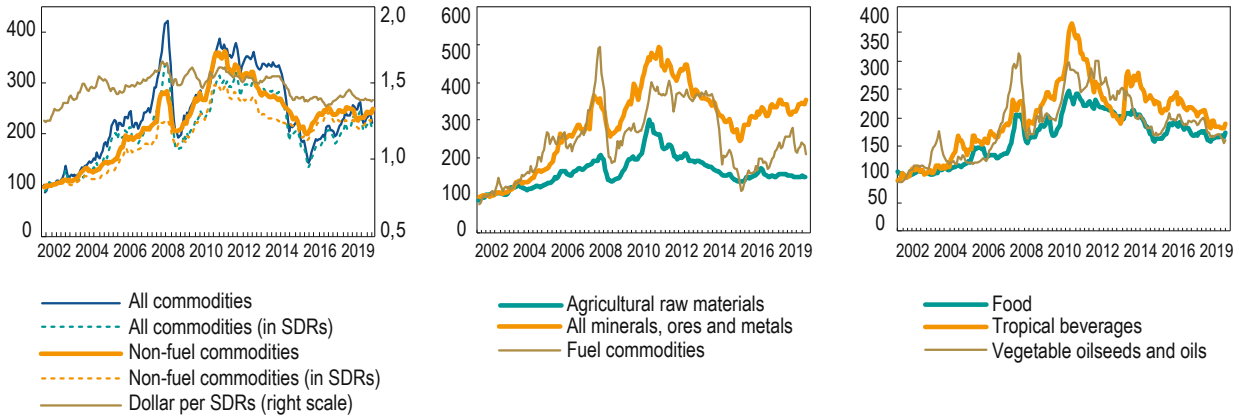
While depressed demand underlies the absence of price buoyancy in many commodity markets in recent months, medium-term volatility has been influenced by the wide fluctuations in oil prices and by the financialization of commodity markets and the concentration of market power in a small number of international trading companies.

TABLE 1.3 World primary commodity prices, 2008–2019
(Percentage change over previous year)

Commodity groups	*2008*	*2009*	*2010*	*2011*	*2012*	*2013*	*2014*	*2015*	*2016*	*2017*	*2018*	*2019*[a]
All commodities[b]	33.4	-31.6	24.3	28.6	-3.0	-3.7	-7.9	-36.2	-9.4	17.4	16.0	-5.7
Non fuel commodities[c]	22.2	-17.8	26.1	18.9	-12.7	-6.5	-8.0	-18.9	2.3	9.1	-2.2	-3.8
Non fuel commodities (in SDRs)[c]	18.3	-15.8	27.4	14.9	-10.0	-5.7	-8.0	-11.9	3.0	9.4	-4.2	-0.4
All food	32.6	-10.4	12.0	24.0	-6.5	-9.6	-0.8	-15.6	3.6	-1.3	-6.5	-8.0
Food and tropical beverages	31.1	-2.2	11.6	23.6	-9.9	-9.1	3.8	-14.2	2.2	-1.6	-6.6	-5.1
Tropical beverages	19.2	1.1	19.8	31.2	-22.4	-19.8	24.1	-10.3	-3.3	-3.1	-8.5	-11.9
Food	34.9	-3.2	9.1	21.1	-5.6	-6.0	-1.2	-15.4	4.0	-1.2	-6.1	-3.1
Vegetable oilseeds and oils	35.2	-24.1	13.0	24.8	0.7	-10.5	-9.6	-18.8	7.0	-0.5	-6.2	-14.1
Agricultural raw materials	8.4	-16.4	37.0	24.5	-19.2	-8.8	-11.8	-13.3	-0.3	5.3	-1.8	-3.8
Minerals. ores and metals	19.7	-12.9	33.6	20.5	-6.9	-9.5	-12.8	-17.2	4.6	11.3	1.3	-0.7
Minerals. ores and non-precious metals	17.5	-25.4	39.0	12.2	-16.8	-2.0	-14.6	-24.8	1.4	25.7	2.6	-0.5
Precious metals	23.4	7.5	27.5	30.8	3.4	-15.8	-11.0	-9.9	7.1	0.4	0.0	-1.7
Fuel commodities	37.9	-38.6	23.1	32.0	-0.5	-1.2	-7.5	-44.4	-17.5	25.9	27.5	-7.0
Memo item:												
Manufactures[d]	4.9	-5.6	1.9	10.3	-2.2	4.0	-1.8	-9.5	-1.1	4.7	4.5	n.a.

Source: UNCTAD secretariat calculations. based on UNCTAD, Commodity Price Statistics Online; and United Nations Statistics Division (UNSD). Monthly Bulletin of Statistics. various issues.
Note: In current dollars unless otherwise specified.
a Percentage change between the average for the period January to June 2019 and January to June 2018.
b Including fuel commodities and precious metals. Average 2014–2016 weights are used for aggregation.
c Excluding fuel commodities and precious metals. SDRs = special drawing rights.
d Unit value of exports of manufactured goods of developed countries.

FIGURE 1.13 Monthly commodity price indices by commodity group, January 2002–June 2019
(Index numbers, 2002 = 100)



Source: UNCTAD secretariat calculations, based on UNCTADstat. For more details on the data sources see http://unctadstat.unctad.org/wds/TableViewer/summary.aspx?ReportId=140863.
Note: SDR = special drawing rights.

What is noteworthy about early trends in 2019 is the more generalized decline in commodity prices, relative to the previous year, covering fuel commodities and all non-fuel commodity groups. In the case of oil, a number of factors have converged to reverse the earlier strong price trends. First, Saudi Arabia declared that it would ramp up production to cover any shortfall of supply from the Islamic Republic of Iran. Second, the production cut agreement between OPEC and non-OPEC producers, especially the Russian Federation, has not been implemented as per the original schedule, and has been extended with the same level of cuts. Finally, the increase in the price of oil has been enough to encourage increased shale production in the United States, given that technological developments has made it viable at lower prices than earlier. The influence of these factors, and the fear of recession, had set off a reversal of the Brent Crude price rise seen in the first four months of 2019. The price of Brent Crude, for example, fell from close to $75 a barrel in late April 2019 to $62 a barrel in the middle of June, despite the decision of the United States to end the waivers of adherence to its sanctions given to some countries importing oil from the Islamic Republic of Iran.

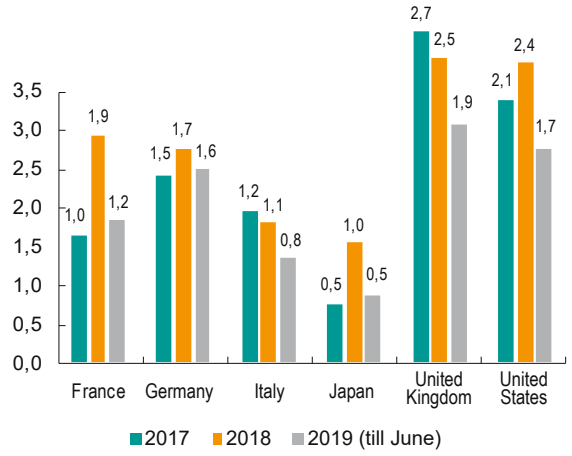
D. Regional growth trends

1. Developed countries

The United States surge in 2018 and the first quarter of 2019 has headlined news on growth performance in the advanced nations. But as a group, developed countries have not fared too well. While GDP growth in 2017 and 2018 in these countries stood at 2.3 and 2.2 per cent respectively, that figure is projected to fall to 1.6 per cent in 2019. An examination of growth in the leading advanced nations indicates that while the United States has managed to sustain a comfortable 2 per cent-plus rate of expansion, all the others have experienced a decline in growth, with the fall being sharp in the case of some, such as Italy (table 1.1). And the United States, too, is projected to record a significantly lower rate of growth in 2019, when compared with 2018. Japan has not merely lost the growth momentum it seemed to have gathered in 2017, but is struggling to get inflation to even 1 per cent (figure 1.14). Overall inflation rates in developed economies are low, but that seems to provide the justification for low interest rates and restrained spending by governments.

While uncertainties created by trade tensions and increased interest rates are blamed for the slowdown, there are other underlying reasons. The demand from emerging markets for developed country exports is slowing, especially from China, as the year-on-year rate of growth of Chinese merchandise imports fell from around 9.5 per cent in the first three quarters of 2018 to −1.9 per cent in the last quarter of 2018 and −3.1 per cent in the first quarter of 2019 (figure 1.15). Meanwhile, investment in housing markets and consumer spending triggered by access to cheap credit is tapering off as lenders and borrowers

FIGURE 1.14 National inflation for selected countries, annual average, 2017–2019
(Percentage)



Source: UNCTAD secretariat calculations, based on national sources reported by Thomson Reuters Worldscope.
Note: The 2019 rates are estimations, averages of monthly rates to respective period of previous year, available since the beginning of year.

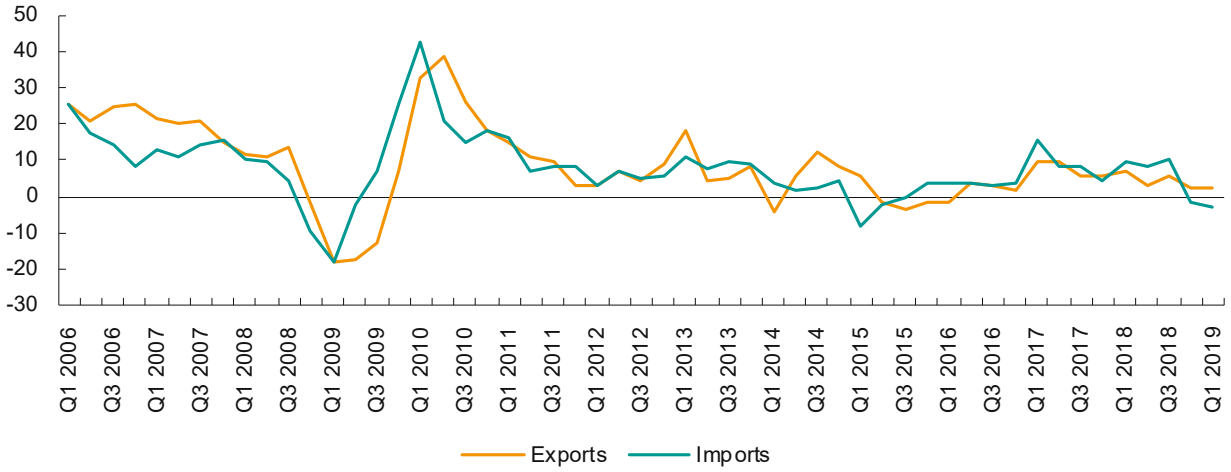
recognize the dangers associated with excess debt exposure. In addition, governments have been reluctant to deploy the fiscal lever. General government debt relative to GDP has either remained constant in advanced nations, or fallen as in the case of Canada, Germany and the United Kingdom.

Interestingly, the United States has been an exception here. The United States Administration's large corporate tax cuts and moderate spending increases have pushed the country in the direction of rising budgetary deficits, with the deficit expected to exceed $1 trillion in 2020. The Congressional Budget Office projections place the average deficit at 4.4 per cent of GDP over 2020–2029, well above the average during the last 50 years of 2.9 per cent of GDP. This has helped the United States maintain comfortable growth rates and reduce the unemployment rate, even though global growth and demand have been decelerating. However, an inverted yield curve, volatile monthly job addition numbers and feeble wage growth all suggest that the recovery is fragile and uncertain, with growth projected to decelerate from 2.9 per cent in 2018 to 2.2 per cent in 2019.

What is striking is that the United States still records current account deficits in its balance of payments, which while declining, point to the adverse performance of exports. Germany and Italy, on the other hand, have been recording large or significant current account surpluses, and France had seen a significant decline in its current account deficit (figure 1.16). This suggests that fiscal conservatism and weak investment in Europe, especially in Germany, is partly responsible for the new normal of low global growth.

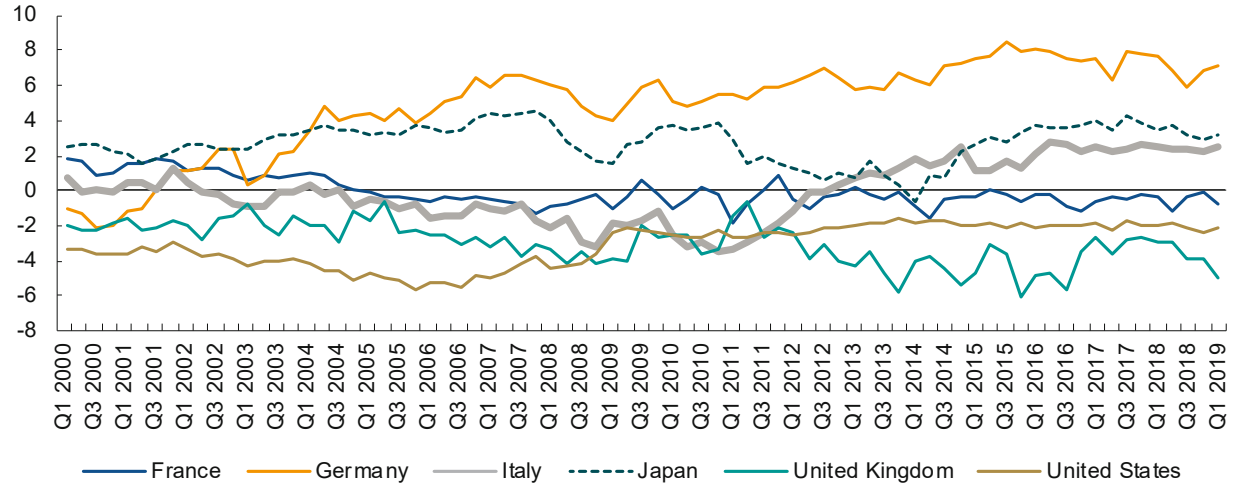
Across the world, the case for expansionary fiscal policies is gaining support, given the fact that monetary policy has been exploited to the maximum with inadequate results (OECD, 2019b; Blanchard and Tashiro, 2019; The Editorial Board, 2019). But governments and central banks in the advanced

FIGURE 1.15 Volume of Chinese merchandise exports and imports, 2006–2019
(Percentage year-on-year growth)



Source: UNCTADstat.

FIGURE 1.16 Quarterly current-account balance, 2000–2019
(Percentage of GDP)



Source: Thomson Reuters Worldscope standardized series, based on national sources.
Note: Seasonally adjusted series.

economies continue to favour lowering interest rates and returning to quantitative easing. That will not do much for growth, but is likely to fuel more financial speculation.

Disruptive shocks like a no-deal Brexit at the end of October 2019 are now appearing more likely. If that were to happen, growth in the United Kingdom could possibly be strongly negative in the fourth quarter, leading to annual growth well below 1 per cent, as trading with the European Union comes to a standstill and financial firms from the City lose out because of the loss of passporting rights to conduct business in Europe, and the regulatory framework in the United Kingdom not being considered "equivalent" to that in European markets. That would only widen the gap in growth between the United States and the other advanced economies.

2. Transition economies

Two factors dominantly influenced economic performance in the transition economies that are members of the Commonwealth of Independent States. First, the economic integration with and dependence on the Russian Federation through trade and remittance earnings of these countries. And, second, the importance of commodities and oil in the economies of individual countries, making commodity trade trends and price movements a crucial determinant of their performance.

The Russian Federation, which benefited from the relatively high level of oil prices over much of 2018 was adversely hit both by the decline in prices in the last quarter of 2018, as well as by the production cuts it had implemented as part of its agreement with the OPEC-plus group of oil producers. The price of Brent Crude fell from around $85 per barrel at the beginning of October 2018 to around $50 at the end of December 2018. However, it subsequently rose to close to $75 a barrel by end April. Combined with the production cuts put in place, these trends adversely affected the economic performance of the Russian Federation in 2018. Russian GDP growth, which increased from 1.6 to 2.3 per cent (the best performance in six years) between 2017 and 2018, is projected to come down significantly in 2019. With the OPEC, Russian Federation and non-OPEC producers having cemented another agreement to extend the production cuts for another six to nine months, output is down though prices may continue along their roller-coaster path.

Weaker performance by the Russian Federation will impact growth in the rest of the Commonwealth of Independent States, so that the group as a whole, which had seen GDP growth rise from 2.1 to 2.7 per cent between 2017 and 2018, is expected to slow to around 1.3 per cent in 2019. However, regional integration efforts to increase the volume of intraregional trade, and infrastructural investments supported in part by the Belt and Road Initiative in China are helping to prop up growth in some countries in

the Central Asian region. After growing at 4.1 per cent in 2017 and 2018, Kazakhstan is projected to grow at 3.5 per cent, and the other large economy, Uzbekistan, which accounts for close to half of the population in the Central Asian region, saw growth rise from 4.5 to 5.1 per cent between 2017 and 2018, with projections pointing to a similar performance in 2019. The tensions with the Russian Federation are seen to have adversely affected exports from Ukraine and growth is expected to slow in 2019.

The transition economies of South-Eastern Europe (Albania, Bosnia and Herzegovina, Montenegro, North Macedonia and Serbia) seem to have weathered the global deceleration in growth well. GDP growth in this group of countries which rose from 2.5 to 3.9 per cent between 2017 and 2018, is projected to stay marginally above 3 per cent. Increased public expenditure, including infrastructural investments supported by the Belt and Road Initiative, and buoyancy in net exports and tourism earnings in some economies explain the relatively good performance of this region. Being integrated into European value chains, these countries have also received relatively consistent foreign investment flows during periods without political uncertainties or conflict, which have contributed to exports.

Strikingly, the creditable growth performance was recorded in an environment in which consumer price inflation was relatively low (below 3 per cent in a few and 2 per cent in many). However, there are signs of vulnerability in the Balkans. First, the current-account deficit was significantly high in Albania and Montenegro, a cause for discomfort in Bosnia and Herzegovina and Serbia, and under control only in North Macedonia. Second, unemployment was high in almost all countries, even though the unemployment rate is expected to decline in 2019 relative to previous years. With new jobs increasing at a slow pace, unemployment among the youth is extremely high. Part of the problem is that the pattern of growth is such that the responsiveness of employment to GDP growth is low. This also leads to a drop in the workforce or the numbers actively seeking work. A third source of vulnerability is the growing indebtedness of some of these economies. Finally, demographic changes and migration to European Union countries are further lowering potential growth in the medium term.

3. Latin America and the Caribbean

As a region, Latin America and the Caribbean has been mired in stagnation for the last four years, and this poor growth performance is expected to persist throughout 2019. The subregion dragging down this regional grouping is South America, with negative and near zero growth over the five years ending 2019. Within South America, growth performance has been especially poor in Argentina, Brazil and the Bolivarian Republic of Venezuela, while some countries (such as the Plurinational State of Bolivia, Guyana and Peru) are expected to grow at 3 per cent or more in 2019. Central America too is projected to experience growth deceleration (driven by Mexico and Nicaragua) in 2019, while the Caribbean is expected to continue to grow at a moderate rate. The two fastest growing economies in the region as a whole continue to be the Dominican Republic and Panama. Both countries have averaged a growth rate of approximately 5 per cent over the last four years, and they are projected to grow at 5.2 per cent and 4.5 per cent respectively in 2019.

The overall subdued trend in commodity prices dampened the performance of the export sectors in the region. Two notable exceptions to this trend were Argentina and Brazil, where significant increases in the value of iron ore exports in the case of Brazil, and of soy exports from Argentina have provided a positive impetus in the first half of 2019. In the latter case, the income from these exports provided a respite, albeit temporary, from pressure on the exchange rate. Some countries are expected to benefit from the recent politically generated buoyancy in oil prices, strengthened by the renewal of the agreement on production cuts among the OPEC-plus group, which includes the Russian Federation.

The three big economies in the region are facing a difficult combination of economic shocks and political uncertainty. In Argentina, the adoption of policies favoured by the Washington Consensus, including reducing subsidies, doing away with price controls, liberalizing foreign exchange markets and lifting capital controls, helped reduce the primary deficit in 2018, but has done little to keep the peso from depreciating, rein in inflation or kick-start growth. Instead, faced with a severe drop in the value of the peso and spiralling inflation in 2018, the central bank was forced to abruptly hike interest rates and to sell off international reserves. The Government subsequently opted for the biggest loan given by the IMF

in its history, of $57.1 billion in 2018, leading to a further increase in the huge debt in Argentina and to greater fiscal austerity. But that has not helped either. Argentina finds itself saddled with high inflation (which has doubled from 25 per cent in early 2018 to more than 50 per cent per annum), negative growth of -2.5 per cent in 2018 and a projected -2.4 per cent in 2019, and a mountain of debt obtained from private lenders and the IMF. Meanwhile, the promised increases in foreign investment and exports have not materialized. The net result is that unemployment exceeds 9 per cent and around a third of the population lives in poverty.

The Brazilian economy shrank by 0.2 per cent in the first quarter of 2019 relative to the preceding quarter. That matters because in the course of the recession of 2015–2016 the Brazilian economy shrank by close to 7 per cent, and in two years of weak recovery managed to raise output by a little more than 2 per cent. The first quarter figure points to 0.4 per cent of GDP growth relative to the corresponding quarter of the previous year, and growth for 2019 is projected at 0.6 per cent. A crucial internal reason for this long-run weakness characterizing the Brazilian economy is the low level of public capital formation resulting from fiscal conservatism, reflected in the new rule that sets a ceiling on expenditure. Federal Government investment, at 0.4 per cent, was at its lowest level in 10 years in 2018. Yet, Government capital expenditure is estimated to have fallen by 27 per cent in the first quarter of 2019 as compared with the corresponding quarter of the previous year. The central bank's decision to keep interest rates at record lows, after a total 775 basis-point reduction between October 2016 and March 2018, has not helped to spur private investment.

The other large economy in Latin America, Mexico, also contracted by 0.2 per cent in the first quarter. Over 2019, growth is projected at just above 0.4 per cent, down from around 2 per cent in 2017 and 2018. An important cause for sluggishness is the uncertainty generated by United States trade policy shifts, which, together with limited public investment, has held back private investment and growth.

4. Africa

GDP growth in Africa is projected to hold steady in 2019 at 2.8 per cent, from 2.6 and 2.8 per cent in 2017 and 2018 respectively. But given the size and diversity of individual countries constituting the continent, performance varied significantly, as is to be expected. Some of the largest economies in the continent (Angola, Nigeria and South Africa) remain stuck in a sluggish growth cycle. In the case of Nigeria, infrastructure shortfalls, power shortages and constrained credit conditions continue to weigh down growth prospects. Similarly, the South African economy trapped in a low-investment regime, has recently been hit by damaging power cuts. The latter has had a particularly detrimental impact on the mining sector. The poor growth performance in Angola is largely a result of the country's declining oil production, due to insufficient investments in the petroleum sector. On the other hand, the continent is also home to a number of countries recording the fastest rates of growth in the world economy, with Côte d'Ivoire, Ethiopia and Rwanda projected to grow at rates above 7 per cent in 2019.

At a subregional level, East Africa (with rates of growth of 5.5 per cent in 2018 and a projected 5.3 per cent in 2019) was ahead, while West Africa (3.2 and 3.4 per cent) performed comfortably, as did North Africa (3.1 and 3.0 per cent). Growth in Southern Africa was sluggish (0.9 and 0.5 per cent), with Botswana being the only economy that beat that trend (4.4 and 4.3 per cent). Middle Africa, which had performed poorly on the growth front, contracting by 0.5 per cent in 2017 and growing 0.8 per cent in 2018, is expected to register a recovery to 2.1 per cent in 2019. The positive effect of the higher growth in many economies in the continent was discounted because two of the largest economies – Nigeria and South Africa – were among the slowest growing. In 2018, South Africa recorded its lowest per capita GDP since 2012.

Government investment in infrastructural projects, particularly in the energy sector, underlie to a significant degree the buoyancy in the faster-growing economies. In East Africa, robust growth was generalized, unlike elsewhere, with growth being creditable in Djibouti, Ethiopia and United Republic of Tanzania, as well as Rwanda. One issue here is that most economies are dependent on primary commodity exports, making them vulnerable to the volatility in export volumes and prices. Subdued commodity prices and the decline in oil production in Nigeria account for the fact that West Africa fell behind East Africa, even though the former performed better than Central and Southern Africa. But Benin, Burkina Faso, Côte d'Ivoire, Ghana and

Senegal recorded rates of growth in excess of 6 per cent in 2018 and are expected to grow at well above average rates in 2019 as well.

Internal problems were an important factor holding back central Africa, with the Central African Republic, Chad and the Democratic Republic of the Congo being the worst affected. This, combined with the subregion's heavy dependence on the mining and oil sectors, which often are the focus of conflicts over control, has resulted in many of the countries being trapped in a vicious feedback loop of poverty, unemployment and conflict. Declining oil production was strong enough to lead to significant contraction in Equatorial Guinea. In Southern Africa, the biggest economy in the subregion, South Africa, performed poorly, which in turn also impacted the economic activity in its neighbouring countries. With the exception of Botswana – the only country to buck the low growth trend in Southern Africa – the rest of the countries in the subregion are expected to register growth rates between 1.0 and 1.5 per cent in 2019.

As mentioned earlier, the subdued trend in commodity prices was an additional factor weighing down on the prospects of the continent, as the vast majority of the countries in the region are net commodity exporters. While the oil price recovered somewhat in the first half of 2019 relative to the last quarter of 2018, it remains significantly below the levels of the first half of 2018. This has adversely impacted external balances in the petroleum-exporting countries in the region (Angola, the Democratic Republic of the Congo, Equatorial Guinea, Gabon and Nigeria). Rising external deficits combined with easy access to credit resulted in annual growth in external debt stocks of 9.5 per cent[4] over 2009–2018. Africa's debt-to-GDP ratio was an estimated 33.6 per cent in 2018, representing a debt-servicing ratio to GDP of 3 per cent, far higher than the respective levels (25.7 and 1.6 per cent) recorded for 2009. One notable exception to this generalized trend in commodity exports is South Africa, where the exports of iron ore (one of the few commodities to register a significant increase in its price in 2019) boosted the performance of the country's export sector.

5. Asia

Growth in developing Asia, which has been slowing after 2016, is estimated at 5.3 per cent in 2018 and projected to come down to 4.5 per cent in 2019. The growth slowdown has been significant in East, South and South-East Asia, and substantial in West Asia where growth was already slow. The deceleration would have been greater in the region as a whole if India had not registered an acceleration in growth between 2017 and 2018, from 6.9 per cent to 7.4 per cent. However, the slowdown observed in the rate of growth of the Chinese economy from 2017 onwards, is projected to intensify in 2019 because of the trade and technology tensions. Together with a projected deceleration in the rate of growth in 2019 for India, where below-target collections from the recently introduced Goods and Services Tax have combined with fiscal consolidation efforts to limit public spending, will further slow growth in the Asian region as a whole.

The slowing of China's trade growth has a major impact on other East Asian and South-East Asian economies, since it is likely that the integrated value chains spread across these economies and linked to China would be disrupted. In addition, specific factors such as natural disasters in Japan and deleveraging in the household sector in the Republic of Korea played a role in limiting growth. Growth in Japan fell from 1.9 per cent in 2017 to 0.8 per cent in 2018, and is expected to stay around that level in 2019. In the case of the Republic of Korea, the rate of growth fell from 3.1 per cent in 2017 to 2.7 per cent in 2018, and is expected to fall further to 1.9 per cent in 2019. However, some countries in South-East Asia, such as Indonesia and Viet Nam, have performed consistently well in recent years, despite sluggishness in their export markets.

Meanwhile, United States trade and financial measures against the Islamic Republic of Iran have reduced oil revenues, generated shortages and inflation, and limited utilization and expansion of productive capacity. Elsewhere, the efforts of OPEC to curtail production in order to prevent a renewed slide in oil prices helped to shore up revenues and raise growth in the member countries of the Cooperation Council for the Arab States of the Gulf (GCC): Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates. Capital flow volatility and uncertainty regarding the policy stance to be adopted by the Government led to significant depreciation of the Turkish lira, forcing the Government to hike interest rates to extremely high levels with adverse growth effects. In some South Asian economies, such as Bangladesh,

growth was quite robust. But Pakistan is in the midst of a crisis: the growth rate has almost halved, the balance of payments is in poor shape, the rupee has depreciated significantly, and external debt is large and rising. While support from China and Saudi Arabia and a large IMF loan have helped address the immediate problem, the crisis has not been resolved. ■

Notes

1 It is worth noting that such SBBs were also significant in the run-up to the 2008 crisis, and this period of boom in the 2000s was marked by falling net investments because of the significant role of borrowing for physical and financial investments by firms, as well as for SBBs.

2 Financial conditions, and the recent stringency in trade credit, may also be adding to the impact of low demand conditions in affecting global value chains in trade. It has been argued (Shin, 2019: 6) that the "overextended network of global value chains that were strung out across the world in 2006–2007 may have been sustainable only with the extraordinarily loose financial conditions that were then prevailing".

3 Estimates of losses to United States consumers and/or firms due to higher import prices vary from $36 billion to $68.8 billion in a full year and aggregate income losses in the United States after taking account of gains to producers and to government in the form of revenues from $7.8 billion to $16.8 billion in a full year (Fajgelbaum et al., 2019; Amiti et al., 2019). This compares, for example, with losses suffered by the United States from Hurricane Katrina of anywhere between $125 billion and $250 billion.

4 UNCTAD secretariat calculations based on World Bank, IMF and national sources.

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ISSUES AT STAKE

II

A. Introduction

The global financial crisis left deep and lasting scars on the societies it touched. Those scars have only been deepened by a decade of austerity, sluggish productivity growth, stagnant real wages, rising levels of household and corporate debt, and increasing inequality. Disparities of wealth and income have grown, and local communities are fragmenting under the dynamic and destructive forces of hyperglobalization. Thousands of lives are being lost to "deaths of despair" each year (*The Economist*, 2019), and trust in political institutions has evaporated. Growth has slowed in most developing countries, albeit with considerable variation across regions. The struggle to create good jobs has intensified, with rapid urbanization, premature deindustrialization and rural stagnation widening the gap between the "haves" and the "have nots".

All over the world, anxiety over the prospect of economic breakdown is compounded by the impending threat of environmental collapse. The IPCC (2018) has raised the stakes by giving the world just 10 years to avert climate meltdown; but this is just part of a growing recognition of a wider and deeper ecological crisis. Thousands of species are going extinct every year, soils are being degraded, oceans acidified and entire regions desertified.

The international community has agreed upon a series of goals in an attempt to ensure an inclusive and sustainable future for people and the planet. But with little more than a decade left to meet the 2030 Agenda for Sustainable Goals, these efforts have fallen drastically short of their proponents' ambitions. Today, there is widespread agreement that there is just one option left: a coordinated investment programme on an unprecedented scale across the entire global commons. The numbers are daunting. Cost estimates have gone from "billions to trillions" according to the World Bank (2015), to an additional $3 trillion a year for developing countries alone, according to UNCTAD estimates.

Mobilizing investment on this scale will be challenging for many national policymakers. This is certainly true in most developing countries where there have been long-standing resource constraints on development ambitions; but in recent years, sluggish investment, particularly in the public sector, has also been a concern for policymakers in advanced economies, with many acknowledging serious deficits in their infrastructure provision (McKinsey Global Institute, 2017). Moreover, the macroeconomic and financial pressures that are likely to accompany any big investment push require policy coordination that goes well beyond countries simply putting their own house in order to include revitalized international support and cooperation.

A decade ago at the G20 gathering in London, the world's major economies came together to stem the global financial panic triggered by the collapse of the sub-prime mortgage market in the United States and to establish a more stable growth path going forward. Their talk of a fresh start – "a new international order" for President Sarkozy, "a new Bretton Woods" for Prime Minister Brown – was an acknowledgement that the existing multilateral system had failed to provide both the resources and the coordination needed to underpin stable markets and a healthy investment climate.

A decade on, that effort has stalled, leaving those tasked with meeting the Sustainable Development

Goals (SDGs) wondering whether the multilateral system is fit for purpose. These concerns are compounded by the dizzying rise in debt levels to a scale similar to those seen before the financial crisis (see chapter IV). If the routine warnings from financial analysts and at international gatherings are to be believed, the global addiction to debt is no longer sustainable.

Rising indebtedness presents a challenge to those attempting to deliver on the 2030 Agenda. A consensus is emerging that with public finances under stress, the required resources must be provided by the private sector. Whether by appealing to their "better angels" through narratives of social responsibility or to their economic self-interest through the use of impact investment, champions of the SDGs are now focused on finding ways to entice high-net-worth individuals and corporations to provide the financial resources necessary to meet these goals.

At the same time, the scale of the economic, social and environmental challenges requires us to go beyond simply redeploying existing resources to mobilize new ones as well. This means taking up the call to reform the multilateral system and to find new ways to finance public goods at both national and global levels. The preferred solution is, once again, to appeal to the private sector to provide these resources – often by creating innovative financial products that can reduce the risks associated with big investment projects. The bias towards private financing has continued to go unchallenged, even as such schemes have consistently failed to deliver desired outcomes for the productive economy, whether in the private or the public sector.

This *TDR* will examine some of the proposals behind the private financing agenda. It will suggest that the bias towards private financing is based on limited empirical support and pays insufficient attention to the dangers of a world dominated by private credit creation and unregulated capital flows. Such an approach therefore runs the very serious danger of, as Angel Gurria, head of the OECD has put it, wanting "to change things on the surface so that in practice nothing changes at all" (cited in Giridharadas, 2018: 9). Doing so will not only fail to generate the resources required for the investment push needed to deliver the 2030 Agenda but, in all likelihood, will further exacerbate the inequalities and imbalances that the Agenda is designed to eradicate.

Instead, the *Report* suggests that meeting the financing demands of the 2030 Agenda requires rebuilding multilateralism around the idea of a Global Green New Deal, and by implication forging a collective financial future very different from that of the recent past. The first step towards building such a future is to seriously consider a range of public financing options, as part of a wider process of repairing the social contract on which inclusive and sustainable outcomes should be based, and out of which can emerge a more socially productive approach to private financing.

B. Revving up the private financing engine

The question of how to make the global financial system work for all has been taken up by the G20 Eminent Persons Report on Global Financial Governance (EPR-GFG), released in October 2018. The report makes the bold claim that, in light of the overlapping and pressing challenges identified in the 2030 Agenda, serious reform of the global financial architecture is overdue. It recognizes, moreover, that the anachronistic structure of the international system – premised on the dominance of the United States and Western-led multilateralism – could compromise efforts to respond to these challenges.

As the report emphasizes, promoting "mutually reinforcing policies between countries and minimize negative spill overs" in this context presents many challenges. Policymakers must be careful to ensure that national and international policies "aimed at growth and financial stability" reinforce one another, rather than deepening divides, conflict and economic stagnation. This requires "a framework […] to mitigate such spill overs and their effects as much as possible" not least to avoid reducing national "policy space" (EPG-GFG, 2018: 12).

In light of these challenges, the argument of the report is that we should reject calls to return to the "old multilateralism", and instead create a "cooperative international order" in line with today's multipolar world. Such a new multilateralism should be tasked with establishing a resilient and healthy investment

climate to unlock the private capital needed to finance the big challenges of the twenty-first century (EPG-GFG, 2018: 4).

To do so, the report proposes a three-pronged strategy which, it is argued, offers a new model for development finance. First, strengthen national capacities by deepening domestic capital markets, improving tax administration, promoting "development standards" around debt sustainability, adopting coherent pricing policies and, more generally, creating a low-risk national investment climate through transparent economic governance and robust "country platforms". Second, "de-risk" private investment and maximize the contribution of development partners by joining up regional and global "platforms" to boost investment, primarily by creating new large-scale asset classes, such as "infrastructure assets" that can be "securitized" by bundling high- and low-risk loans into new and "safer" financial products. Third, strengthen global financial resilience by improving global risk surveillance, improving management of policies with large spillovers and building a stronger global financial safety net, including a global liquidity facility. The report outlines 22 proposals to advance this strategy.[1]

Paradoxically, the proposals are simultaneously quite radical and oddly familiar. The familiarity stems, in part, from the fact that much of the model (especially the emphasis on private financial flows) is an extension of the path that the international financial institutions (IFIs) have been following for some time and which the G20 has been actively promoting since 2014.[2] The radical element of the analysis is the emphasis placed in the report on "de-risking" private investment, a term that applies not only to securitized infrastructure assets but to creating a safe, low-risk investment climate for private investors more generally.

The focus on de-risking will, it is suggested, give IFIs greater scope to adopt a variety of mitigation instruments that make it more attractive for private finance to invest in public goods and the global commons – for example, public guarantees, insurance programmes and co-investments. But while this suggests a new approach for the IFIs, it draws on the same arguments about the role of financial markets in boosting competition and innovation that came to prominence in the 1990s, which supported a new generation of instruments of risk-management. These instruments supposedly allowed investors to manage complex risks in ways that enhanced trade and portfolio flows and promoted real capital formation, boosting living standards worldwide (Shiller, 2012).[3]

The G20 report argues that the sense of urgency that now exists around the delivery of the SDGs could provide the impetus needed to scale up these innovations as part of a wider programme to create open, liquid capital markets that are attractive to global investors in the developing world. This wider transformation includes (but is not limited to) making infrastructure an asset class; creating liquid assets (i.e. revenue flows) out of currently illiquid assets; promoting "shadow banking" to create investment opportunities in economic and social infrastructure; pursuing the privatization of public services (by normalizing the idea that public goods such as education, water and health care can be better provided by private investors); replacing disaster relief with private financing instruments; and extending the "microcredit" option to the poorest households.[4]

Pursuing this approach to refashion the multilateral financial system begs an obvious question: why, having crashed spectacularly in 2007–2008, should this model offer the preferred way to deliver on the ambition of the 2030 Agenda? Addressing this question requires a detour through recent history.

C. Financialization matters

1. From servant to master

When more than 700 international policymakers gathered at Bretton Woods 75 years ago, they had one clear task: making finance into the servant of capitalism, rather than its master. The delegates aimed to construct a more regulated capitalism geared to delivering full employment, boosting incomes and supporting democratic principles. Most of the participants had witnessed first-hand the economic destruction of the previous decades – caused by mercurial flows of hot money and exaggerated by procyclical monetary policies and fiscal austerity. There was a broad consensus that curbing such flows

of hot money through financial oversight and regulation at both the national and international levels was a prerequisite for economic stability, a healthy investment climate, open markets and effective national policy making.[5]

While the aim of the conference was clear, the negotiations were far from simple, and tensions between the rising United States and the declining United Kingdom were high.[6] Still, the multilateral system that emerged from the negotiations permitted nations to regulate international markets and to pursue strategies for more equitable prosperity and development. Such a system had emerged because the leaders who negotiated it – those elected in the wake of the Second World War – believed in managed capitalism and full employment. Having experienced both the Great Depression and the defeat of fascism, they sought to build a value-driven and rules-based global economy with appropriate checks and balances – an economy that would, in the words of the first post-war Chancellor of the United Kingdom, favour "the active producer as against the passive rentier".

The system was far from perfect: the technological divide between North and South persisted and unequal trade relations inhibited diversification in many developing countries; wasteful military spending under a tense East–West divide fuelled proxy wars and crippled economic prospects in many poorer regions; racial and gender discrimination endured; and carbon-heavy growth was pursued heedless of the environmental cost. However, its core principles provided a rough template for a more balanced form of prosperity in a globally interdependent world (UNCTAD, 2014; Gallagher and Kozul-Wright, 2019).

That system broke down in the early 1970s, as the economy of the United States struggled to manage its twin deficits and as global banks and corporations found ways to circumvent the checks and balances that had underpinned the social contract at home and the monetary compact abroad. The system of fixed exchange rates was first to buckle. With a slowing global economy, recurrent economic shocks and growing constraints on domestic policymaking, political allegiances and ideologies shifted rapidly. During this time of transition, the ideology of neo-liberalism rose to prominence. The neo-liberals argued that the state's role was to support the operation of free enterprise and to leave free markets to adjust to any shocks until equilibrium was reached. Monetary policy was tightened, fiscal austerity adopted and labour markets deregulated (Glyn, 2006).

Over the subsequent decades, politicians, policymakers and the public were cajoled and persuaded into believing that what was good for footloose finance and international corporations was good for everyone else.[7] Inevitably, given its economic weight and the dominant position of the dollar in international markets, the United States was the bellwether. Depression-era regulations separating commercial and investment banking were eliminated, as were regulations on new financial products such as credit-default swaps; investment banks were allowed to dramatically increase their leverage; regulatory oversight of financial markets was weakened; controlling inflation became the singular focus of government policy and insistence on the free flow of international capital became the dominant ideological mantra. Similar policies were implemented across the developed world, albeit to varying degrees and on different timescales (Kay, 2015).[8]

Supportive changes were under way at the international level. The Basel Accords allowed banks to measure their own risk exposures, and regulators barely attempted to update regulation in line with the tremendous pace of financial innovation. Above all, the role of the dollar as the financial lodestone in a world of floating exchange rates was preserved by ensuring that the financial markets and institutions of the United States became the magnets for attracting and recycling footloose capital. Paul Volcker, Chair of the Federal Reserve between 1979 and 1987, was candid about orchestrating a "controlled disintegration in the world economy" that would preserve the exorbitant privilege of the dollar's reserve currency status and pave the way for a much greater role for financial, and in particular Wall Street, institutions, in shaping economic prospects at home and abroad (Mazower, 2012: 316–317).[9] Doing so involved an unprecedented hike in interest rates in the United States, and by the time those had returned to more normal levels, the Bretton Woods system was well and truly buried.[10]

2. The shadowy world of financial innovation

Proponents of this new world order claimed that deregulating finance was the best way to unlock the benefits of globalization by improving "the

worldwide allocation of scarce capital and, in the process, [engendering] a huge increase in risk dispersion and hedging opportunities" (Greenspan, 1997). By the end of the 1980s, through a combination of pressure and persuasion, emerging economies had started to open their capital accounts and tentatively welcome foreign investment, which began to flow from North to South in search of higher yields.[11] The collapse of the Soviet Union converted yet more states to the gospel of financial deregulation. The era of financialization was in full swing.

As we have argued in previous *Trade and Development Reports*, the rise of self-regulation in financial markets has led to increased inequality, an unprecedented growth in indebtedness (both public and private) and growing insecurity and instability. Financialization has led to a dramatic shortening of economic horizons, the concentration of market power and the re-emergence of rent-seeking behaviour – the bugbear of the architects of Bretton Woods – often in a highly extractive and predatory guise (Nesvetailova and Palan, forthcoming).

Banks have been central players in the financialization of the world economy, growing dramatically in both size and complexity in the process. As a result of deregulation, banks merged their retail and investment banking arms to create financial conglomerates that could operate with an "originate-and-distribute" model that would allow them to make and securitize loans, while providing a host of other financial services (Ahmed, 2018). The resulting shift among banks towards packaging, repackaging and trading existing assets has increased volatility and aggravated contagion effects.

In fact, financial deregulation has created an entirely new financial sub-system, aptly referred to as shadow banking, which is estimated to account for around a third of the global financial system (Nesvetailova, 2018: xiii).[12] Shadow banking originally emerged with the creation of the Eurodollar market in the 1960s (Guttmann, 2018), and today it is dominated by over-the-counter markets, which coordinate interactions between vast networks of financial dealers and intermediary institutions with undisclosed balance sheets. New financial products yield high profits for inventors and their clients precisely because they exploit regulatory loopholes. The emergence of structured finance allowed banks and their shadow arms to package and repackage assets of varying qualities in a process known as securitization. These products were repeatedly sold, rated, collateralized and insured through an ever-lengthening chain of clients. In the end, "the chain that linked [these products] with a 'real' person was so convoluted it was almost impossible for anybody to fit that into a single cognitive map – be they anthropologist, economist or credit whizz" (Tett, 2009: 299). Opaqueness and regulatory evasion resulted in heightened uncertainty and fragility.

Long-standing institutional and market firewalls have been broken down in the name of competition, efficiency and innovation. But the main aim of the financial innovation that took place from the 1970s onward has been to put credit creation ever further out of reach of regulators. Banks began to use their powers over lending to engage in arcane speculative activities. As financial innovation proceeded apace and the scope for state oversight and management reduced, speculative financial markets flourished at the expense of credit directed to the productive sector.

Regulators' loss of control has been particularly acute in developing economies that have opened their financial markets to non-resident investors, foreign banks and other financial institutions. Evidence suggests that non-residents account for a much higher share of both equity markets and sovereign debt markets in emerging than in developed economies, with attendant vulnerabilities linked to shifts in global risk appetites, liquidity conditions and policy positions (Akyüz, 2017).

Together these trends have weakened traditional bank–client relationships, the incentive for due diligence in risk-assessment and the regulatory oversight of state agencies. In their place has emerged a web of complex market-based financial transactions, often of short duration, many cross-border and most of a highly opaque nature. The result has been the development of a deeply fragile system, highly vulnerable to shocks and bouts of contagion. Financial crises were a perennial feature of the mis-named "great moderation" era, but in the end it took the collapse of a relatively small part of the United States housing market to trigger a chain reaction that brought the entire financial system to the brink of collapse (Admati and Hellwig, 2013; Tooze, 2018).

The financial crisis and its aftermath should have refuted the argument that competitive market forces, liberalized financial flows and financial innovation

provide the best mechanism for financing production, capital investment and economic transformation. The crisis showed once and for all that, left to their own devices, financial markets are far from perfectly efficient. Financial deregulation cannot be used to generate credit to finance productive activity without undermining the integrity of the financial system itself. Securitization had "secured" droves of a windfall profits for the few but had failed to de-risk financial innovation for the many. Yet, this same formula – evident in the enthusiasm for "securitization", "new asset classes" and "financial innovation" – is at the heart of proposals to cede delivery of the SDGs to financial markets.

D. Money, banks and resource mobilization: The hidden role of the state

As financialization has been presented to the public as a natural and inevitable process, we have ceased to ask ourselves what role money and credit should be playing in a productive economy. Money is a multifaceted entity, functioning as a means of exchange, a unit of account and a store of value. Most orthodox accounts of the monetary system rely on the "myth of barter", which emphasizes the first two uses above the other. According to this account, primordial systems of barter evolve into payments systems, before developing into the modern banking system. The function of these banking systems is to intermediate between savers and borrowers by allocating "loanable funds".[13]

But the myth of barter really is nothing more than a myth. As economic anthropologists have long insisted, money, credit and debt have been closely interrelated for centuries. Modern money evolved out of systems used to settle national and international debts;[14] money and credit are therefore central to the functioning of any commercial economy, providing a stable basis for contracts, and thus production and investment.

Today, banks do not simply intermediate between savers and borrowers – they have the capacity to create new money by issuing currency in the form of credit. Banks' capacity to create money is a privilege awarded to them by the state, whose creditworthiness underpins the value of the currency. Because deposits come into being when this debt is taken on by banks, the money supply is substantially the result of banks' lending decisions. While the conventional narrative was one of banks waiting for deposits which would then be allocated in loans (financial intermediation), it is now widely accepted that loans come first (McLeay et al., 2014; Pettifor, 2016). In other words, the money supply is endogenous (depending on banks' lending decisions) rather than exogenous (fixed by the central bank).

Central banks do not simply manage price stability through setting (or targeting) interest rates. They manage liquidity and thus financial stability – where the latter does not automatically follow from the former. They foster structural financial development and they support the state's financing needs in times of crisis (Goodhart, 2010). Central banks have a range of tools at their disposal both to safeguard the stability of financial relations at home, and, through interaction with other central banks and financial regulators, globally. These tools include bank taxation, the use of sanctions and of resolution mechanisms to discipline private sector behaviour incompatible with national or global financial stability, the management of government (and publicly guaranteed) debt, and the setting of central bank interest rates. As guardians of financial stability, central banks play a critical role in determining whether financial systems serve the interests of society, or the other way around. Recently, however, central banks have abjured their role in promoting financial stability and have instead focused mostly on inflation targeting.

Traditional banking models operated according to an "originate-and-hold" principle, which saw banks use their comparative advantage in underwriting to make loans and hold them to maturity. This raised a problem of maturity mismatch, resulting from the fact that banks borrow from depositors over short time-horizons while lending money over much longer terms. The success of the system is founded on trust that banks can nevertheless honour their liabilities – but when this trust evaporates, bank runs ensue. Leaving markets to solve this problem would only make matters worse. The public trusts the state to support the banks by providing secure assets (balances with the central bank, government bonds, etc.) for

banks to hold; regulating, supervising and monitoring banks to ensure prudent portfolio behaviour; and providing liquidity through the lender-of-last-resort facility in the event of unforeseen difficulties (to be resolved when the risk of panic withdrawals is over). As commercial banks have been deregulated, the supply of credit – and therefore the money supply – has increased dramatically.

Financial deregulation meant that banks shifted their focus from an originate-to-hold to an originate-to-distribute model as banks started to turn their assets into financial securities that could be traded on financial markets and, in turn, used as collateral for further loans. Banks would often create shadow banking entities at arm's length from themselves in order to keep the securities they were creating "off balance sheet" and insulate them from regulatory oversight. While these processes were praised in some quarters as evidence of the power of financial innovation, in practice these products have proved to be a source of heightened instability (Carney, 2015). In particular, when credit is created in order to purchase financial assets, and these assets are, in turn, used as collateral for further borrowing to purchase more financial assets, financial instability can result as investors pursue assets of diminishing quality, ultimately leading to a wave of defaults and a "debt deflation" spiral. When such a crisis occurs, the dependence of money and credit on the role of the state is starkly revealed as the state is forced to bail out financial institutions to mitigate damage to the real economy.

Proper management of the financial system requires recognizing the procyclical credit-creating role of banks, and imposing countercyclical breaks to mitigate these tendencies. In the absence of such safeguards, what *The Economist* (2012) called "the rotten heart of finance" can readily surface through irresponsible or predatory behaviour of one kind or another. Adequate financial regulation is the preserve of financially sound states – that is, those states with the fiscal capacity to issue and service their own debts (Greenspan, 1997; McLeay et al., 2014). Financially sound states must ensure that their tax base expands alongside the productive opportunities being financed by credit and direct government expenditure. More financially open economies, and those with less accumulated domestic wealth, face greater constraints on government finances. Occasionally, such states face the danger of a vicious circle whereby weak government finances reduce confidence in domestic sovereign debt and thus the domestic financial system, increasing liquidity preference, encouraging capital outflows and discouraging inflows, further inhibiting efforts to manage credit. In some circumstances, this can lead to the perverse incidence of developing economies (including the least developed) becoming net international lenders (see chapters I and V).

E. Bamboozled

Some time ago, the economist Jagdish Bhagwati (1998) complained that "the fog of implausible assertions that surrounds the case for free capital mobility […] have been used to bamboozle us into celebrating the new world of trillions of dollars moving daily in a borderless world". These trillions of dollars are now of interest to those policymakers hoping to deliver the SDGs.[15] But these policymakers have also tended to ignore the dependence of contemporary financial markets on access to cheap credit, the fragile nature of the assets that underpin the credit system, the perverse incentives and excessive risk-taking of many financial actors, and the resulting fragility of the entire financial system. Mistaking the accumulation of debts for the accumulation of capital is not a sound basis for delivering the SDGs.

Such ignorance of the destabilizing potential of financial integration is evident in policymakers' attitude towards capital account management in the developing world. Economists have spent decades arguing that "opening up" one's financial markets to the rest of the world is a critical element of sustainable development. But the evidence for such claims remains extremely thin.

Financial liberalization has not consistently led to more credit for productive investment (Alper and Hommes, 2013). Rather, in periods of financial euphoria, increased access to credit has fuelled the growth of speculative activities, rather than productive investment. Even when bank credit has expanded to non-financial businesses, it has been used to

finance activities (such as mergers and acquisitions and stock buybacks) that have not established new productive capacity (Durand, 2017: 4; *TDR 2015*). While some of these activities do stimulate economic growth in periods of rising asset prices – through "wealth effects" that induce higher spending on goods and services – they also slow down longer-term growth of output and productivity (Cecchetti and Kharroubi, 2012, 2015; Borio et al., 2016; Jordà et al., 2017; Comin and Nanda, 2019).

The emergence of the privatized credit system has allowed the financial sector to transact more and more with itself, creating a complex network of closely interconnected debtor–creditor relations that cannot easily be re-engineered for productive investments (private as well as public) without a fundamental reorganization of the financial system. At the same time, these flows have produced a highly unstable environment that is subject to short-term speculative trading, boom and bust cycles and highly unequal patterns of income distribution. When prices inevitably fall, financial booms leave behind large debt overhangs that delay the recovery of the real economy, sometimes for decades.

There is, moreover, abundant empirical evidence that public financing of domestic public goods, particularly infrastructure, is cheaper, more sustainable and more conducive to financial stability. This is unsurprising, as the kind of long-term investment required to finance big infrastructure projects is not attractive to private investors given the high risks and relatively low economic returns. There are few opportunities for purely commercial infrastructure projects, and those that do exist tend to require complementary public investment (*TDR 2018*; Griffiths and Romero, 2018).

There is also unambiguous evidence that public incentives aimed at encouraging private investment in infrastructure over the last several years (e.g. through subsidies and risk guarantees) and efforts to marry public and private resources (through public–private partnerships [PPPs] and blended finance) have failed to unlock available pools of private capital (*TDR 2015*; Eurodad, 2018; European Union, 2018). A survey by the World Economic Forum of 40 major infrastructure actors shows a distinct lack of enthusiasm for risk-sharing tools – fewer than 20 per cent perceive the risk mitigation tools deployed by multilateral development banks (MDBs) as successful for both public and private partners in infrastructure projects (Lee, 2017: 13). Thus, in today's highly financialized world, there seems little likelihood that the expansion of such instruments will bear additional fruit, especially in what are seen as the riskiest environments (such as in least developed countries or for climate-related challenges). Even in the best-case scenario, such tools are simply likely to increase funding for "mega projects" rather than the smaller, more inclusive and environmentally sustainable ones.

Public–private infrastructure financing tends to be more expensive than public financing alone. Subsidies and risk guarantees for private investors can therefore waste the scarce resources of MDBs and/or host governments. In many cases, the public sector and host government have perversely assumed the risks that should be borne by private investors, creating a problem of moral hazard (Griffiths and Romero, 2018). Governments have often found themselves with binding financial obligations even when failed PPP projects have had to be taken back into public ownership (*TDR 2015*).

The World Bank has acknowledged that, despite its efforts, PPPs have attracted very little private investment. Even where they have been more successful, the risks were generally borne by the Bank and host country governments (IEG of the World Bank, 2014). PPPs in infrastructure have, moreover, undermined transparency and public accountability as they frequently appear as "off book" transactions. Infrastructure is a public good that must be broadly accessible, but accessible and inclusive infrastructure may conflict with the objectives of private investors who seek to recover upfront investment costs through user and other fees. Blended finance introduces additional opportunity costs. It is increasingly being used as aid, which typically favours private partners from donor countries, while being driven by profit rather than public interest (*The Economist*, 2016).

Private participation in infrastructure is not only costly, it is also highly concentrated geographically and sectorally. It clusters in commercially attractive sectors and countries that are more likely to offer what are termed "bankable" opportunities (which are rarely low income countries, LICs) (Tyson, 2018: 11; *TDR 2018*). Middle income countries (MICs) have received an estimated 98 per cent of all private infrastructure financing between 2008 and 2017, and of this 63 per cent went to upper MICs (Tyson, 2018: 11). LICs, which have the greatest need for infrastructure development, have received less than

2 per cent of total private investment financing for infrastructure in the last decade (ibid.: 12). From 2011 to 2015 International Development Association (IDA) countries received less than 4 per cent of the value of infrastructure projects in developing countries with private investment (Lee, 2017: 7).

Private financing for infrastructure has also been heavily concentrated in certain sectors. Energy and the information and communications sectors received 37 per cent and 30 per cent of total funding flows, respectively, between 2008 and 2017 (Tyson, 2018: 11). Water and sanitation received only 7 per cent of total private financing in the decade to 2017 (ibid.: 12). Much the same can be said of roads in developing countries, where private investors have been far less active than in other areas. There have been three times more PPPs in the power sector than in the transportation sector. In fact, private investment in roads has declined to a 10-year low and is highly concentrated in MICs. In LICs fewer than 1 per cent of all road projects involve private participation (Pulido, 2018).

The optimism around private capital that marks, for example, the EPG-GFG, 2018 report seems, in part, to reflect the conditions of the post-crisis world when the "search for yield" drove investors into developing countries. In the unique environment of 2008–2014, private funding to infrastructure averaged $150 billion a year (Tyson, 2018: 12). Since monetary policy in wealthy economies (and especially in the United States) has "normalized",[16] investors have turned away from developing country markets (including infrastructure, which halved to an average of just $75 billion annually) (ibid.).[17]

F. Making finance work for all: A developmental perspective

As the global crisis made clear, financial deregulation and integration can introduce severe fragility to the financial system. These trends can also inhibit transparency and frustrate attempts to assess risk in the financial system. The crises that inevitably result from financial market liberalization provide frequent and abrupt reminders of how quickly the value of these assets can evaporate.[18] The bailouts that tend to follow the crises have perverse distributional outcomes as they socialize private risk. Such an analysis should cast serious doubts on the leading desirability of private financing as the mechanism for delivery of the SDGs.

Still, there is no disputing that the multilateral trade, investment and monetary regime is in need of urgent reform if the 2030 Agenda is to move from rhetoric to results. Reform was promised a decade ago at the G20 meeting in London. Instead, as Martin Wolf (2018) has recognized, "most efforts to date have been driven by a desire to go back to a better past; lower taxes and labour market de-regulation dominate policy discussion, growth has remained dependent on rising indebtedness and asset prices, monopoly and 'zero-sum' activities are pervasive. Few doubt that another large crisis is somewhere on the horizon".

Moreover, the response to the crisis has further increased income disparities. Fiscal austerity has had a disproportionate impact on welfare programmes, while loose monetary policy designed to mitigate the effects of high levels of debt has boosted asset prices and thus the wealth of the already rich (*TDR 2017*; Stiglitz, 2019). Even as unemployment has dropped, real wages have remained stagnant in flexible labour markets. Banks that were too big to fail are bigger still (if somewhat better-capitalized), while financial services have become the preserve of a small number of giant firms in asset management, credit rating, accounting, business consultancy, etc. Under these circumstances, it is difficult to see how extending the market option will now bring about more inclusive and sustainable outcomes.

Rolling back financialization is often casually dismissed as "old thinking" or "backward looking" – at odds with the technological opportunities of the twenty-first century. However, the hyper-globalized world is not an inevitable product of technological progress or disembodied market forces, but of ideological persuasion, institutional reform and policy choice. These same pressures that were once used to promote financialization must now be used to roll it back, in order to forge a global new deal that can halt environmental breakdown and economic polarization, and establish a new social contract with sustainable development at its core.

The New Deal, launched in the United States in the 1930s and replicated in distinct ways elsewhere in the industrialized world, rolled back the laissez-faire model of the interwar years and, in doing so, built a new social contract that fostered decades of equal and sustainable growth. This contract was centred on four broad components: relief from mass unemployment; sustained economic recovery; regulation of finance; and redistribution of income. These elements were consistent with more specific policy priorities tailored to particular economic and political circumstances. But all in all, the New Deal policies of the post-war period facilitated the emergence of a virtuous circle of job creation, expansion of productive investment, faster productivity growth and rising wages.

The internationalization of the New Deal through the Bretton Woods regime was only partially directed at development and environmental challenges and certainly not with the urgency or on the scale required today. The Global Green New Deal must learn from the mistakes, as well as the successes, of its forerunner (Gallagher and Kozul-Wright, 2019).

Under the Global Green New Deal, states will have greater space to implement proactive public policies to boost investment and raise living standards. Such policy space is also a prerequisite for encouraging those states to cede, where appropriate, sovereignty to international bodies to establish international regulations and forge collective action in support of the global commons. Building this Global Green New Deal to meet the ambition of the SDGs will certainly require much greater participation of developing countries in international decision-making than that seen at Bretton Woods.

As before, the Global Green New Deal will be driven by an expansion in the space for public action, in "a pragmatic and non-ideological attempt to restore the balance between government, markets and civil society based on a new social contract between voters and elected officials, between workers and companies, and between rich and poor" (Stiglitz, 2019). Financial sector reform will be critical to such a project. As James Tobin (1984) predicted more than 30 years ago, the disconnect between the private rewards of many financial activities and their social productivity has not only drained the financial sector of its useful purpose but has given rise to unproductive and in some cases predatory purposes that produce recurrent and damaging crises.

The underlying intent of reviving the public option in finance is not to extinguish private finance, but rather to find pragmatic ways to make it once again serve the public interest (*TDR 2017*; Foroohar, 2019). De-financialization will no doubt take different forms in different countries, but the fundamental goal is "a smaller, simpler financial services system that is better adapted to the needs of the non-financial economy" (Kay, 2015: 306). Regulating private financial flows will be essential to steering private finance towards social goals and curtailing predatory and restrictive business practices will be key to reining in rentierism and crowding in private investment to productive activities including in the green economy. But just as importantly, it will require promoting alternative mechanisms of delivering finance in support of a more inclusive and sustainable growth path.

A healthy global economy is a prerequisite for such a reform agenda – and this cannot be taken for granted. Chapter III reviews the state of the world economy, stressing that the combination of weaker government expenditure, compression of wage shares, and financialization have suppressed private investment, employment creation and economic development. By way of an alternative, the chapter proposes a globally coordinated reflation strategy with a focus on development and environment recovery, in which the public sector plays a pivotal role. A significant, well-planned and stable pattern of public expenditure can exert a lasting and positive effect on private investment (crowding-in), support employment creation, decent work conditions and wages, and trigger technological advances for a "green" productive transformation. What is more, an effective public sector can help lift supply constraints, especially in developing economies, and ensure that credit creation and financial conditions serve the real economy, rather than the other way around. Policy coordination is essential to resolve trade-offs between growth targets, financial stability and environment protection, and to prevent national policy actions that could trigger a regulatory race to the bottom.

Given that credit will be essential to supporting such a massive investment push, sovereign debt sustainability will be key to achieving a more balanced economy. As chapter IV makes clear, current challenges to external debt sustainability will have to be resolved quickly and smoothly through increased official development assistance and the restructuring of debts, if the international community is serious about meeting the SDGs on time. As the

chapter shows, there is no "private" option in this time frame. If anything, a focus on "de-risking" will only deepen current external debt vulnerabilities. In the longer run, developing countries must continue to build up capacity to record and monitor national debt, and should pool their growing expertise in dealing with a fragmented and increasingly privatized international monetary and financial system by strengthening regional public systems to facilitate cross-border payments and liquidity provision. They can also build up expertise to address sovereign debt restructuring processes collectively, rather than on a case-by-case basis.

Given their procyclical nature, the inherent volatility of financial markets and the predatory behaviour of financial institutions, private capital flows can just as readily extract resources from as add resources to the productive economy. Developing countries are more vulnerable than developed countries to such outcomes, but the threat is a ubiquitous one. Mitigating this danger and establishing a regime of longer-term and more stable flows is discussed in chapter V. To mitigate such risks, many developing countries have accumulated large foreign-exchange reserves. This strategy has high opportunity costs, causing a resource transfer from developing to developed countries and widening rather than bridging the finance gap. Governments have, moreover, lost sizeable fiscal revenue from so-called "tax-motivated illicit financial flows" as a result of multinational enterprises reducing the payment of corporate income tax (CIT) through a shift of their profits to affiliates in tax havens or by exploiting tax loopholes in domestic legislation or international tax treaties. Such leakages have been further augmented by digitalized economic transactions that make the current CIT norms less and less apt to determine where taxable value is created and how to measure and allocate it between countries. A radical overhaul of these norms could significantly improve countries' capacity for domestic resource mobilization.

An ambitious programme of financial reform is required to shift the focus away from financial speculation and towards the financing of productive investment. Within a more stable financial framework, the state can manage credit in a variety of ways. Direct credit controls became unfashionable in the era of "efficient markets". Yet incentives (e.g. placing government deposits) and disincentives (e.g. portfolio restrictions) can be effective in steering credit to the most productive investment opportunities. Governments can achieve this even more directly by setting up their own development banks, which would have a greater capacity than retail banks for "patient lending". At the same time, governments can actively promote a variety of alternatives to traditional banking to tap new development opportunities, simultaneously promoting more equitable development. These options are discussed in chapter VI. ■

Notes

1 Similar proposals for financing the SDGs have been advanced by the international financial institutions, (see World Bank, 2015); by the OECD, 2018; and by myriad think tanks, (see Lee, 2017).

2 While there has been discontinuity in the positions adopted by the IFIs since the financial crisis, measures to unleash financial markets – through transparency, securitization, capital account liberalization, public–private partnerships etc. – became part of the Washington Consensus over the previous two decades or longer. On the evolving mix of continuity and discontinuity in the approach to development finance of the IFIs, see Gabor, 2010, Helleiner, 2014, and Grabel, 2017.

3 On the various ideological roots of neo-liberalism, see Turner, 2008, and Slobodian, 2018; on its extension to finance, see Shaxson, 2018, and Storm, 2018.

4 In 2017 the World Bank sold its first pandemic bonds, raising $320 million from private investors in a deal that was seen to help developing countries facing serious outbreaks of infectious diseases. Former Bank president Kim said they were a way of "leveraging our capital market expertise" … "to serve the world's poorest people". On this and the wider trend of replacing disaster aid with private finance, see Ralph, 2018, Keucheyan, 2018, and Allen, 2019. On the limitations and dangers of microcredit, see the various papers in Bateman et al., 2018.

5 In his inaugural address in 1933, President Franklin Roosevelt had insisted that the "practices of the unscrupulous money changers stand indicted in the court of public opinion, rejected by the hearts and minds of men". A decade later, at Bretton Woods, Henry Morgenthau, Roosevelt's Treasury Secretary, made it clear that driving "the usurious money lenders from the temple of international finance" was the job of the conference. In a similar, albeit more morbid spirit, Keynes had earlier called for

the design of monetary policy that would lead to the "euthanasia of the rentier" and he left little doubt at Bretton Woods that his proposals were intended to finish the job at the international level.

6 For a vivid account of the Bretton Woods negotiations, see Conway, 2014.

7 The former chief economist of the International Monetary Fund (IMF) Simon Johnson, 2009, has described this capture of government as a "quiet coup".

8 As noted by Glyn (2006: 65) "Amongst OECD countries, 5 out of 19 were classified by the IMF as having open capital markets in 1976, including the USA and Germany. The UK and Japan followed suit by 1980. By 1988 only one OECD country was classified as having controls in one of the five strongest categories, compared to half the countries in 1973. In the late 1980s and early 1990s the rest of the OECD liberalized with Norway the last of the social democratic strongholds to succumb in 1995".

9 As Volcker later put it, under the new international regime, "The external financing constraints were something that ordinary countries had to worry about, not the unquestioned leader of the free world, whose currency everybody wanted"; cited in Varoufakis, 2013: 102.

10 The damage to highly indebted developing countries and satellite countries of the Soviet Union from these interest rate hikes also carried profound geopolitical consequences, derailing the agenda for a new international economic order and laying the ground for the rise of the Washington Consensus and opening up more economic space for mobile international capital; see UNCTAD, 2014.

11 In the mid-1970s, Latin American governments in the Southern Cone adopted policies in line with the neo-liberal agenda but this ended badly; see Alejandro-Diaz, 1985, and TDR 1991.

12 Although the term was coined only in 2007, the practices it describes go back much further. According to Bernanke, 2013, "Shadow banking, as usually defined, comprises a diverse set of institutions and markets that, collectively, carry out traditional banking functions – but do so outside, or in ways only loosely linked to, the traditional system of regulated depository institutions. Examples of important components of the shadow banking system include securitization vehicles, asset-backed commercial paper [ABCP] conduits, money market funds, markets for repurchase agreements, investment banks, and mortgage companies".

13 Most conventional economic modelling splits the world into monetary and real components. This is usually defended as a useful methodological gambit for getting at the "fundamentals". While never a particularly persuasive line of reasoning, in today's highly financialized world it is a decidedly unreal approach which not only left economists bewildered when the crisis hit but has crippled their ability to contribute to effective policies for recovery (see Galbraith, 2014). However, as Stiglitz, 2017, and others recognize, integrating these components together has proved a difficult task.

14 In this vein, Ferguson aptly defines money as "the crystallized relationship between creditor and debtor" (2008: 30).

15 The OECD, for example, estimates that institutional investors in member countries hold global assets of $92.6 trillion (Lee, 2017: 8) and that "investment of only 1% of those funds in developing country infrastructure would go a long way" (ibid.). In a similar vein, the corporate sector is estimated to be sitting, worldwide, on very large piles of cash – over $2 trillion according to S&P Global – that could also be tapped to help fill the financing gap (Global Finance, 2018).

16 In March 2019 the European Central Bank moved away from normalization when it announced a return to expansionary policy.

17 In fact, infrastructure with private participation has been on a falling trend since 2012 when private participation in infrastructure was valued at $210.6 billion; in 2013 it was $155 billion; in 2014 $165.8 billion; in 2015 $117.8 billion; and in 2016 it fell to $76 billion (Lee, 2017: 8).

18 An estimated $50 trillion in the market value of assets evaporated during the 2008–2009 financial meltdown.

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A ROAD MAP FOR GLOBAL GROWTH AND SUSTAINABLE DEVELOPMENT

III

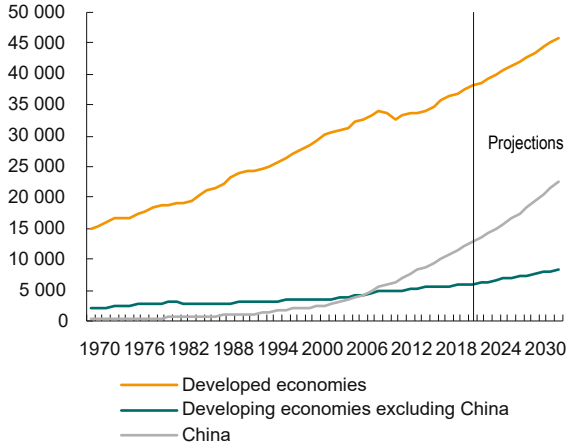
A. Introduction

This chapter outlines a macroeconomic strategy to revive global growth and strengthen industrialization in the South while reducing carbon emissions, inequalities and instability. It builds on the largely untapped power of international coordination to expand countries' policy options and, empirical analysis indicates, sets the global economy on a path that is sustainable economically, socially and environmentally. Rather than specific policy proposals, the chapter emphasizes the macroeconomic orientation that any such proposals must support in order to achieve sustainable global growth. It starts by pointing to the structural challenges facing the global economy, then discusses necessary changes in critical policy areas and the "dividend" of international coordination. Finally, an empirical analysis charts plausible global pathways to achieve the 2030 Agenda.

B. Regressive trends in the global economy

The global economy does not serve all people equally. Under the current configuration of policies, rules, market dynamics and corporate power, economic gaps are likely to increase. Globally, not only are levels of GDP per capita almost six times higher on average in developed countries than in developing ones, for most the absolute income gap is growing (*TDR 2016*: 2). There are exceptions to this trend, China being the only one that somewhat affects developing country averages, but it is clear that the pattern of global growth remains highly unequal (figure 3.1).

FIGURE 3.1 GDP per capita in developed and developing countries
(Constant 2005 US dollars, ppp)



Source: UNCTAD secretariat calculations and the United Nations Global Policy Model (GPM).
Note: ppp = purchasing power parity.

Achieving sustainable global growth, income convergence and development requires addressing underlying structural challenges. There is, however, a good deal of disagreement on the nature of these challenges. In many policy discussions, the long-term challenges are narrowly identified with market rigidities, while "structural reforms" are equated with further liberalization in labour, product and financial markets (Lin, 2012; OECD, 2017b). However, this approach overlooks aspects of national economic structures – such as the composition of aggregate demand and production, weak labour-market institutions, market power deriving from intangible assets, and the effects of income distribution on demand – as well as the constraints arising from the asymmetric insertion of countries into international trade and financial systems. This combination has led to four big global trends that are obstructing achievement of the Sustainable Development Goals: the fall of labour's shares of global income, the erosion of public spending, the weakening of productive investment, and the unsustainable increase of atmospheric carbon dioxide.

1. Falling labour shares

Few global trends are as apparent as the skewing of income distribution: since the 1980s, in all regions and in almost every country, the share of national income accruing to labour has decreased and the profit share has correspondingly increased (figure 3.2). In developed countries this redistribution has been generally larger and occasionally extreme (with 10 per cent or more of GDP transferred from workers to capitalists in Australia, Italy and Japan) but the trend has been visible in developing countries as well, highlighting a global race to the bottom in labour costs. The proximate cause has been wage repression, which has prevented wages from keeping pace with the cost of living and increases in productivity. The deeper, more fundamental factors have included decreasing unionization rates, the erosion of social security, growing market concentration and the spread of outsourcing through global value chains (Izurieta et al., 2018; *TDR 2017*; *TDR 2018*), all of which have eroded labour's bargaining power.[1]

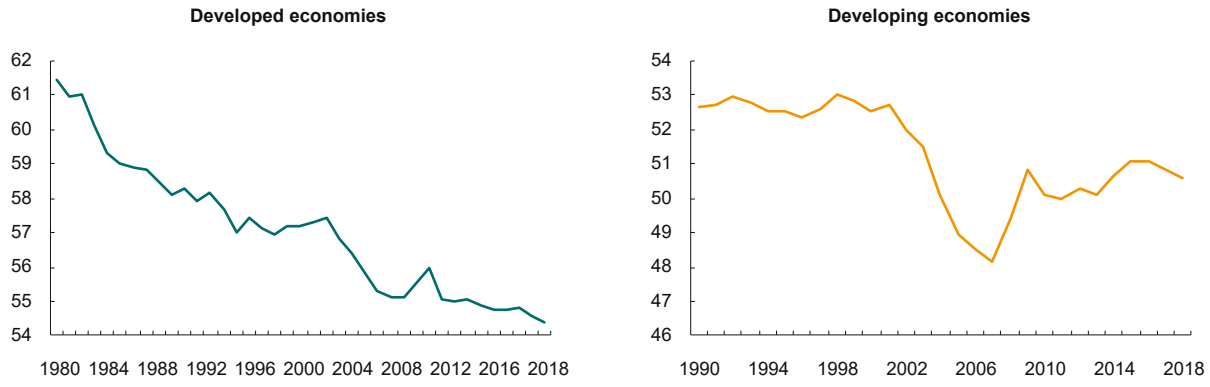
While workers have received a decreasing share of total income, they have also faced more insecurity. In developed countries, the loss of bargaining power has led to the diffusion of precarious employment contracts. In many developing countries, deindustrialization and pressure for labour-market liberalization have weakened the prospect of full-time, regulated employment (UNIDO, 2013). As a result, a growing share of household spending has been financed with borrowing rather than real income. Overall, households' consumption and investment have slowed down, undermining aggregated demand, with negative consequences on business investment and productivity growth, thus reinforcing the downward pressures on wage and employment growth. Financial crises in Mexico, East Asia, the Russian Federation, Turkey, Argentina, North America and Europe, starting in the mid-1990s, have further undermined labour shares both by depressing employment and by paving the way for export-oriented policies, with the attendant race to the bottom, as the only strategy for long-term growth.

2. The erosion of public spending

In most countries, fiscal policy has been on a tight or contractionary trajectory for several decades. The break in the markedly declining trends occurred after the shallow recession of the United States in the early 2000s, and more prominently the global financial crisis. Immediately following the Great Recession, several countries adopted fiscal stimulus packages, only to tighten sharply from 2010 (Devries et al., 2011). The contraction, which has taken the form of both spending cuts (figure 3.3) and increases in value added taxes, had the objective of reducing government debts relative to GDP. In most countries, the cuts have hit social protection systems (ILO, 2017) and public investment (Oxford Economics, 2017; OECD, 2017a; Bhattacharya et al., 2019) with further damage in terms of rising inequalities (Popov and Sundaram, 2015; OHCHR, 2013; Perugini et al., 2019), heightened insecurity and diminished prospects for future growth (Ostry et al., 2016).

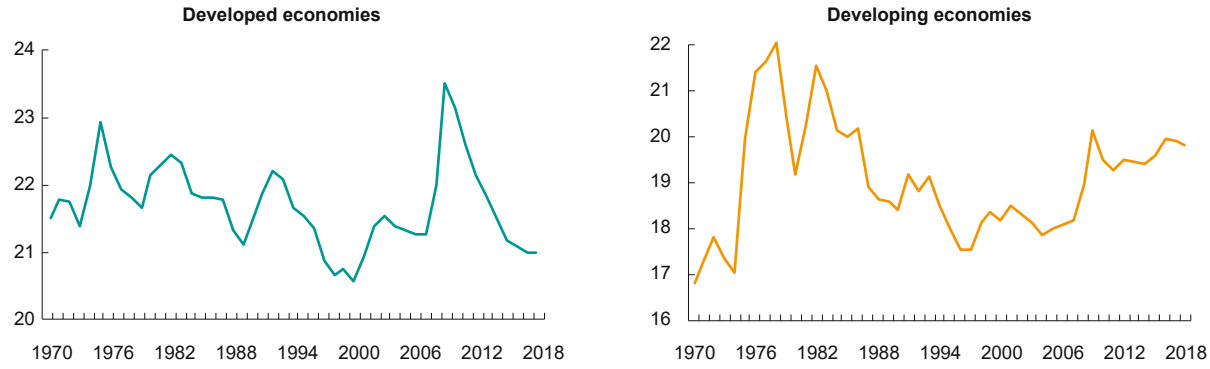
While public spending in developed and developing countries has exhibited a clear declining trend until 2008, its composition has changed (Ortiz et al., 2015). It has increasingly shifted away from social transfers (which are not accounted for in figure 3.3)

FIGURE 3.2 **Labour shares**
(Income from employment as percentage of GDP)



Source: UNCTAD secretariat calculations and the United Nations Global Policy Model (GPM).

FIGURE 3.3 **Government spending in goods and services (including investment)**
(Percentage of GDP)



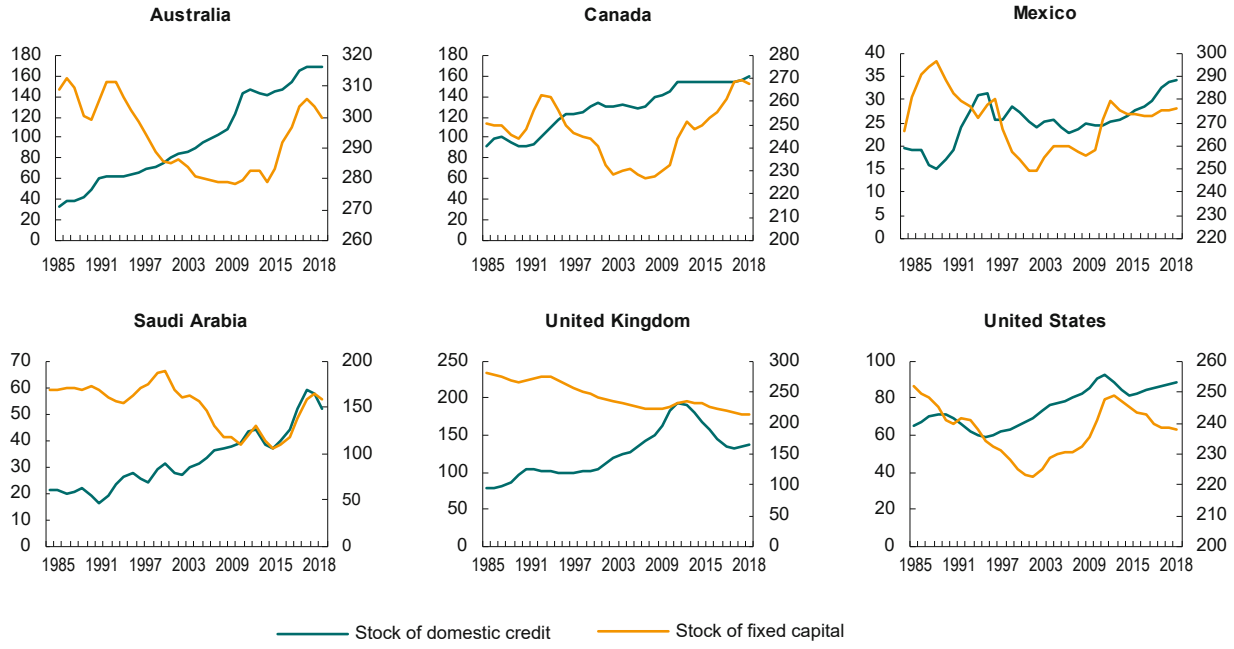
Source: UNCTAD secretariat calculations and the United Nations Global Policy Model (GPM).

and public investment towards debt service in a widespread effort of fiscal "consolidation". After a brief interruption in 2008–2012, when spending increased due to stimulus packages, automatic stabilizers and corporate and banking bailouts (Acharya et al., 2014; Balteanu and Erce, 2017), the declining trend appears to have swiftly returned, mainly for developed economies.

3. Weak investment growth

At least since the 1980s, credit expansion in many countries has taken off without a corresponding accumulation of fixed capital (figure 3.4), sometimes for long periods before contracting in a credit crunch. This trend emerges in most developed and developing countries and is particularly apparent in Australia, Canada, Mexico, the United Kingdom and the United States, as well as in Saudi Arabia, South Africa and the Caribbean region. This means that in periods of expansion, credit has been used to finance speculative activities by both financial and non-financial corporations (Schularick and Taylor, 2012; *TDR 2015*: 2). Productive investment has been affected in two ways. As non-financial corporations were able to use credit to fund financial operations, they had a strong incentive to turn away from productive investment

FIGURE 3.4 **Finance and fixed capital**
(Percentage of GDP)



Source: UNCTAD secretariat calculations and the United Nations Global Policy Model (GPM).

FIGURE 3.5 Corporate tax cuts, 2000–2019
(19-year differences in tax rates)

Source: OECD Tax Database, Statutory Corporate Income Tax Rates, Table II.1.

because of its long maturity, low liquidity and often lower yields. At the same time, the accumulation of large financial liabilities, fuelled by credit, produced financial crises and recessions that discouraged productive investment. Overall, productive investment has not surged globally, despite repeated bouts of credit expansion, increases of the profit shares and corporate tax cuts across developed and emerging economies. With the sole exception of Chile, corporate tax rates are now lower than they were in 2000 in all OECD countries, with cuts ranging from 3 percentage points in the Republic of Korea to 22 in Germany (figure 3.5).

Infrastructure investment, which has lower yields and longer maturity, has been particularly affected (Bhattacharya et al., 2019) with negative impacts on industrialization in developing countries and productivity growth everywhere. Data show that while credit expansion has continued everywhere, in many countries fixed capital investment has contracted. This is particularly striking in developed economies such as the United Kingdom and the United States, but it is also evident in other developed and developing countries (figure 3.4).

4. The growing stock of atmospheric carbon dioxide

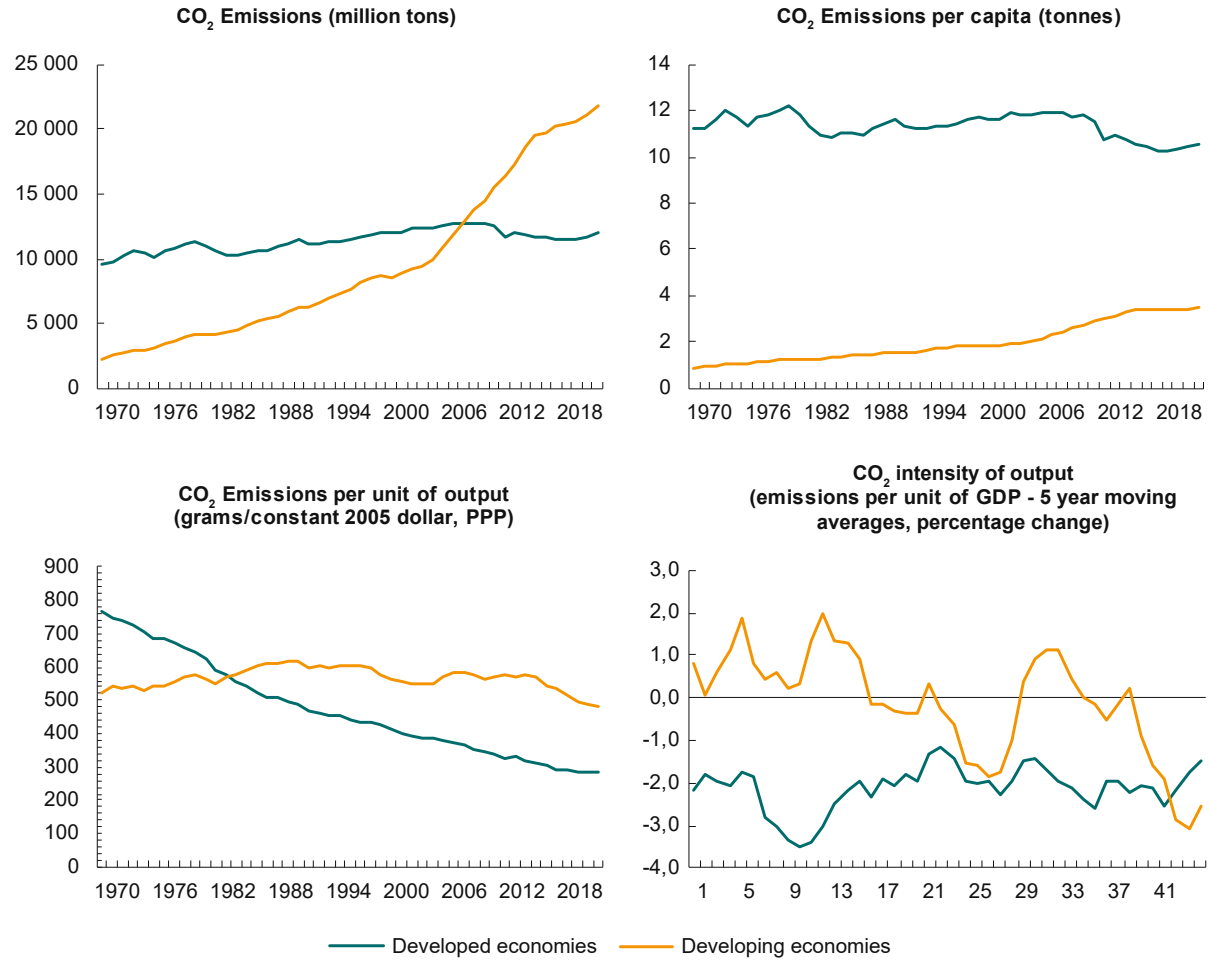
Data indicate that the stock of atmospheric carbon dioxide (CO_2), which is responsible for global warming, continues to increase and that the rise of temperatures must be stopped and reversed soon in order for it not to become self-sustaining (IPCC, 2018). Technological solutions abound (Steffen et al., 2018) but their adoption on a sufficiently large scale is at odds with the prevailing patterns of economic growth. So far, market-based attempts at making carbon-heavy investment more costly than green investment have failed (Storm, 2017b).

Annual carbon emissions have accelerated in developing countries and seem to have stabilized in developed countries (figure 3.6). On the surface, this seems to suggest that it is now up to developing countries to adopt the necessary standards, especially in energy efficiency, in order to stop climate change. But a closer reading of the data does not support this conclusion. On the one hand, once population size is taken into account, developing countries produce much less CO_2 then developed countries, approximately 80 per cent less in per capita terms. On the other, the carbon intensity of GDP and the growth elasticity of CO_2 indicate that developing countries, too, are becoming increasingly efficient in the use of carbon energy. Furthermore, efficiency gains in developed countries do not correspond to an actual transformation towards carbon-free consumption and investment. Rather, they are the effect of decades of outsourcing of industrial activities to developing countries (Schröder and Storm, 2018). Through international trade and the globalization of value chains, developed countries have been able to maintain their consumption patterns while moving parts of production and emissions to developing countries. Clearly, the disconnect between consumption patterns and the availability of non-renewable resources also continues to exist in developed countries.

Moreover, the link between rising inequality and rising temperatures, though complicated, cannot be ignored. The threat of rising temperatures from high

levels of atmospheric carbon is in large part due to emissions from the richest 10 per cent of people in the world, while at the firm level the carbon footprint of a handful of giant corporations has dominated the rise of emissions in recent decades. There is also ample evidence that climate change is adding to the factors discussed earlier that have led to worsening inequalities; higher temperatures are already hitting poorer countries and poorer people the hardest (Diffenbaugh and Burke, 2019).

FIGURE 3.6 **Carbon dioxide emissions, 1970–2018**



Source: UNCTAD secretariat calculations and the United Nations Global Policy Model (GPM).

C. Main considerations in the design of a strategic framework

The structural challenges faced by the global economy stem from a common problem: unrealistic expectations on the part of policymakers about the private sector's ability to deliver sustainable growth and development. After three decades of policy reforms that have concentrated on "price stability", "free trade" and "free enterprise", the evidence shows that the strategy has failed to deliver on its promises (Glyn, 2007; Palma, 2009; Storm and Naastepad, 2012: 1). Global growth has failed to return to the heights of the post-war era, and in the vast majority of countries, growth has been erratic, economic and financial crises have persisted, productive investment has stagnated and inequalities have increased. In developed countries, economic insecurity has become the norm for many workers; while in developing countries industrialization has stalled in most, with deindustrialization taking place prematurely in some cases. The one country – China – that has visibly bucked these trends has done so by guarding its space for active state intervention.

In this context, it is essential for governments across the world to reclaim their policy space and act to boost aggregate demand. To do so, they should assume a leading role in a coordinated investment push, both by investing directly (through public sector entities) and by establishing the conditions for productive investment by the private sector. Concomitantly, governments should address inclusiveness and sustainability challenges, by redistributing income in ways that bolster growth and by directly targeting social outcomes through employment measures, decent work programmes and expanded social insurance.

Despite national variations depending on context, in all cases a wide range of policy instruments will be required, including fiscal policies, industrial policies, credit policies, financial regulation and welfare policies, as well as international trade and investment policies (*TDR 2016*). This also requires appropriate international coordination to counteract the disruptive influence of capital mobility (which can undermine any isolated expansionary strategy), contain current account imbalances and support the transition to a low-carbon economy, especially in developing countries.

Large and protracted global imbalances are not sustainable because they lead to the accumulation of external debts, a process that frequently ushers in currency crises that governments often try (or are obliged) to address unilaterally by cutting domestic spending. External deficits are eventually reduced but at the cost of recession, with lasting consequences in affected countries and on global demand, particularly when contagion occurs. A coordinated alternative, in which domestic spending is maintained in all countries but accelerates faster in surplus countries, can achieve rebalancing with limited national and global cost (UNCTAD, 2014).

Likewise, uncoordinated policies on carbon emissions have failed to stabilize the climate (IPCC, 2018). Developing countries with abundant reserves of fossil fuel will continue to tap these if development priorities depend on their extraction and users are charged market prices (as per international trade agreements) for cleaner technologies. Only multilateral coordination can bring the full value of climate stabilization to bear, promoting technology transfer and investment for a transition to a low (or zero) carbon growth path.

1. Fiscal policy: Government spending and taxation

Despite attempts at austerity in many countries, since the early 1980s, debt ratios have failed to decrease because GDP has contracted as fast as debt or faster. This underscores the crucial role of fiscal policy in the process of economic growth.

The two main arguments in favour of austerity – "expansionary contractions" and "debt thresholds" – have been shown to be untenable, flawed by wrong assumptions concerning financial markets and the effect of government spending on the economy (Boyer, 2012; Skidelsky and Fraccaroli, 2017). The argument for "expansionary contraction" assumes that public spending cuts drive down interest rates by lowering demand for funds in bond markets and that lower interest rates in turn generate higher private investment.[2] It further assumes that cuts to government spending have relatively little adverse effect on aggregate demand. In reality, interest rates are not that sensitive to demand for funds (Taylor, 2017) and investment is not very sensitive to interest rates (Levrero, 2019; Storm, 2017a). Meanwhile, the direct effect of government spending on output has proved to be larger than anticipated (Blanchard and Leigh, 2013; IMF, 2012; Guajardo et al., 2011; *TDR 2011*; *TDR 2017*; UN DESA, 2008, 2011: 42–43), especially during recessions and under the pressure of hyperglobalization (Capaldo and Izurieta, 2013). The "threshold" argument, which has been very popular with policymakers and media pundits (*Financial Times*, 2010) maintains that there is a universal debt-to-GDP ratio above which all countries face rising interest rates, mounting instability and recession. However, while recessions, rising interest rates and high debt levels may occur at the same time, the causality can run in all directions (Irons and Bivens, 2010) and attempts to identify the supposed threshold have been marred by errors and selective data use (Herndon et al., 2014; IMF, 2010b). Bondholders' expectations and portfolio choices are affected by a wide range of information, which may or may not include debt-to-GDP ratios.

The lingering weakness of global growth and the flaws in pro-austerity arguments call for a reversal of course. In fact, the evidence that discredits expansionary contraction also supports straightforward expansionary fiscal policy. In such an expansion,

public spending and taxation will have different roles to play.

Government spending on goods and services is a major component of aggregate demand, averaging 20 per cent of GDP in both developed and developing countries. To put this figure into perspective, the average contributions of private consumption and investment, the other two domestic components of demand, amount to 55–60 per cent and 18–25 per cent of GDP on average. By fuelling demand for goods and services, including those produced or provided by government employees, government spending contributes to aggregate demand as much as or more than private investment.

To the extent that taxation reduces disposable income affecting private consumption and investment, it eventually causes a "leakage" of spending potential from the economy (*TDR 2018*). Private income that could be spent or saved is transferred to the government, and the effect of this transfer on aggregate demand depends on how the government uses the money. If it spends it entirely on goods and services, there is no loss of aggregate demand. Aggregate demand could even increase if the taxed income was destined to be saved and the resulting government spending leads to extra spending by the private sector. However, if the government saves the revenue (as it does, for example, when it purchases stocks under corporate bailout programmes) or uses it to pay down its debt, there is no additional spending on goods and services to compensate for the tax leakage. In these cases, aggregate demand does not necessarily increase.

In assessing whether fiscal policy contributes to stable growth of aggregate demand, a key element is the evaluation of the multiplier effects of various forms of public spending and revenue mobilization (Mittnik and Semmler, 2012; Blanchard and Leigh, 2013; Kraay, 2014). Spending that increases incomes for lower-income groups (with higher consumption propensities) as well as demand for goods from domestic firms, has the strongest effects. Public investment decisions can also contribute to building productive capacity and enhancing overall efficiency, thus encouraging private activity. Taxation has the highest potential of contributing to demand growth and economic stability when it targets high incomes (which are largely saved) and speculative activities. Indirect taxation, especially value added tax, tends to have a detrimental effect on aggregate demand because it weighs heavily on spent income (such as the incomes of the poorest groups) rather than saved incomes (such as by the richest groups).

Furthermore, fiscal policy is critical in determining two important features of the economy: the amplitude of business fluctuations (including the duration and depth of recessions) and the longer-term growth performance. Fiscal policy stabilizes demand fluctuations through automatic and discretionary spending. In most cases, recovery from recessions would not be possible without this supportive action (Boyd et al., 2005; Cerra and Saxena, 2008). The "automatic" components are taxes and transfer payments (such as unemployment insurance payments and other social protection benefits) that act countercyclically. When the economy contracts in a downturn, tax receipts decrease and transfer payments increase. This is particularly important in developed countries where income taxation is generally present and social protection systems are relatively extensive. Public spending – on purchases and production of goods or on employment programmes (Wray, 2007) – can support the stabilizing function (as was the case, for example, in China, as well as in Germany and the United States during the Great Recession) or run against it (as was the case in Argentina, Greece, Italy, Spain and other countries after 2012), with the overall effect playing out through real and financial channels (Boushey et al., 2019). On the financial side, government deficits during recessions support business cash flows preventing businesses from losing access to credit (partially or entirely) and curtailing investment, an effect that is stronger in countries where investment finance relies more on debt. Furthermore, government debt provides savers with relatively safe financial assets, making the financial system more liquid. As Hyman Minsky put it, "the efficiency of Big Government can be questioned but its efficacy in preventing the sky from falling cannot be doubted" (Minsky, 2008: 34).

Just as important, although underappreciated in public discussions, is the effect of fiscal policy on the economy's longer-term growth performance, not only via ongoing support to aggregate demand but through strategic investment decisions. Supporting aggregate demand to increase employment sustains the expansion of markets for consumption and investment goods, thereby allowing firms to exploit static and dynamic economies of scale. This leads to sustained productivity growth, the most proximate determinant of long-term economic growth (Storm,

2017a). But for this process to be sustainable, it is necessary for the gains from productivity growth to be appropriately distributed, as discussed below. At the same time, the government is uniquely positioned to make the strategic investments critical to long-term growth, such as in physical infrastructure, education, public health and other investments in social protection. These investments are generally different in developed and developing countries but, when appropriately tailored to national needs, expansionary fiscal policy can be a powerful instrument of growth in all countries.

A question that is immediately raised is whether or not a country can "afford" an expansionary policy. It should be clear that fiscal space cannot be identified as a predetermined level of resources in any economy. Rather, it is dependent on past and current fiscal policy choices, such as the extent of the government's spending, its savings and the level of its debt relative to GDP. What matters most is the flow of revenue that accrues to the government over a period of time as a result of tax and expenditure changes and their subsequent impact on GDP through the fiscal multipliers.[3] While fiscal space is "endogenous" in this sense, it can still be materially constrained by limits to productive capacity, which can shift dynamically over time. If production cannot be expanded despite the presence of unemployment, typically because of bottlenecks in other factors or financing (discussed further below), there will be associated limits to the impact of fiscal policy on aggregate demand.

Therefore, expansionary fiscal policy requires a careful approach. When productive capacity is fully utilized or when firms face external constraints (such as the scarcity of foreign exchange), spending injections derived directly or indirectly from higher government spending can lead to inflationary pressures and redistribution of real income from wages to profits[4] with negative consequences for private spending.[5] Another reason for caution is the fast accumulation of sovereign debt, which can lead to problematic feedback effects from interest rate hikes, high debt-servicing costs and debt levels themselves (see further, chapter IV).

These risks can be reduced when expansionary fiscal policy is part of a globally (or regionally) coordinated strategy, as discussed further below. Coordination helps to achieve domestic targets by easing external constraints while allowing for fiscal policy strategies that reflect the specific structural conditions of each economy.

Fiscal coordination is especially important for development financing. The instruments that developing countries have at their disposal to obtain funds for industrialization and welfare expansion – mainly taxation of foreign companies and high incomes, as well as export revenues – cannot work effectively if other countries do not cooperate, such as by refraining from tax competition, sharing data, granting market access and favouring long-term financing. Most of all, if each country supports the expansion of its own domestic demand, this can generate a robust growth of global demand.

However, developed and developing countries differ significantly in their abilities to contribute to a global reflation centred on public spending. Obviously, advanced economies with widely accepted currencies (especially the United States which enjoys the "exorbitant privilege" of the United States dollar standard) are better placed to finance fiscal reflation than most developing countries. This brings up the question of whether "functional finance" (and more generally "modern monetary theory", MMT) can provide a useful framework for advancing an expansionary strategy. This is briefly considered in box 3.1.

BOX 3.1 To spend or not to spend – is that the question? Endogenous money, modern monetary theory and government deficits

Modern monetary theory (henceforth MMT) is an extension of the notion that money supply is endogenous to the workings of the economic system and the policies of the government. It follows upon the arguments about "functional finance" developed initially by Abba Lerner (1943). In its simplest form, MMT maintains that the very existence of fiat money is essentially enabled by the backing of governments that require the payment of tax obligations and other dues to the state in such currency. Therefore, government revenues are not simply a means of financing public spending; rather the public deficit or surplus is a policy tool that can be used to regulate employment and inflation levels, as governments can finance increased public spending by simply issuing money. This would not trigger inflation unless there are supply constraints that prevent output from increasing in response to increased demand. This has direct relevance when the policy objective

is that of generating an expansion of the real economy, in terms of rising employment and incomes. This is a useful antidote to excessive emphasis on fiscal austerity propounded by "deficit hawks". And it clearly points to the possibility for policy packages that can be very different from those currently in vogue, which aim to reflate the economy by creating liquidity through quantitative easing measures but typically operate in combination with policies of fiscal austerity and/or labour-market flexibilization that simultaneously weaken aggregate demand.

The basic propositions of MMT are broadly consistent with the process of money creation in a modern economy and the associated role of fiscal policy. Also, the theory reiterates the important point that there is much more financial space for proactive fiscal stances than is generally perceived. Indeed, Keynesian economists have been arguing for a very long time that government deficits can and should be used to fight recessions, finance infrastructure, and even pay for some ongoing current expenditures that are seen to be socially valuable. Therefore there is clearly a case for implementing such a functional finance programme in the United States, where it has been strongly advocated (Bell, 1998; Wray, 1998, 2015; Mosler, 2004; Tymoigne, 2014; Mitchell, 2016; Nersisyan and Wray, 2019). Such a strategy is particularly suited to the United States as its Government is also the issuer of the global reserve currency; obviously, therefore, this requires that the United States dollar continues to be accepted as such so that the additional import demand created by domestic expansion can be easily met. There are additional concerns in the United States that would need to be addressed, such as the self-imposed limits on government debt, claims of central bank independence and the distributional tensions between labour and capital that can arise from the pattern of additional public spending. Some concerns that have been raised about MMT (López-Gallardo and Reyes-Ortiz, 2011; Lavoie, 2013; Taylor, 2019) point to issues of institutional and real resource constraints, including the possibilities of supply bottlenecks arising in particular sectors that could have inflationary consequences. Even after recognizing these issues, it is clear that, in the United States, there can be a successful functional finance strategy for full employment or a "Green New Deal". To the extent that this then contributes significantly to global demand, it would also assist global reflation, while if the focus of public spending is on the transformation towards a green economy, there will be meaningful spillovers in terms of technology transfers and economies of scale to other countries.

However, in other economic contexts, such programmes of public spending based on money creation face tougher challenges. Other advanced economies cannot count on the same degree of acceptance of their currencies as the United States dollar, and therefore such a functional finance strategy would require much greater coordination between central banks to prevent speculative attacks and dramatic exchange-rate fluctuations. The problems are more severe for developing countries, which are generally far more externally constrained, with productive and financial structures heavily dependent on the rest of the world. It is unrealistic to expect that increased demand financed by issuing sovereign money can be fully matched by a domestic supply push. Import elasticities are typically high in developing countries, and industrialization requires imports of capital equipment and know-how that cannot be paid for in their national currencies. Insofar as such money-financed expansion leads to larger trade deficits, there would be associated increases in foreign debt that would make such countries more vulnerable. In addition, potential inflationary dynamics triggered by domestic supply constraints or induced depreciations would complicate distributional conflicts and welfare improvements. In these countries, financing a significant part of the deficit by a progressive overhaul of tax systems (including taxing the wealthy and the profits of extractive industries) is more consistent with the challenge of improving welfare. Furthermore, it is more consistent with a programme of structural transformation to rely on generating foreign exchange by expanding access to export markets and complementarily establishing regional clearing union systems and other forms of financial cooperation (see chapter IV). Finally, a formal premise of proponents of MMT is that currency sovereignty can only be maintained by flexible exchange rates. That is too high a price for most developing countries today. These countries are all too often subject to the double shock of terms of trade and exchange rate gyrations, which are mostly external and beyond their means of intervention. For these countries, capital controls and exchange rate management offer better effective policy sovereignty than flexible exchange rates in combination with functional finance.

There is the more general point that both taxation and public spending policies have significant distributional outcomes that cannot be divorced from broader social goals including those embedded in a Green New Deal. Ideally such a strategy should have a strong distributional component, which emphasizes the role of progressive taxation of both incomes and assets in reducing inequality, and identifies the patterns of spending that are most likely to generate more sustainable and equitable outcomes.

2. Investment and industrial policy

While government spending can be calibrated to work countercyclically, private investment often amplifies the business cycle, with especially negative effects during recessions. This makes an active investment policy a critical element in a strategy of economic growth and development, as discussed extensively in previous *TDR*s (1994, 1996, 2003, 2007, 2016). However, investment policies in both developing and developed countries have increasingly focused on enabling private investment and attracting external finance. This has contributed to the ubiquitous adoption of inflation targeting as a guide to macroeconomic policy, with the expectation that price stability and low interest rates would create a congenial environment for private capital accumulation. This has been accompanied by measures aimed at reducing the cost of "doing business" through deregulation, lower corporate taxes, privatizing state assets, signing investment treaties, etc.

These policies have generally achieved their immediate objective of increasing profitability for private capital, but they have failed to mobilize productive investment on the scale of earlier decades, let alone to the extent necessary for full employment and structural change (UNCTAD, 2018). Instead, they have allowed corporate profits to flow increasingly to the financial sector, confirming critics' warnings about the replacement of a robust profit-investment nexus with the rise of rent-seeking behaviour (*TDR 2003*; *TDR 2016*; *TDR 2017*).[6] The unheeded lesson is that sustained growth and structural change require the "directional thrust" of the state (Wade, 2014) through government investment and the management of private investment, both these activities are critical in supporting productive diversification and technical progress (IMF, 2018).

A long tradition of empirical research has shown that not all economic sectors have the same potential for generating higher incomes and improving living standards, especially in developing countries. The positive development experiences of the early post-war decades and the negative ones of the "lost decades" of the 1980s and 1990s have, in particular, confirmed the critical role of the industrial sector because of its extensive backward and forward linkages to the rest of the economy.[7] The expansion of the service sector, while also a feature of successful modern economies, is more often a marker of development than a cause, as demand from the industrial sector often drives its growth, even in cases such as the boom in India of digital services (Ghose, 2014).

Actual experiences of industrialization (and premature deindustrialization) have highlighted the role of the state in devising comprehensive industrial policies to resolve a range of critical challenges (Storm and Naastepad, 2005; *TDR 2016*). These include a familiar list of coordination challenges arising from market failures and the disconnect between private and social returns; the failure to take advantage of dynamic gains linked to increasing returns to scale; the damage from wasted resources due to excessive competition leading to price wars, bankruptcies and socially costly reallocation of resources; and the threat of sclerosis from resistance to changes that generate temporary unemployment and lost profits.

Aggregate investment generates the resources it requires by driving up aggregate income and profits, and therefore saving.[8] It is not constrained by the existing flow of saving in the economy, but it does require that future savings are made available *ex ante* through credit creation or other forms of financing. Although aggregate saving responds to investment spending, the extent and manner in which households, businesses, the government and external resources contribute to such savings matters, and have both growth and distributional consequences. Similarly, the ways in which the financial system channels credit to productive and other investments can make a difference, especially for long-term investment (chapter VI). But establishing financing options that are conducive to long-term, innovative and productive investment involves regulating interest rates, the allocation of credit and the flow of foreign direct investments (FDIs), all of which require some degree of capital controls and management of exchange rates (chapter IV and V). Given the high dependence of all economies on international capital markets, an industrial policy capable of directing growth on a sustainable path requires an appropriate financial policy.

Investment in industrial capacity should go hand-in-hand with investment in infrastructure. Owing to its large scale and its "crowding-in" effect on other investments (i.e. its stimulus effect on new economic activities and expansion of existing ones) public sector infrastructure investment plays an important role in every economy.[9] The strategic role and social value of infrastructure investment mean that its revenues

are hard to appropriate fully for individual investors, so government involvement is necessary for it to take place at the desired level (Aghion and Howitt, 2006). However, over recent decades infrastructure spending has been insufficient in many countries (*TDR 2018*). One reason has been inadequate financing, especially when governments face pressures to cut budgets and their policy sovereignty is challenged. To mobilize private capital, most countries have experimented with various forms of public–private partnerships but, as discussed in the previous chapter, many of these entail an unbalanced distribution of revenues and risks, with the former mostly accruing to private investors and the latter mostly borne by governments. Non-market financing options, such as long-term loans by national development banks, are more effective in funding strategically important investment in the interest of sustainable development (see chapter VI).

3. Investing in the green transition

Investment in infrastructure provides a unique opportunity to transition to a less carbon-intensive, or "decarbonized", global economy. Climate protection requires a massive new wave of investment, not only in infrastructure, reinventing energy and other carbon-emitting sectors, as soon as possible (Steffen et al., 2018; IPCC, 2018). New low-carbon technologies must be created, installed and maintained in all countries (Bovari et al., 2018; Millar et al., 2017; Geels et al., 2017; Steffen et al., 2018; Fankhauser and Jotzo, 2018), especially given the presence of carbon-intensive globalized value chains.[10]

There are numerous opportunities for investment in energy efficiency and renewable energy supply, many of them already cost-effective at today's prices[11] and many that have not been commercialized yet but are equally necessary for the complete decarbonization of the global economy.[12]

For developing countries, green investment raises both challenges and opportunities that were not available for developed countries when they industrialized. Although all countries have to install new infrastructure, most developed countries are likely to have older and inefficient infrastructure installed. In the context of energy infrastructure two prominent examples are peak facilities and long-distance electricity transmission.

Rising incomes imply a shift towards residential patterns of electricity demand in high-density urban areas where most of this century's growth in population, incomes and infrastructure will occur. Air conditioning and lighting both require a surge in energy output late in each day, which is met by "peaking" facilities that sit idle most of the time. High-income countries have generally gone through the process of developing peaking facilities sufficient to meet the maximum demand experienced on the grid. Many developing countries, in contrast, are still planning and creating their energy systems. As a result, the available resource savings from clean energy are greater in some developing countries: in developed countries, adoption of a new technology such as energy-efficient light bulbs can avoid the fuel costs, but not the capital costs, of existing peaking facilities. In developing countries, the same technology choice can avoid capital costs, as well as fuel costs, of new peaking facilities.

Similarly, delivering energy to remote communities, via an urban-centred national grid, entails the substantial expense of long-distance transmission. Again, many developed countries, including Canada and the United States, have already invested in these long-distance connections. In this context, clean energy can avoid the fuel costs and emissions associated with fossil fuels, but not the (already sunk) capital cost of running the wires so far into the countryside. For physically remote communities that lack grid connection, greater savings may be available. So-called "microgrid" systems, linking small-scale power sources to local customer demand, provide improved community energy services but do not attempt the larger investment required to link to a unified national grid (IRENA, 2018a).

Indeed, the optimal energy system for a large country may involve a microgrid structure, regardless of density or income. In this case, developing countries can skip the expensive stage of developing a single national grid, and leap ahead to a decentralized, microgrid-based structure. Just like cell-phone technology has allowed developing countries to "leapfrog" over the expense of creating a landline network (Aker and Mbiti, 2010), microgrid technology allows them to leapfrog over the expenses of creating and extending a unified national grid.

This "green" investment push is an opportunity for a "Global Green New Deal", recasting the Depression era's signature policy on a global scale with the

potential of generating income and employment growth as well as climate stabilization, cleaner air and other environmental benefits. Income distribution will also improve as many of the jobs created by green investment are inherently local to the area where investment occurs (ILO, 2018). This process can drive developed countries closer to full employment and help achieve better conditions of work in developing countries.

Estimates of the employment impact of the green transition vary, with detailed analyses pointing to a net gain of 18 million jobs across sectors, once both job creation and job destruction have been taken into account (ILO, 2018). The energy sector in particular is likely to be a major engine of job creation. Global employment in renewable energy industries reached 10.3 million in 2017 (IRENA, 2018b). There was ample opportunity for further employment growth, as existing jobs are concentrated in the minority of countries that have promoted renewable energy to date. And more can be done to expand clean energy and employment, even in countries that have already begun to adopt renewables. In the European Union, the shift towards clean energy from 1995 to 2009 created 530,000 new jobs, unevenly distributed by country; one third of the new jobs were due to transboundary effects of one European Union country's policies on another (Markandya et al., 2016).

Employment created by clean energy includes both the labour required for construction and installation, and jobs in basic materials industries that supply the energy sector (Pollin, 2015). A 2011 study estimated material requirements for the United States to generate 20 per cent of its electricity from wind power by 2030, finding a need for increased annual consumption of 6.8 million tons of concrete and 1.8 million tons of iron and steel (Wilburn, 2011).

Energy efficiency creates jobs via a different mechanism. When efficiency measures reduce or replace energy consumption, they frequently lower household energy costs. In all but the richest households, this releases some part of incomes for increased spending on other goods and services, indirectly creating jobs across many sectors of the economy.

Input–output analyses find that both renewable energy and energy efficiency create many more jobs than fossil-fuel industries – almost three times as many jobs per million dollars of spending, in one recent study (Garrett-Peltier, 2017). For the United States, the inefficiency of the current energy system and the plummeting costs of clean energy imply that it is possible to achieve an 80 per cent reduction in greenhouse gas emissions (GHG) by 2050, with no net increase in energy costs and a substantial increase in employment (Ackerman et al., 2015). Of the 550,000 net new jobs created in that scenario, more than three quarters are in construction and manufacturing. An input–output analysis for Africa, based on more fragmentary data, suggests similar potential for job creation from clean energy, with more ambitious GHG reduction scenarios generating lower costs per job (Cantore et al., 2017).

As clean energy initiatives and GHG reduction policies lead to ample job creation, it is tempting to see them as potential foundations for local industrial development. India, for example, embraced the solar industry in 2011, and set up incentives for domestic production. However, this ran afoul of World Trade Organization rules, which prohibit favourable support to domestic producers. If trade rules continue to trump environmental and development concerns, it will be difficult to realize the full potential for a Global Green New Deal. Tradable components of green investment, including photovoltaic cells and modules, can be monopolized and exported by low-cost producers, such as China at present. However, much of the employment created by clean energy is inherently local, either in construction and installation jobs that cannot be traded away, or in manufacturing of massive components, as in wind turbines, that are prohibitively expensive for long-distance transportation (ILO, 2018).

4. Financing investment: Credit creation, financial regulation and climate insurance

The decoupling of credit creation and productive investment suggests that expanding the latter requires careful regulation of credit, both to support productive activities and to avoid fuelling destabilizing ones.

Productive investment, especially in infrastructure, is mainly long-term investment that requires the financial system to reliably make future savings available *ex ante*, especially in the form of long-term credit.[13] The financial requirements can be significant. For example, studies indicate that rapid decarbonization

of the economy would require additional investments of 1–2 per cent of GDP for several decades (Williams et al., 2014; Agora Energiewende, 2018; Pollin, 2018). This is a small amount when seen as insurance against disastrous losses (Ackerman, 2017) but it is enough to strain corporate and government balance sheets in many countries. Although stopping climate change has no real cost, as it would extend and improve the global economy's productive life indefinitely (Rezai et al., 2012), inadequate financing can prevent the necessary investments (Baer et al., 2009; Mazzucato and Semieniuk, 2018).[14]

Overall, successful financing strategies require some degree of planning. As discussed in chapter VI, national development banks and other direct credit institutions are usually better placed to support long-term finance. Central banks can help by functioning as lenders of last resort and by monitoring the banks' leverage and lending practices (including any lending targets).

Sustainable global growth requires that financial regulators, including central banks and financial market authorities, curb destabilizing financial trades and return finance to its socially useful function of funding productive investment (Storm, 2018). From the standpoint of implementation, and as discussed in later chapters, the challenge is that this "productivist" approach to finance requires complementary policies on many fronts, including international capital controls (IMF, 2010a, 2011), exchange rate management, subjecting bank mergers to financial stability and establishing international protocols to resolve sovereign debt crises in order to avoid predatory financial behaviour.

In sum, appropriate credit policies stimulate investment by mitigating its risks. But there are sources of uncertainty that these policies alone cannot eliminate. The exchange rate is a primary one, especially for developing countries where manufacturing requires imports of raw materials and intermediates. In these countries, exchange-rate hedging can help reduce currency mismatch and, if demand growth is strong, it can boost investment. If, however, aggregate demand is flagging, no financial instrument on its own can stimulate investment. Although credit and exchange-rate policies can address critical bottlenecks, if the economy suffers from insufficient aggregate demand, the only way to stimulate growth is to directly tap a source of real spending (*TDR 2015*).

5. Income redistribution

The distribution of income between wages, profits (and rents) and taxes is the result of a bargaining process shaped and driven by government policies.[15] It is key to economic growth for two reasons. First, it determines wage income relative to profit income and rents. As workers have lower saving rates than capitalists and rentiers, redistribution towards labour generally drives up consumption spending. In principle, this may or may not lead to higher growth and employment, depending on the web of dynamic interrelations between demand and distribution. In practice, with the global economy lacking sufficient demand for at least a decade, redistribution is necessary to reflate growth and create more jobs. Second, wages are not only a major determinant of production costs but also impact on technical progress, as the labour share is effectively the average unit cost of labour faced by a country's firms. Higher unit labour costs provide a powerful incentive for firms to invest in labour-saving technology – which temporarily allows higher profit shares, until wages are renegotiated – and higher-end product varieties that command higher profit margins (Storm and Capaldo, 2018). Thus, in the medium term, income redistribution can trigger positive dynamics that lift the constraints on supply posed by pre-existing technical frontiers.

Particularly in developing countries, supply-side constraints (related to the scarcity of factors of production) are a major obstacle to the expansion of output and to strategies of structural change. But supply-focused responses that aim at alleviating the constraint by expanding the availability of the scarce factor can backfire because of their adverse effects on distribution. Relative prices, including the terms of trade between manufactures and primary commodities as well as the relative prices of tradable and non-tradable goods, are of great significance in the development process. Uncoordinated changes in these prices can constrain spending for one or more groups of workers, thereby constraining aggregate demand, generating inflationary spirals or both. The challenge is that in these cases fiscal and monetary policies do not provide solutions and therefore restoring or increasing aggregate demand to the full-employment level would require addressing underlying structural problems (Ros, 2013: 259).

6. International trade and investment agreements

International trade can be a powerful driver of economic development. International treaties can help to unlock this power, but if they are poorly designed, they can also be detrimental to growth, employment and development (Capaldo, 2015; Capaldo and Izurieta, 2018; Izurieta et al., 2018; Kohler and Cripps, 2018). Their ultimate effect depends on whether they enhance the channels through which trade supports development or subordinate trade flows to foreign investment flows and international capital markets.

The Havana Charter, which proposed an international trade organization to manage international trade in the post-war world, saw a central role for trade as an instrument of industrialization and employment generation. Exports support economic development through two main channels: by expanding aggregate demand, with associated improvements in productivity because of economies of scale and scope as well as innovation; and by providing a source of foreign exchange, which enables the purchase of capital goods, raw materials and intermediate inputs from abroad that might otherwise be the cause of bottlenecks to investment. More recently, however, a single-minded focus on export-led growth and the perceived advantages of trade liberalization have been used to justify regulatory changes in external trade as well as in investment and finance. This is reflected in the current trend towards "comprehensive" bilateral and plurilateral trade agreements[16] that include chapters on investment, finance and intellectual property rights as well as health, labour and environmental standards. These provisions undermine national policy sovereignty by constraining governments' choices on industrial policy, public investment, financial regulation and other critical policy areas (*TDR 2014*). International agreements that seek to expand growth and development through international trade can, in fact, curtail them because of their negative effects on income distribution and policy space. They also deflect attention from important aspects of trade regulation, such as the definition of acceptable trade barriers. Public dissatisfaction with the outcomes generated by such agreements has led to growing opposition (for example, in the case of the Trans-Pacific Partnership (TPP) in the United States, of the Comprehensive Economic and Trade Agreement (CETA), in Belgium and of the Transatlantic Trade and Investment Partnership (TTIP) in the European Union). A more sensible approach to take advantage of international trade and contain its risks is to negotiate trade agreements that deal exclusively with trade provisions, mainly tariffs, subsidies, quotas and preferential purchases, leaving investment and finance to separate agreements. These would take into account the specific social, economic and developmental requirements of trade partners at varying levels of per capita income and employment diversification.

International investment can be a source of foreign exchange and a conduit of technology transfer with positive effects on industrialization. But negotiations of comprehensive agreements often exaggerate these benefits and downplay the risks. For example, countries seeking access to foreign markets for their exports and trying to ease the foreign exchange constraint may agree to measures of financial liberalization that they would not otherwise seek. But such liberalization may undermine the industries that trade negotiations are meant to bolster; and it may do so without attracting the expected FDI. In practice, FDI has proven to be at best a modest source of foreign exchange, for at least two reasons. First, the payments made to establish new activities often take the form of credit from affiliated companies already present in the country, which do not involve transfers of foreign exchange. Second, FDI that leads to functioning industrial operations eventually leads to outflows of foreign exchange too, because of imports of intermediates, royalties and technical fees, and profit repatriation (Ocampo et al., 2009: 3).

7. International coordination for growth, industrialization and crisis response

Reflationary strategies cannot work as intended without explicit international coordination. Whereas uncoordinated policies ignore global aggregation effects and run into multiple constraints (such as unsustainable external deficits and pressing trade-offs between emission reduction and development priorities) coordination can expand policy space and align the incentives faced by different countries.

By contrast, straightforward export-led growth promises lower-hanging fruits. Cutting unit labour costs is the main instrument, which all countries today are encouraged to use. This may pay off in the medium term, but at the cost of longer-term problems. Cutting unit labour costs means undermining real

wage growth and, eventually, aggregate demand. Even if a country initially succeeds in expanding exports and export-oriented employment, wage stagnation means that domestic demand will lag behind, making growth dependent on continuous expansion of foreign markets. Furthermore, this strategy provokes competitive responses from other countries in a global race to the bottom. As labour costs are cut globally, finding expanding markets to sustain growth becomes increasingly hard. Countries may or may not succeed in increasing export shares, but they surely incur steep costs in the form of redistribution from wages to profits, slower growth, higher instability and diminished prospects for industrialization.

Medium-term gains are not an automatic prospect either, as competitive export-led growth is not a fair game in the neo-liberal era. Short-term gains from exploiting static comparative advantages are within reach only for countries whose productive systems do not need the inputs that the current international legal framework for trade and investment restricts, such as technology transfer and public investment in infrastructure. In addition, volatile cross-border capital movements can lead to undesired exchange rate movements that work against medium-term goals of export promotion. In the current framework of international rules, it is rare for deficit countries to switch to surpluses without going through recession. As a result, current account imbalances tend to last and accumulate into unsustainable external debts, posing a recurring global challenge. This makes international policy coordination inevitable, but in the perverse form of bailout programmes with strict policy conditions. In such a context, it makes sense for all countries, but especially for developing countries, to invest politically in establishing forms of coordination that preserve their policy sovereignty while supporting global aggregate demand and financial stability (Helleiner, 2014, 2019).

Therefore, international coordination has at least three constructive functions. First, it helps to counteract the pressure that international capital mobility puts on domestic policies. Agreed standards for capital controls, if widely adopted, are instrumental in reducing capital flight in the face of economic and financial tensions, as well as the related pressures on exchange rates. Coordination mechanisms can also provide buffers to withstand pressure on exchange rates when the latter does occur. Second, and more fundamentally, international coordination can shield against protracted current account imbalances while preserving global demand, such as through mechanisms requiring that all countries expand domestic spending, while surplus countries increase their spending faster (Keynes, 1929; UNCTAD, 2014). In clearing unions, mechanisms to "recycle" external surpluses can be implemented through rules that stabilize thresholds, notional currencies to measure the imbalances, and lending mechanisms to clear them. Clearing unions are particularly useful for developing countries, as they offer an effective solution to the problem of financing likely external deficits. Third, as noted in chapter V, coordination on tax policies can be hugely effective in increasing fiscal revenues for all countries.

Coordination is also and obviously an essential prerequisite for the global success of climate action policies. Uncoordinated environmental policies have failed and will continue to fail to stabilize the climate or to halt environmental degradation (IPCC, 2018). Unless they have feasible alternatives, developing countries with abundant carbon energy will continue to tap it when facing pressing development priorities and more imminent challenges such as food insecurity. Under current standards in international trade and investment treaties, transfers of green technology are generally seen as infringing intellectual property rights, thereby bringing climate policy negotiations to a stalemate. While many developed countries have become more energy-efficient, they continue to support a trading system that provides (and enforces) low-cost and low-standards manufacturing goods (Schröder and Storm, 2018). Clearly, only explicit coordination can align the incentives faced by each country based on negotiated support for adoption of the necessary energy use standards.

National growth strategies have a greater chance of success if they are globally consistent. Crisis response is also more effective and efficient when it is coordinated. On the one hand, crises (economic, financial, environmental) often hit different countries at different times, making it more efficient, overall, for the countries that have been spared to take on some of the burden of crisis response. For example, foreign exchange reserves are a "leakage" from global demand but they are also a critical buffer during a currency or balance-of-payments crisis. If a credible commitment to mutual foreign exchange assistance can be made, for example through formal

currency swap agreements or through institutions that pool and lend reserves, currency crises can be contained with less accumulation of reserves and a smaller burden for developing countries (chapter V) and for the global economy. This was the idea that inspired the Bretton Woods system. Likewise, developed countries can support the expansion of policy space in developing countries to support their ability to invest in climate stabilization.

As a supporting mechanism for a long-term growth strategy and as a crisis-response instrument, international coordination is more efficient the larger the number of countries that participate. But in some cases, smaller coordination arrangements are also beneficial – as shown, for example, by the many regional funds, regional payment systems and exchange-rate agreements established to contain the risks of exchange-rate fluctuations (chapter IV).

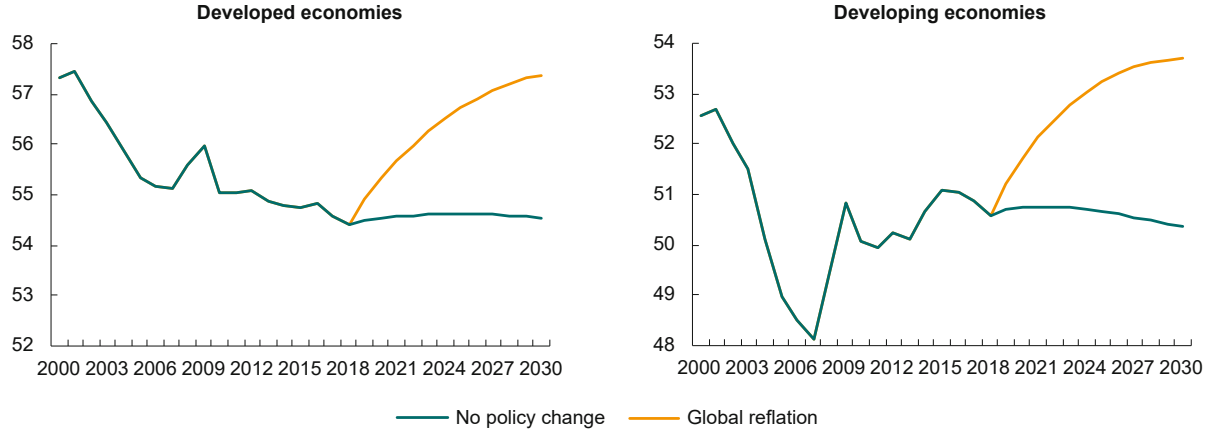
D. Laying out the midterm strategy in empirical terms

In order to make the previous discussion more concrete this section provides an empirical assessment of how the global economy may fare by 2030. First, it is necessary to consider where current policies will lead, based on observed trends. Second, alternative outcomes can be outlined that reflect the policy changes described in section B.

If the current policy stances continue, the global economy from here to 2030 will face slower growth and higher instability. As labour shares across the world continue on their decreasing path, household spending will weaken, further reducing the incentive to invest in productive activities. At a minimum, this will mean lacklustre employment creation and stagnant wages in developed countries as well as slow (or negative) expansion of domestic markets in developing countries. Both outcomes will worsen as governments keep engaging in the global race to the bottom, promoting more cuts to labour costs. Aggregate demand expansion will slow down further, as governments continue to reduce social protection benefits and abstain from infrastructure investment, which will also make supply constraints tighter. In the meantime, unchecked credit creation will continue to fuel destabilizing financial transaction while failing to stimulate private productive investment. Finally, lacking sufficient investment and international agreement on technology transfer, carbon emissions will continue to increase overshooting the Paris target.

In stark contrast with current trends, this section examines the possible outcomes in terms of growth, employment, labour incomes and carbon emissions of an internationally coordinated policy package consisting of income redistribution, fiscal expansion and state-led investment centred on economic development, social protection and green technology. The outcomes presented are realistic within the range of options that emerge from robust estimates of the effects of each policy.

FIGURE 3.7 Labour shares: Income from employment as percentage of GDP, 2000–2030



Source: UNCTAD secretariat calculations and the United Nations Global Policy Model (GPM).

1. Income redistribution

In order to reverse the regressive trend in income distribution, labour shares will have to recover towards the higher levels of the mid-1990s. This can be achieved gradually in the medium term through labour-market regulation that supports employees' compensation while limiting profit markups. Raising minimum wages, strengthening collective bargaining institutions and increasing employers' social security contributions are the primary instruments. In practice, data suggest that it is realistic for labour in developed countries to regain by 2030 at least half the income share lost since the late 1990s while shares can grow faster in developing countries to drive up domestic demand more significantly and minimize labour cost competition with developed countries (figure 3.7).

As discussed in the previous section, increases in the labour shares will drive up GDP growth mainly by supporting household spending and, indirectly, business investment. International coordination is critical to induce all countries to adopt the necessary policies. Without coordination, countries that raise the labour share would face the prospect of reduced competitiveness, even if only in the narrow sense of labour cost levels, which would probably be enough to dissuade them from such policies.

Realistic estimates of the expansionary effects of labour share increases are given by the coefficients in table 3.1, which are consistent with the findings of other empirical research (Lavoie and Stockhammer, 2013; Stockhammer and Onaran, 2013; Storm and Naastepad, 2012: 5). The coefficients indicate the increases in GDP that follow a 1 per cent increase in the labour share, without taking into account any feedback effects from other countries. Thus, for example, in the United States a 1 per cent increase in the labour share is estimated to drive up GDP by 0.38 per cent. Coordinated policies would have stronger effects beyond these figures.

2. Fiscal expansion

In order to sustain global demand, government spending will have to continue to expand in both developed and developing countries, but the components of spending will play different roles in different contexts. In general, in developed countries, spending on goods and services will have to expand more significantly in order to meet the need for public investment,

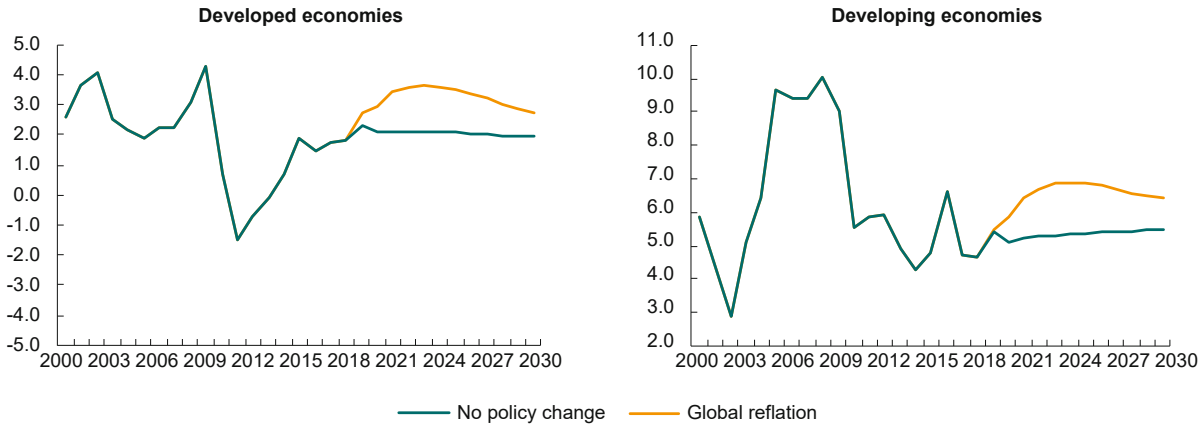
TABLE 3.1 Effects of labour share increase on GDP, selected countries
(Percentage change in GDP after an increase of 1 per cent in the wage share)

Argentina	0.32
Australia	0.30
Brazil	0.34
Canada	0.28
Caribbean	0.28
China	0.26
France	0.30
Germany	0.26
India	0.23
Indonesia	0.29
Italy	0.30
Japan	0.34
Republic of Korea	0.22
Mexico	0.24
Other Union Europe	0.28
Russian Federation	0.31
Saudi Arabia	0.21
South Africa	0.25
Turkey	0.21
United Kingdom	0.27
United States	0.38
North Africa	0.19
Other Africa	0.23
Other Transition Economies	0.22
Other Developed Economies	0.25
Other East Asia	0.20
Non-European Union Europe	0.25
Other South America	0.32
Other South Asia	0.47
Other West Asia	0.20

Source: UNCTAD secretariat calculations and the United Nations Global Policy Model (GPM).

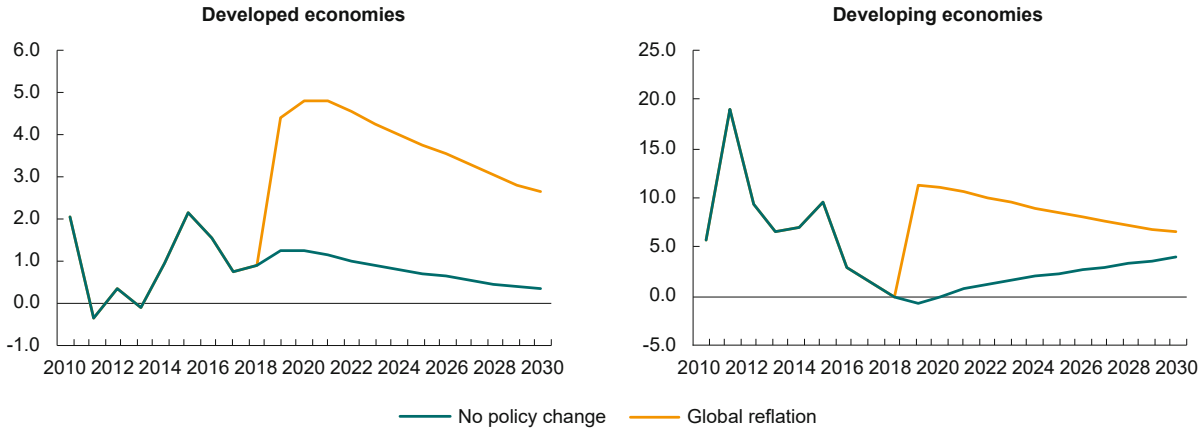
Note: Figures indicate effects produced within one year of wage-share increase; *other East Asia* includes the Democratic People's Republic of Korea, Hong Kong (China), Malaysia, Mongolia and Singapore; *Non-European Union Europe* includes Norway, Serbia and Switzerland; *Caribbean* includes Costa Rica, the Dominican Republic and Jamaica; *Other European Union* includes Croatia, Estonia, Greece, the Netherlands, Norway, Portugal, Spain and Sweden; *Other West Asia* includes Iraq, Lebanon and the United Arab Emirates; *North Africa* includes Algeria, Egypt, Libya, Morocco and Tunisia; *Other transition economies* includes Georgia, Kazakhstan and Ukraine; *Other developed countries* includes Israel and New Zealand; *Other South America* includes Chile, Colombia, Ecuador and Peru; *Other South Asia* includes Afghanistan, Bangladesh, the Islamic Republic of Iran and Pakistan; *Other sub-Saharan Africa* includes Angola, the Democratic Republic of the Congo, Kenya, Nigeria and sub-Saharan African countries excluding South Africa.

FIGURE 3.8 Government spending in goods and services, 2000–2030
(Constant 2005 US dollars, ppp year-on-year percentage change)



Source: UNCTAD secretariat calculations and the United Nations Global Policy Model (GPM).

FIGURE 3.9 Government spending on transfers and other payments, net of subsidies, 2010–2030
(Constant 2005 US dollars, ppp year-on-year percentage change)



Source: UNCTAD secretariat calculations and the United Nations Global Policy Model (GPM).

especially in green infrastructure (figure 3.8). The strategy laid out here points to an average increase of 2 per cent of GDP as a plausible figure. Government transfers (such as pensions for government employees, unemployment benefits, funding of public health-care systems, food subsidies, subsidies to production etc.) will also need to increase to meet the needs of ageing populations (figure 3.9). This is in stark contrast with the picture that would result from the current declining trend in government transfers. In developing countries, government transfers will have to increase at a faster rate in order to offset protracted austerity and to establish stronger social protection systems. Spending on goods and services in these countries will have to continue growing in absolute terms but will have to slightly decline as a share of GDP in order to minimize inflationary pressures and pressures on public budgets.

Estimates of government spending multipliers indicate that such an expansion would partially pay for itself by generating higher GDP and (everything else being equal) higher tax revenue (table 3.2). But in all countries, tax policy will have a significant role to play to support redistribution – through higher marginal rates of income taxes, both personal and corporate – and to ensure that government deficits are sustainable (figure 3.10). Estimates of direct taxation multipliers (table 3.2) indicate that a rise in progressive taxation has little negative effect on aggregate demand and, conversely, that tax cuts have little positive effect (which are negligible when they benefit only corporations and the wealthy). More progressive

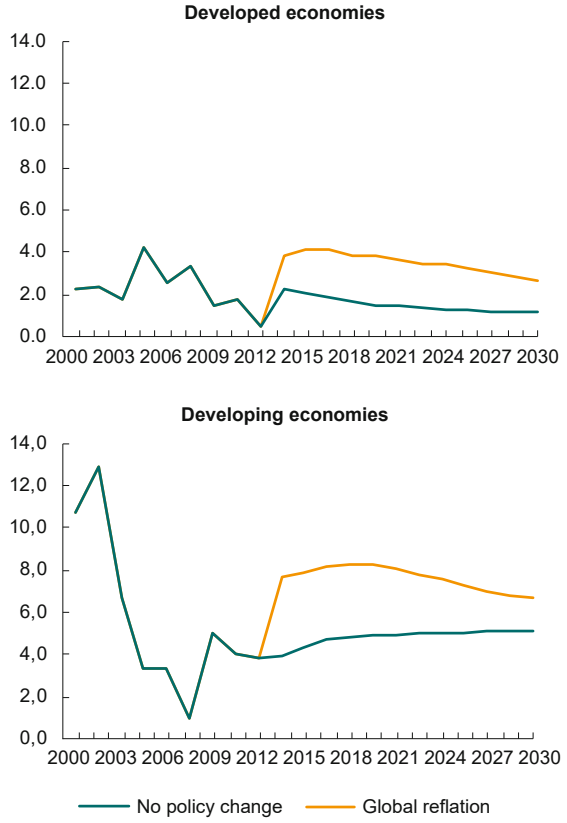
TABLE 3.2 Fiscal multipliers (increase of GDP following a $1 billion increase in government spending in goods and services or a $1 billion cut in direct taxes)
(Millions of dollars)

	Government Spending	*Direct Taxation*
Argentina	1,618	204
Australia	1,525	122
Brazil	1,671	189
Canada	1,360	73
Caribbean	1,522	207
China	1,724	206
France	1,340	80
Germany	1,291	85
India	1,505	223
Indonesia	1,779	252
Italy	1,408	154
Japan	1,646	181
Republic of Korea	1,315	129
Mexico	1,428	212
Other European Union	1,326	104
Russian Federation	1,602	145
Saudi Arabia	1,282	102
South Africa	1,469	209
Turkey	1,421	207
United Kingdom	1,374	119
United States	1,752	218
North Africa	1,316	141
Other Africa	1,455	203
Other transition economies	1,442	183
Other developed economies	1,391	124
Other East Asia	1,181	114
Non-European Union Europe	1,302	88
Other South America	1,606	183
Other South Asia	1,489	192
Other West Asia	1,297	104

Source: UNCTAD secretariat calculations and the United Nations Global Policy Model (GPM).
Note: See table 3.1.

direct taxation is, therefore, compatible with an expansion of government spending and a gradual decline of government deficits in both developed and developing countries. International coordination is as important in this area as it is for redistributive policies, as the possibility of tax competition can easily dissuade governments from raising direct taxes. In addition, as discussed in box 3.1, countries that issue reserve currencies – especially the United States, and to a more limited degree other developed economies which issue major currencies (like Japan and the United Kingdom) – may combine increases of tax rates with some variety of "functional finance" as a means to fund a government spending expansion.

FIGURE 3.10 Total tax revenue, 2010–2030
(Constant 2005 US dollars, ppp year-on-year percentage change)



Source: UNCTAD secretariat calculations and the United Nations Global Policy Model (GPM).

3. A greener horizon

A global push towards the Sustainable Development Goals is made particularly challenging by environmental targets. The development agenda drawn in this chapter requires sustained growth of output and demand in both developed and developing regions, implying massive increases in the demand for energy and primary commodities. In this context, achieving environmental targets requires efforts at three levels:

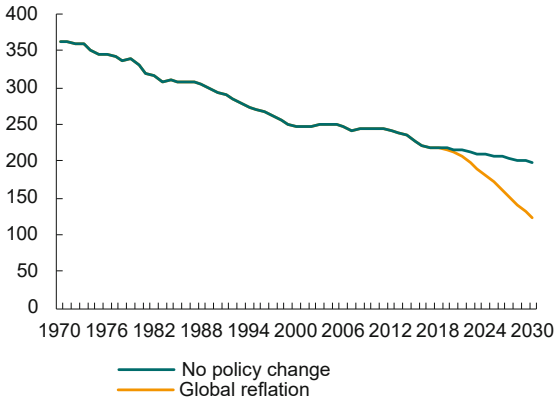
(a) drastic improvements in energy efficiency that can effectively reduce the sensitivity of energy demand to economic growth; (b) cuts to the production of carbon energy, to be partly compensated by higher production of non-carbon energy; (c) technological and financial transfers that support the energy transition. This last is especially important for developing countries, which are currently projected to grow faster than developed countries in the coming decades but generally lag behind in the adoption of green technologies and often depend on exports of carbon energy to obtain foreign exchange. International coordination can be decisive in breaking this dependence.

(a) Energy demand

As a share of global GDP, global energy demand has been falling at an average rate of 1 per cent a year since 1970 (in real terms) but it has increased in level. If this trend continues, and global growth continues as discussed above, by 2030 global energy demand will be nearly 60 per cent higher than in 2010. This will mean overshooting environmental targets. Indeed, the worst scenario considered by the IPCC assumes an increase in global demand of only 44 per cent (IPCC, 2018: 14).[17] Furthermore, all scenarios deemed acceptable by the IPCC assume moderate growth of global GDP (close to the baseline discussed above, approximately 3.5 percent per year), rather than fast growth.

Empirical evidence suggests that the sustainable growth strategy proposed in this chapter is compatible with an increase of global energy demand by 2030 of approximately 14 per cent with respect to 2010. As the strategy generates faster GDP growth (of approximately 4.7 per cent per year), energy demand per unit of output will have to fall by approximately 4.5 per cent per year on average. Compared to the current trend of 1 per cent, this is clearly ambitious (see figure 3.11). But international evidence suggests that it is feasible. For example, pressed by the second international oil shock, France, Japan, the United States and West Germany improved energy efficiency by 4 per cent a year or more for five years or longer. Some developing countries, starting from lower levels of efficiency, have also managed sustained improvements. Throughout the 1980s and 1990s, China improved efficiency at an average rate of nearly 6 per cent per year, and at the rate of nearly 7 per cent per year after 2012. Meanwhile, average yearly improvements in India in the 2000s, while the oil-price boom lasted, were of nearly 3 per cent.

FIGURE 3.11 Energy intensity of global output (volume), 1970–2030
(Grams of oil-equivalent)

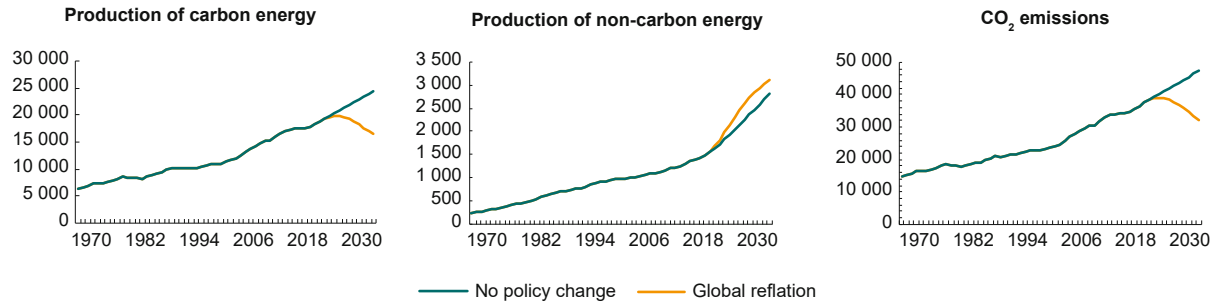


Source: UNCTAD secretariat calculations and the United Nations Global Policy Model (GPM).

(b) Energy production and carbon dioxide emissions

Improving overall energy efficiency is only one dimension of the challenge. Another is to shift from carbon to non-carbon energy sources. Total energy production is at present about 20 billion tons of oil-equivalent, about 8 per cent of which is generated from renewable sources. This combination causes gross CO_2 emissions to the degree of 36 billion tons. If current production patterns are projected into the future, even after taking into account a moderate acceleration in the production of non-carbon energy, by 2030 CO_2 gross emissions will reach 47.5 billion tons, reflecting global totals of 24 billion and 3 billion tons of oil-equivalent in carbon and non-carbon sources, respectively. Alternatively, to reach a minimally acceptable environmental target by 2030, the IPCC proposes in one of its moderate scenarios a reduction of gross CO_2 emissions of 41 per cent in 2030 relative to 2010, in conjunction with a postulated increase of 21 per cent of total energy production. That would require an excessively challenging shift towards non-carbon energy. Experimenting with a variety of scenarios, it appears that only a more modest improvement could be consistent with extrapolations to a global scale of relatively successful country-level episodes of combined falls in fossil-fuel production and meaningful increases of non-carbon production. More concretely, it is possible to postulate a fast deceleration and successive decreases of carbon energy production, falling from above 18 billion tons at present towards 15 billion tons of oil-equivalent by 2030, and a significant acceleration in renewable sources of energy, from 1.5 billion to about 3.5 billion

FIGURE 3.12 Energy production and emissions, 1970–2030



Source: UNCTAD secretariat calculations and the United Nations Global Policy Model (GPM).
Note: MTOE = million tons of oil-equivalent.

tons. Such a combination will result in a fall to about 30–32 billion tons of gross CO_2 emissions by 2030 (see figure 3.12). This may correspond to a scenario somewhere between those named by the IPCC as "no or limited overshoot" and "higher overshoot". And yet, the extent of policy change required to make that happen is not in the least trivial.

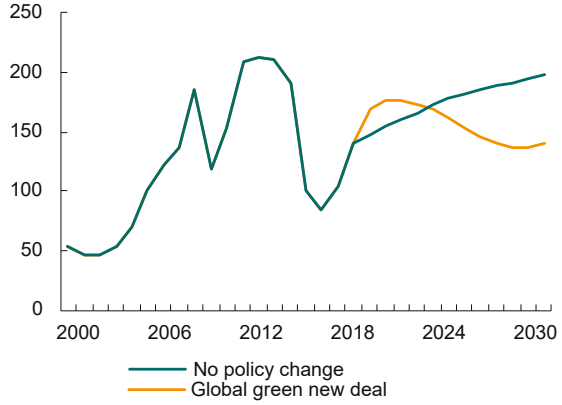
(c) Further requirements: Coping with terms-of-trade shocks, investment and finance

The challenge of such a transformative agenda on a global scale, even if moderate in its results, cannot be overstated. The improvements in energy efficiency and shifts towards non-carbon energy require technology sharing and financial support, both of which will need to underpin the necessary investment push, including public investment in physical and social infrastructure as discussed above. Technology sharing is essential because only a few economies have advanced sufficiently in the production of new forms of energy to the scale required to be cost-effective. For many other economies, the threshold is too high, and their best course of action may be not to join a "greener" agenda as they lack the proper technology and the financial resources to pay for it. What is more, a global shift away from fossil-fuel energy, together with the postulated fall in global energy demand relative to output, will imply consistent downward pressure on the global price of fossil-fuel products, even if initially a global fiscal reflation and investment push will cause some degree of oil-price inflation.

Under these conditions, the oil price – compared with a projection derived from current trends – may evolve as shown in figure 3.13. Depending on the degree to which the environmental agenda going forward incorporates improvements in the production and reusability of other primary commodities, as well as technologies that improve energy efficiency, it is likely that such an agenda involves serious term-of-trade losses for most developing economies whose foreign earnings continue to depend heavily on primary commodities. Indeed, research indicates that meeting emissions targets requires the reduction of dependence not only on oil but also on primary commodities (Izurieta and Singh, 2010).

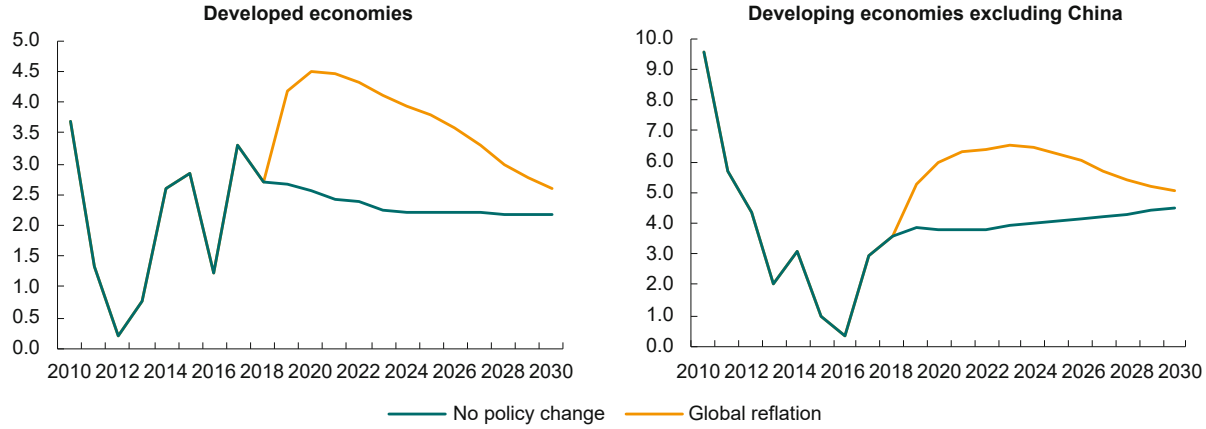
That is, on the one hand the postulated strategy of fast growth and sustainable development requires a momentous, even if feasible, impulse of public and private investment by both developed and developing economies (see figure 3.14). This means that in both groups of countries, domestic demands for finance to enable the long-term investment push will be considerable.

FIGURE 3.13 Oil price in alternative scenarios
(Index number, 2005 = 100)



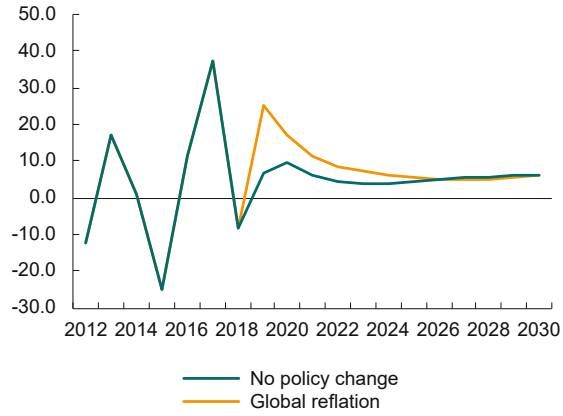
Source: UNCTAD secretariat calculations and the United Nations Global Policy Model (GPM).

FIGURE 3.14 Private investment growth, 2010-2030
(Constant 2005 US dollars, ppp year-on-year percentage)



Source: UNCTAD secretariat calculations and the United Nations Global Policy Model (GPM).

FIGURE 3.15 Total financing requirements (domestic and external) as a share of GDP, excluding China, 2012–2030
(Constant 2005 US dollars, ppp percentage)



Source: UNCTAD secretariat calculations and the United Nations Global Policy Model (GPM).

On the other hand, the financial constraints for most developing countries may turn out to be very tight. A globally coordinated agenda that favours the technological transfers necessary for climate change mitigation will partially ease them. It can also be considered that, judging from the expected patterns in the price of oil presented above (which may also be exhibited by some of the primary commodities that feed into infrastructure and fixed capital production), at least initially there will be additional sources of foreign exchange for exporting countries. But eventually this strategy will require considerable increases in demand for resources in developing countries, in terms of both domestic and foreign financing, roughly at rates above 10 per cent per annum for the first four to five years, slowing down towards 4–5 per cent per annum afterwards (see figure 3.15). Admittedly, the demand for finance also grew considerably in 2016–2017, but this was mostly due to recovery from its fall that followed the "taper tantrum" of 2013. Besides, while in the years from 2012 to 2018 the main driver of demand for finance was the speculation induced by quantitative easing. By contrast, the increase generated by a globally coordinated strategy after 2019 would mainly be motivated by the financing of productive investment and infrastructure.

Though what is presented above is empirical estimates of projections that are conditional on the set of policy assumptions to shape a genuine sustainable development agenda, it should be clear that adding environmental targets to what is already a challenging strategy of growth and development requires very significant efforts at both the national and international levels. The question is whether the postulated changes required to deliver even modestly on climate change mitigation can also deliver on growth and employment.

E. Conclusion: Coordination is the key to growth, jobs and climate stability

Strategies towards sustainable development and economic growth can take a variety of paths, depending on the structural conditions and constraints of each country. Yet, the main factors to consider can be derived from the multiplier analyses presented above (tables 3.1 and 3.2). If policymakers succeed

in raising the shares of labour income towards the levels of a not-so-distant past, growth will increase between 0.25 and 0.75 per cent per year depending on the country. If all or most countries act in the same direction, feedback effects will lead to faster and more sustained growth. International coordination is key to ensure buy-in by all countries as well to facilitate transmission of demand and productivity effects by enhancing trade and financial networks.

A similar observation can be made about assessing the impact of a combined fiscal reflation financed by progressive tax increases and credit creation. Government spending multipliers for individual countries range from 1.3 to 1.8. In a globally or regionally coordinated agenda, these effects are amplified. Of particular importance is the extent to which private investment is stimulated by the initial fiscal impulse (the crowding-in effect). Considering that many economies currently experience weak or insufficient demand, it is expected that the fiscal stimulus will result in sizeable increases of private investment and consequently faster productivity growth than if current policy stances continue.

Significant public investment in clean transport and energy systems is imperative to establish low-carbon growth paths and to transform food production for the growing global population, as well as to address problems of pollution and environmental degradation more generally. This will need to be supported by effective industrial policies, using a mix of general and targeted subsidies, tax incentives, loans and guarantees, as well as accelerated investments in research, development and technology adaptation, and a new generation of intellectual property and licensing laws. Specific measures and support will be required in developing countries to help them leapfrog the old and dirty development path followed by today's advanced economies.

Coordination is key in this instance for two other reasons. First, for many countries, particularly in the developing world, constraints to growth may not emerge from demand but from supply bottlenecks in particular sectors or from the lack of foreign finance. A coordinated strategy is needed to ensure that any such shocks do not trigger capital flights and that trade can compensate for domestic supply deficiencies. Second, a critical limit to the growth of productivity in many developing countries arises from technology, know-how and sophisticated capital equipment. In many instances, such countries will not be able to succeed in reaching the initial conditions to take off and realize the scale economies needed to be cost-effective. Coordination to support technology transfers and access to markets is critical.

Considering the estimates reviewed, and assuming an effective degree of international policy coordination (including South–South cooperation), it seems realistic to envisage that a policy package consisting of redistribution, fiscal expansion and state-led investment push will yield sustained growth rates of GDP in developed economies at 1–1.5 per cent above of what can be experienced under current patterns. For developing economies, excluding China, the growth rate increases above the projection of current patterns may be between 1.5 and 2 per cent per annum. Growth above the baseline in China may be more moderate, close to an increase of about 1 per cent per annum.

Based on current trends in employment creation, a successful global growth strategy of this kind will increase employment by approximately 26 million jobs in developed countries and 146 million jobs in developing countries (40 million of which would be in China) by 2030. These are relatively small numbers compared to a global labour force projected to reach 4.1 billion, especially as in the past economic growth used to have stronger impact on employment. But it is plausible that a globally coordinated strategy centred on state-led investment and social spending would have a substantially larger impact than projected here, thanks to the expansion of service employment. Clearly, therefore, the projected estimates for growth and employment as well as for environmental outcomes, suggest that even more decisive efforts than those explored here are necessary to achieve global growth and development that are sustainable economically, socially and environmentally. Nevertheless, the policies discussed in this section would effectively push the global economy in the right direction.

Notes

1 The cost-cutting agenda has been promoted as a one-size-fits-all remedy to jump-start economic growth, based on studies suggesting that labour-market regulation undermines economic growth while cutting labour costs boost private investment (Besley and Burgess, 2004; Bernal-Verdugo et al., 2012; IMF, 2013a, 2013b; World Bank, 2008, 2019). It has informed policy advice (IMF, 2013a, 2017), financial aid conditionality (European Commission, 2010, 2012, 2015) and country rankings (World Bank, 2018; World Economic Forum, 2017). The rationale of flexibilization has been shown to be biased and flawed by unrealistic assumptions, most recently in the context of the slow recovery from the Great Recession (see section B).

2 In development policy the idea gained traction in the 1950s informing early IMF conditionality (Polak, 1957) and was mainstreamed in the 1980s and 1990s in the Washington Consensus, the "Shock Therapy" programmes for transition economies (Lipton et al., 1990; *Financial Times*, 1992) and in responses to emerging market financial crises (IMF, 1998; World Bank, 1999).

3 In the policy debate there is often another connotation to "fiscal space", referring to the fear of policymakers of being penalized by domestic and international investors who tend to dismiss all forms of public sector action as "irresponsible" or "profligate". But that cannot be a guide to fiscal policy action of sovereign states.

4 An adjustment process known as "forced saving". Attempts at expanding demand in the presence of tight constraints (such as bottlenecks to investment or the economy's reaching its full capacity) may lead to price increases that reduce real wages and increase real profits, effectively transferring income from workers to profit earners. To the extent that the latter save a larger share of their income than workers, the transfer causes a net reduction of consumption "forcing" higher savings out of national income.

5 Provided that wage-earnings are indexed, a moderate degree of inflation reduces the real value of debts, thus redistributing wealth from creditors to debtors. This can be especially conducive to promoting activity by small and medium entrepreneurs, who tend to be credit-constrained. The policy concern in these instances is whether the initial expansionary push is met with sufficiently fast and reliable increases of productive capacity that lift the constraints. Under such circumstances, inflation rates in the range of 10–20 per cent per year can be beneficial to sustained growth and development (UN DESA, 2008: chap. 1). But if capacity is not increased, or inflation runs too fast, the result is a vicious circle in which wages and prices chase each other, causing instability and economic shocks.

6 The view that lower interest rates always promote productive investment was shown to be wrong already during the Great Depression (Keynes, 1936) but resurfaced in the academic literature of the past few decades and linked to the idea of a "great moderation" (Bernanke, 2004). Though this was disproved several times before and after the Great Recession (Godley and Lavoie, 2007; Storm, 2017a; Taylor, 2017), it still prevails.

7 There is an ongoing discussion of sectoral dynamism (*TDR 2016*). The latest "manufacturing renaissance" in development analyses places a renewed emphasis on the benefits of local concentration of industrial firms. Alfred Marshall's analysis of industrial districts (Marshall, 1920: 222) has reappeared, modernized and extended, in the notion of "industrial commons" (Andreoni and Gregory, 2013; Best, 1999).

8 Keynes famously pointed this out, among others (Keynes, 1936: 84): in the aggregate increasing saving leads to lower demand and income. The only way to increase aggregate investment is to reduce aggregate saving, which requires borrowing. For an analysis of these relationships in the context of today's financial system, see Wray, 2012.

9 The literature on crowding-in has been extensively reviewed (Erenburg, 1993), including with reference to developing countries (Taylor, 1994) where insufficient private investment is analysed in connection low government investment (a fiscal gap between government saving and investment).

10 With geographically fragmented manufacturing, data on emissions can give the false impression that some developed economies have reduced emissions when, in fact, they have mostly outsourced carbon-intensive tasks (Peters et al., 2017; Semieniuk, 2018; Schröder and Storm, 2018).

11 Frequently discussed examples include energy efficiency measures (Panwar et al., 2011), wind power (Guezuraga et al., 2012; Lazard, 2018), solar power (IRENA, 2018a; Bloomberg New Energy Finance, 2018), new batteries (*Greentech Media*, 2019), electric vehicles (Hao et al., 2017) and heat pumps.

12 These include renewable liquid or gas fuels, new formulas for cement manufacturing and other industry-specific technologies to reduce process carbon emissions, climate-smart agriculture (de Oliveira Silva et al., 2016) and new patterns of high-density, transit-centred urbanism.

13 Short-term credit continues to be needed to finance businesses' payroll and circulating capital (Godley and Lavoie, 2007: 49–51).

14 The Paris Agreement, combining member countries' voluntary commitments to emission reduction, called for $100 billion per year of contributions through to 2025, with a likely increase in contributions after that year (Meltzer, 2016). On the one hand, this is too little for climate stabilization and sustainability; trillions, not billions, of dollars per year will be needed. On the other hand, it is more than the parties to the Paris Agreement have been willing to provide, in practice. In 2014, developed-country governments could only agree to $10.3 billion in pledges to the Green Climate Fund (Waslander and Amerasinghe, 2019). According to the World Resources Institute, five different methods of estimating likely future contributions produce figures between $14 billion and $66 billion per year. Controversy over contributions from developed countries reflects, in part, historical responsibility for the initial stages of climate change. Several analytical frameworks have attempted to assign responsibility for past emissions, and for the elevated levels of GHGs in the atmosphere. Such frameworks often project that Europe and North America, which enjoyed such a long head start in fossil-fuelled economic development, are responsible for much more than domestic climate damages (Baer et al., 2009).

15 This is known as "primary" distribution and the resulting incomes (net wages, net profits and taxes) are known as primary incomes. Transfers in money and in kind, except social transfers in kind, operate a "secondary" distribution the results of which are "disposable" incomes. The remaining transfers yield "adjusted" disposable income (United Nations, 2009).

16 These include the North American Free Trade Agreement (NAFTA), the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), the Transatlantic Trade and Investment Partnership (TTIP), the European Union–Canada Comprehensive Economic and Trade Agreement (CETA) and the African Continental Free Trade Area (AfCFTA).

17 In 1970 $1 of global output required about 363 grams of "oil-equivalent" energy, while in 2005 it required 250 grams (expressing output in constant United States dollars of 2005). By 2018, the energy demand per constant unit of output has fallen to about 218 grams. With an average density of crude oil of 0.87 grams/litre, this means that producing an extra dollar of output is currently equivalent to burning almost one third of a litre of oil. For every $3 (ppp) of sales, approximately one litre of oil is burned somewhere in the world. If the trend continues, by 2030 $1 of global output (in 2005 dollars) will require approximately 195 grams of oil-equivalent or 0.22 litres.

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MAKING DEBT WORK FOR DEVELOPMENT

IV

A. Introduction: Yesterday's shackles or tomorrow's potential?

As outlined in the previous chapter, to achieve the structural transformation implied by a Global Green New Deal and meet the goals of the 2030 Agenda, developing countries, supported by the international community, will need to scale up investment on an unprecedented scale, in both new areas of productive activity and infrastructure provision. Credit creation and the settlement of debt are at the heart of any such effort, as they can augment or constrain the massive mobilization of resources required of both public and private agents.

Modern banking and financial systems are accounting schemes for the clearance and settlement of credit and debt. Credit here provides advance means of payment, thus purchasing power, backed only by claims on current and future incomes, or debt (Schumpeter, 2008 [1934]: 107). As Keynes insisted, a principal role of the credit system should be to augment the productive powers of societies: "Credit is the pavement along which production travels and the bankers if they knew their duty, would provide the transport facilities to just the extent that is required in order that the productive powers of the community can be employed at their full capacity" (Keynes, 1930: 219–220). However, as he implied, and as has been found out at considerable cost over the past three decades, there is no guarantee that bankers do know their duty and that, therefore, a largely privatized and decentralized system of credit creation will automatically deliver prosperity for all.

From the perspective of economic development, there are three main implications. First, the essential role of credit is that it frees today's investment from the shackles of yesterday's accumulated savings, enabling productivity-enhancing investment to be stepped up. Second, the speed and direction of credit creation depend on lenders' confidence in the repayment of debt and, more generally, in the value of financial and bank assets. Therefore, it ultimately depends on the credibility and effectiveness of the institutional and regulatory structures that govern credit creation. Third, the decoupling of credit and productive investment can generate economic pathologies which are antithetical to sustainable economic growth.

Private investment decisions are guided by expectations about sales prospects and future profits. High expected profits incentivize firms to invest. To the extent that the combined investment decisions of firms boost aggregate demand and allow for the profit expectations of individual firms to be realized, accrued profits also increase the capacity of firms to finance future investment out of retained earnings (*TDR 2008*: chap. IV, *TDR 2016*: chap. V). Those same expectations also generate demand for credit to launch an investment drive prior to the profits being realized and encourage banks to extend that credit. Similarly, public investment decisions are typically guided (or should be) not only by their desired social benefits but also by the expectation of higher incomes in the future resulting from such decisions, which in turn generate higher future tax revenues and crowd in private investment.

Successful domestic resource mobilization (DRM), in developed and developing countries alike, is therefore based on strong and reliable connections between credit, investment and profits, where profits are "simultaneously an incentive for investment, a source of investment and an outcome of investment" (Akyüz and Gore, 1996: 461). This profit-investment nexus is the basis for triggering virtuous cycles of rapid productivity growth, higher incomes and

expanded markets, at home and abroad, leading in turn to higher levels of domestic investment, further boosting productivity. While a robust profit–investment nexus should mean that investment in leading sectors can increasingly be financed out of retained earnings, the accelerated pace of capital accumulation overall, the evolution of national production systems and their insertion into changing international production chains, requires that targeted credit creation (or debt finance) remains a necessary and useful constant along the economy's dynamic growth and developmental trajectory.

But debt finance does not play this dynamic role in domestic economic development by virtue of some spontaneous process. Indeed, as noted in the last chapter and discussed extensively in previous *Report*s, in the context of hyperglobalization, the nexus between profits and investment has broken down in many countries as profits have been used to augment dividends, to buy back stocks and to acquire other businesses, often using opaque financial structures to hide how profits are being used (*TDR 2015*; *TDR 2017*; and chapter V). Extending credit along a broken profit–investment nexus will probably fuel more inequality and instability.

Moreover, debt is a social and institutional relationship that builds on trust, as well as on shared information and expectations between debtors and creditors. It, therefore, requires the confidence of lenders and borrowers alike in the ability of the domestic banking and financial system, and of monetary authorities and the state, to honour commitments, preserve the value of financial and bank assets and govern the speed and direction of credit creation in the interest of both financial stability and structural transformation. This can be a tall order, since the social and economic upheavals that inevitably accompany structural transformation can easily run counter to financial stability.

Successful states have routinely intervened in private credit creation by building sectoral, regional and subnational networks of credit institutions and banks – often but not always state owned – with a mandate to democratize access to finance for social purposes and to facilitate the financing of transformational investment projects for which long-term social returns were high but private profitability was uncertain in the short term and private risks prohibitive (see chapter VI). But, by and large, the power of credit creation, with its enormous implications for wealth creation, productive development and social fairness in the economy, was and is vested in decentralized private banking and financial systems. This has had varying effects. At times, it has facilitated financial resource mobilization for productive purposes through financial innovations that provided increased access to long-term debt in capital markets and lowered the short-term risks of debt-financed private investment. But it has also meant that economic growth has been punctuated by frequent banking and financial crises, usually in periods of high capital mobility and weak regulatory constraints that resulted in excessive private credit creation and "financial innovation" for short-term speculative financial gain (Reinhart and Rogoff, 2009: 156; *TDR 2015*).

The main danger of decentralized and under- or unregulated banking and financial systems is precisely that credit (and liquidity) creation by commercial banks and private financial institutions has no limits, and therefore ceases to be linked to wider social or collective economic objectives instead becoming "a business" of its own in the service of private profitability. Debates about the need for more encompassing public control over what is, after all, a public good – the management of credit creation in the interest of the full and equitable development of a society's productive potential – are not new. Unsurprisingly, however, they have seen a vigorous revival since the global financial crisis (GFC) (Pettifor, 2017).

From a developing country perspective, the main domestic challenge for governments is to steer their existing financial infrastructure towards supporting a working domestic profit–investment nexus. This entails an overt role for the state, primarily based on their capacity to mobilize public credit creation through borrowing from their central banks, and to service their own debt by strengthening fiscal capacities and expanding their tax base, as new productive investment opportunities arise and are created. To sustain accelerated capital accumulation, private credit creation through well-regulated domestic banking and financial systems will gradually become important, and states will need to fine-tune their ability to govern the coordination between public and private credit creation, including through tailor-made and increasingly sophisticated financial and debt instruments. Concomitantly, public planning and policy design capacities have to be kept apace to implement industrial policy frameworks and diversification strategies, promote technology

acquisition and technological learning, as well as mitigate income inequalities to further support virtuous productivity cycles and the process of structural transformation.

Even though most developing countries already possess the essential components of a financial infrastructure, including central banks, commercial banks and development banks, albeit with considerable variation in terms of depth and sophistication, the sheer scale of the productive investment required to achieve structural transformation and sustainable development within a meaningful time frame means that developing countries will have to rely on external financing, including external debt. In the context of late development, debt is often associated with external sovereign debt owed by developing country governments to foreign, private and official creditors, usually in foreign-denominated currency. In addition, hyperglobalization and the concomitant deregulation of cross-border financial transactions has increasingly facilitated private indebtedness in foreign-denominated currency, even in the poorest of developing countries.

Consequently, the ability of developing countries to manage public and private credit creation for development remains heavily dependent on the management of credit creation in advanced economies and on liquidity provision by international financial organizations, over which they have scarcely any control. Monetary policy in advanced economies essentially caters to domestic policy concerns in advanced economies and the interests of private creditors and financial lobbies, rather than the longer-term interests of developing countries. As noted in chapter V, developing countries have become vulnerable to highly volatile private capital flows, driven by short-term investor expectations about global rather than country-specific economic dynamics. Sudden reversals of private capital inflows can adversely affect developing countries despite strong economic "fundamentals" such as relatively low public debt, small budget deficits, low inflation rates and high reserve holdings (Eichengreen et al., 2017). But the more open the developing economy and the more limited the domestic wealth base it has been able to generate, the weaker its fiscal base and therefore its ability to leverage domestic credit creation for structural transformation. Weak government finance then can contribute to reduce international investor (and creditor) confidence and encourage cross-border capital outflows. Resultant exchange-rate depreciations, rising debt burdens in foreign-denominated currency and deepening mismatches between long- and short-term assets and liabilities undermine external debt sustainability and amplify financial and debt distress. Instead of "firefighting" immediate liquidity constraints and hedging against future liquidity risks, with associated international seigniorage losses, as discussed in chapter V, developing country governments should focus on adapting their own financial infrastructure to local needs and conditions and supporting the emergence of a sustainable domestic profit–investment nexus.

A coordinated reorientation of the management of international credit creation and liquidity provision to support developing countries' efforts to govern their own public and private credit creation for development would have several positive effects. It would reduce the exposure of developing countries to detrimental external financial and macroeconomic shocks and, as argued in section C of this chapter, it would also enable greater progress towards the 2030 Agenda.

At present, as discussed in chapter II, the international Financing for Development (FfD) agenda pays little, if any, heed to such considerations. Rather, scaling up development finance is seen as a largely static reallocation exercise to direct existing financial resources (or savings) to meet the Sustainable Development Goals (SDGs). At the heart of this agenda is the idea that available public finance should be used to "leverage" international private finance, through blended financing instruments that allow investors to hedge against risk and, more generally, by "embarking on system-wide insurance and diversification of risk to create a large-scale asset class and mobilize significantly greater private sector participation" (EPG-GFG, 2018: 30). From this perspective, the emphasis tends to be on developing-country debt not being "a free lunch" (World Bank, 2019: 11–17), whereby its potential benefits, such as smoothing short-term macroeconomic fluctuations and helping to meet rising investment needs, can be outweighed by the potential cost of being considered "financially unsound" in the international financial markets, undermining investor confidence and eventually "crowding out" private investment, when debt service costs and domestic interest rates rise as a consequence.

Under current hyperglobalized conditions of sprawling unregulated finance networks and open capital

accounts, developing-country debt, whether private or public, domestic or external can, undoubtedly, end up being an extortionately expensive "lunch", which is why international organizations, including UNCTAD, have long rung the alarm bells (*TDR 2015*; *TDR 2017*).[1] But recognizing this raises the question of how to make debt work better for development given the multiple economic, social and environmental challenges countries are now facing. As it stands, the international agenda for the financing of development subordinates developmental policy to timely debt servicing and the minimization of future repayment risk. Rather than encouraging developing countries to build domestic banking and financial systems that can manage domestic credit creation for development, and advocating measures to reduce their exposure to volatile international financial markets, this agenda focuses on how best to increase developing countries' attractiveness for global private wealth holders and to safeguard international investor (and creditor) risk through "financial innovation" to diversify and insure such risk "throughout the system". As recent research shows, this effectively means shifting most of this risk onto the public realm (Attridge and Engen, 2019).

When financial and debt distress reaches levels that require intervention, effective and fair sovereign debt restructuring mechanisms are essential to preserving a constructive role for developmental credit creation and debt in the future. The current ad hoc frameworks for sovereign debt restructurings are costly, fragmented and fraught with inefficiencies and perverse incentives, largely tilting the balance of power in favour of creditors (*TDR 2015*: chap. VI; Guzman et al., 2016). This, more often than not, leaves sovereign debtors in a "prison world" in which they suffer all the stigma of de facto default and lose future access to affordable finance, even as they do not receive the benefits of substantial debt relief and financial restructuring that would allow their economies to recover and avoid future debt distress. The logic is one of deterrence rather than of enabling future potential, much as was the case for the nineteenth-century debtor prisons famously described in Charles Dickens's *Little Dorrit*. Despite long-standing recognition that this state of affairs is unsatisfactory (Gelpern, 2016), and many substantive reform proposals in this regard,[2] neither the current international agenda on FfD nor the G20 are really addressing this issue. In light of the scale of investment, both public and private, required to deliver a Global Green New Deal it is clear that "business-as-usual" is the wrong approach to managing credit creation and a fresh approach is needed to support the required resource mobilization, particularly in developing countries.

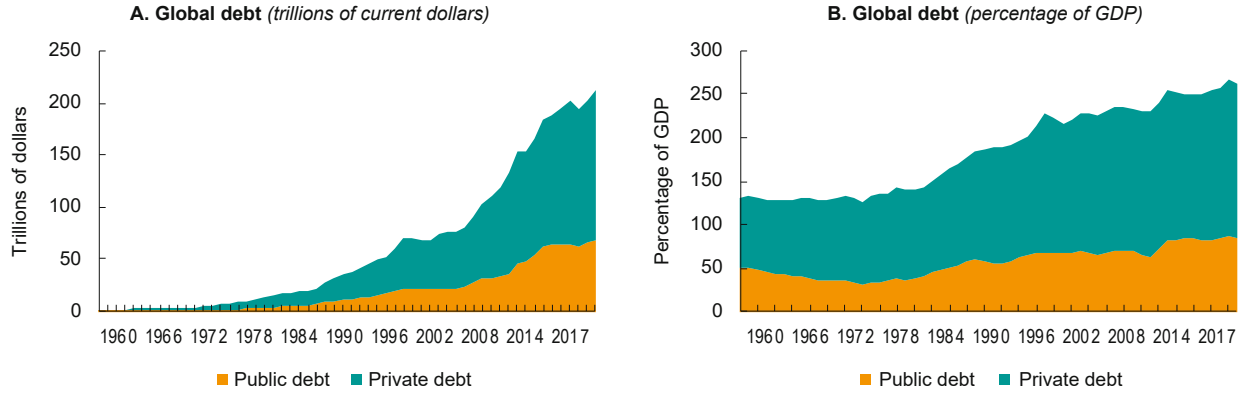
Section B of this chapter surveys the evolving landscape of developing-country debt, its fast-growing vulnerabilities in the context of hyperglobalized financialization, and the main recent trends. Section C takes account of the SDGs and of the impact of investment requirements arising from the timely implementation of the 2030 Agenda on developing-country debt sustainability. It finds that, if only the first four SDGs to address poverty, nutrition, health and education needs are to be met on time without any further deterioration of developing countries' debt-to-GDP ratios, fairly drastic international public intervention in the form of increased official development assistance (ODA) and SDG-related debt relief would be required. On the assumption that such drastic public intervention lacks international consensus at present, section D explores alternative yet complementary avenues, at regional and international levels, to harness the power of publicly controlled credit creation for development. This includes expanding special drawing rights to fund climate-change mitigation more systematically, regional strategies by developing countries to leverage the power of own credit creation for their development, and proposals on how to disentangle sovereign debt restructurings, when these become necessary, from the tentacles of fast-proliferating and diverse creditor interests, through a few initial steps required to safeguard both the future growth potential of the sovereign debtor and its citizens as well as longer-term creditor interests.

B. Development and the business of debt

1. The global context: Private credit creation out of control

Global debt stocks amounted to $213 trillion at the end of 2017, up from $152 trillion in 2008 and just below $16 trillion in 1980. As a share of global GDP, global debt rose to 262 per cent in 2017, compared to 240 per cent at the onset of the GFC and 140 per cent in 1980. Much of this extraordinary increase was driven by the accumulation of private debt,

FIGURE 4.1 Global debt, 1960–2017



Source: UNCTAD secretariat calculations based on IMF Global Debt Database.

which rose more than 12-fold since the early 1980s to account for more than two thirds of total global debt stock in 2017. Public debt also increased substantially, doubling in the decade following the crisis to reach 84 per cent of global GDP (figure 4.1).

The explosion of global private debt since the early 1980s, both in absolute terms as well as relative to GDP, reflects more than three decades of financial deregulation and heavily privatized credit creation and financial intermediation in developed economies. The share of private debt in their GDP rose from 115 per cent in 1980 to well over 200 per cent by 2017. By contrast, the share of public debt in developed countries' GDP remained fairly stable throughout the 1980s and 1990s, at 50–70 per cent, increasing markedly only in the aftermath of the GFC to over 100 per cent (figure 4.2 A).

Beginning with the *Deposit Institutions Deregulation and Monetary Control Act* of 1980 in the United States, financial deregulation resulted in several waves of bank consolidation creating "too big to fail" banks in financial centres, and a gradual shift towards market-based finance. By 1989, the Delors Report on economic and monetary union in the European Community called for "the complete liberalization of capital transactions and full integration of banking and other financial markets" (Committee for the Study of Economic and Monetary Union, 1989: 15) in a bid to step up the creation of European equivalents to United States "mega-banks" and to facilitate the growth of non-bank financial markets in Europe. The repeal of the Glass-Steagall Act in the United States in 1999 – allowing banks to integrate their commercial lending and deposit roles with their more speculative investment activities (so-called universal banking) – completed the dismantling of any serious regulatory constraints on the new global financial system of mega-banks operating alongside fast-proliferating networks of non-bank financial intermediaries. The latter have come to be known as the "shadow-banking" sector due to the deep opacity of its financial transactions (Dymski, 2018; see also chapter II of this *Report*).

This new system thrived on the creation of a whole arsenal of "financial innovations" both in banking as well as non-banking financial sectors – such as securitization, credit derivatives and special purpose vehicles – that increased the availability of credit by converting non-tradable financial assets into tradable securities, transforming liability risks into financial instruments and diversifying individual creditor risks. Repeated use of easy monetary policies in response to growing incidences of stock market "jitters", and of course to the GFC, further fuelled speculative private credit creation and financial intermediation. With attempts at reregulation in the aftermath of the 2008 crisis remaining largely ineffective (*TDR 2015*; Engelen, 2018), shadow banking or "the subterranean credit system" of broker-dealers, money market mutual funds, hedge funds and insurance corporations among others (Guttman, 2018: 26), has expanded unabated. Since the GFC, non-bank financial intermediation has grown twice as rapidly as conventional and public banking, such that its share of total global financial assets (48.2 per cent) is now larger than that of commercial banks and public financial institutions (43.9 per cent) (FSB, 2019).

This wave of privatized credit creation and financial intermediation has had a devastating impact on the ability of developing countries to protect "their

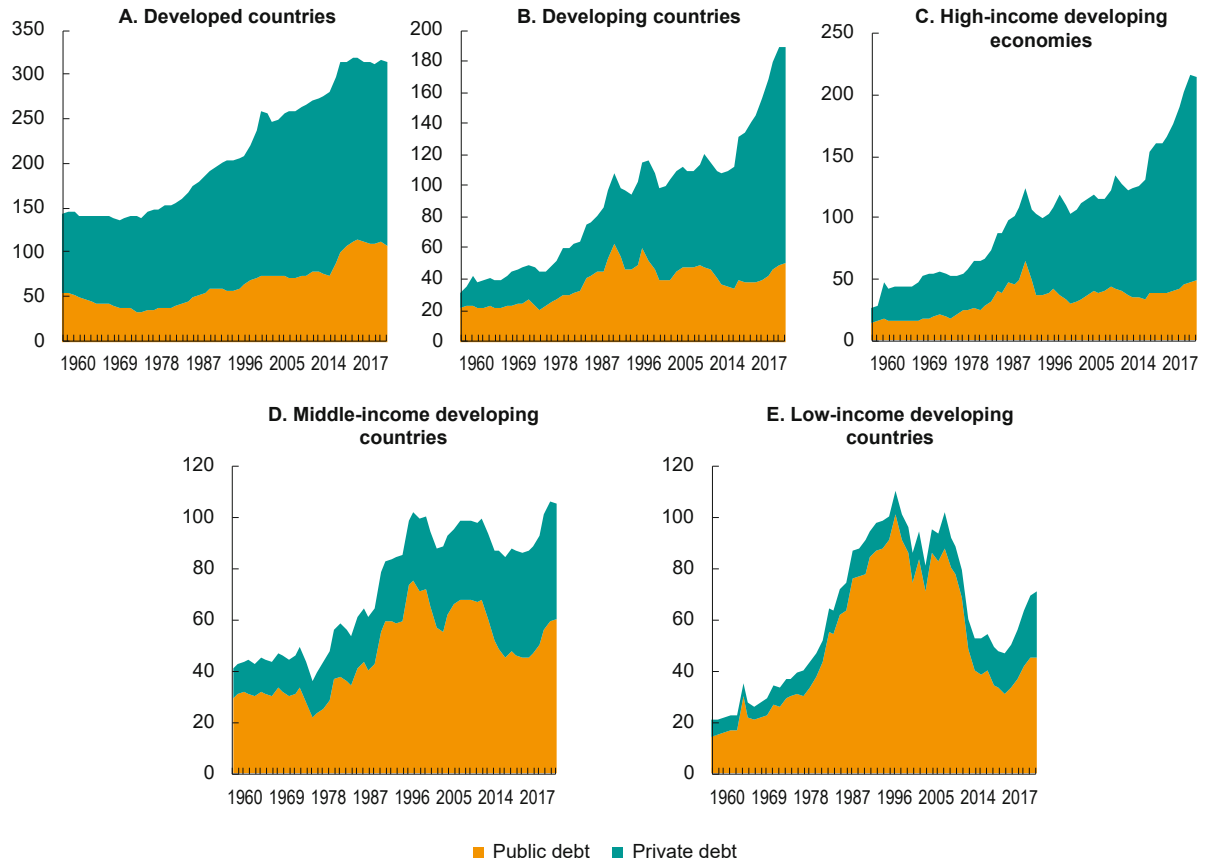
shores" from the onslaught of speculative financial interests in search of high short-term yields, especially in conjunction with widespread capital account liberalization in the developing world (see chapter V). Both the Latin American debt crisis of the 1980s and the Asian financial crisis of 1997 were driven by excessive overseas lending from mega-banks competing with one another and with emerging shadow-banking actors for new customers and virgin territory (Dymski, 2018; Palma, 2002).

Since the GFC, a "new normal" seems to have set in by which developing-country debt has become fair game for financial investors in search of high short-term yields. As developing country governments struggle to deal with widespread exchange-rate volatility, a sluggish global economic recovery, flat commodity prices and mercurial cross-border capital flows, the worst case scenario becomes plausible, whereby developing country governments take on expensive debt in international financial markets to firefight liquidity constraints, and private actors take on such debt to bridge constraints on domestic credit creation, notwithstanding the high risks involved.

2. Developing country indebtedness: An increasingly "private affair"?

In 2017, total developing-country debt reached its highest level on record, at 190 per cent of GDP (figure 4.2 B). This reflected a very steep increase in private indebtedness since the GFC, from 79 per cent in 2008 to 139 per cent in 2017. By contrast, public sector debt, which peaked at 63 per cent of GDP in the late 1980s, fell to 34 per cent in 2008. While the renewed rise of public indebtedness in developing countries to 51 per cent in 2017 is of concern for reasons discussed below, the unprecedented explosion of private debt should clearly raise the loudest alarm bells. It also constitutes the single largest contingent liability on public debt in the event of a debt crisis.

FIGURE 4.2 **Total debt, developed and developing countries, 1960–2017**
(Percentage of GDP)



Source: UNCTAD secretariat calculations based on IMF Global Debt Database.
Note: Country groups are economic (income) groups as per UNCTADstat classification, see: https://unctadstat.unctad.org/EN/Classifications.html (accessed 2 August 2019).

Much of this private debt has been accumulated in high-income developing countries (HICs) with deeper domestic financial and banking systems and easier access to international financial markets. But the share of private debt in the GDP of HICs has also increased sharply since the GFC to reach 165 per cent of GDP in 2017. The public debt-to-GDP ratio of HICs rose from 34 per cent in 2008 to 50 per cent by 2017. Their overall indebtedness in 2017 thus stood at 215 per cent of GDP, by far the highest in the period covered, largely due to the sharp increase in private debt in the aftermath of the GFC (figure 4.2 C).

Both middle- and low-income developing countries have also seen strong upward trends in their overall indebtedness since 2012. This turning point coincides with the onset of the commodity price slump in the same year, with commodity prices, led by fuels, steadying only since 2016 and remaining significantly below their 2011 peaks for most product groups (UNCTAD, 2019a). In both cases, recent increases in overall indebtedness have also been marked by the faster rise of private relative to public debt, albeit at much lower levels of GDP share than in the case of HICs.

In 2016 and 2017, the total debt of middle-income developing countries (MICs) reached 106 per cent of their GDP, for the first time surpassing earlier peaks in the mid-1990s and early 2000s of around 100 per cent. During these earlier episodes of acute debt and financial distress, the rise in overall indebtedness was led by public sector debt, while private sector debt rose only very gradually, from 20 per cent in 1980 to around 30 per cent in the early 2000s. By contrast, in the current phase of rising debt burdens, private indebtedness increased quickly to 45 per cent of GDP in 2017, whereas the share of public debt in GDP only began to increase more pronouncedly since 2015, reaching just above 60 per cent by 2017 (figure 4.2 D).

In low-income developing countries (LICs), current overall debt burdens have not yet reached the high levels of the mid-1990s (111 per cent of GDP in 1993) but are getting close at 92 per cent of GDP in 2017. This signals a clear reversal of the positive impacts of the debt relief programmes of the 1990s and early 2000s, such as the Heavily Indebted Poor Countries Initiative and the Multilateral Debt Relief Initiative. As with MICs,[3] private sector debt as a share of GDP of LICs rose faster than that of the public sector, even if public debt remains predominant. At the height of the debt crises of LICs in the mid-1990s, the share of public debt in their GDP reached 101 per cent, compared to just over 9 per cent for the private sector. By 2017, public debt was 46 per cent of GDP, whereas private debt jumped to a remarkable 26 per cent of GDP, up from 12 per cent just prior to the GFC (figure 4.2 E).

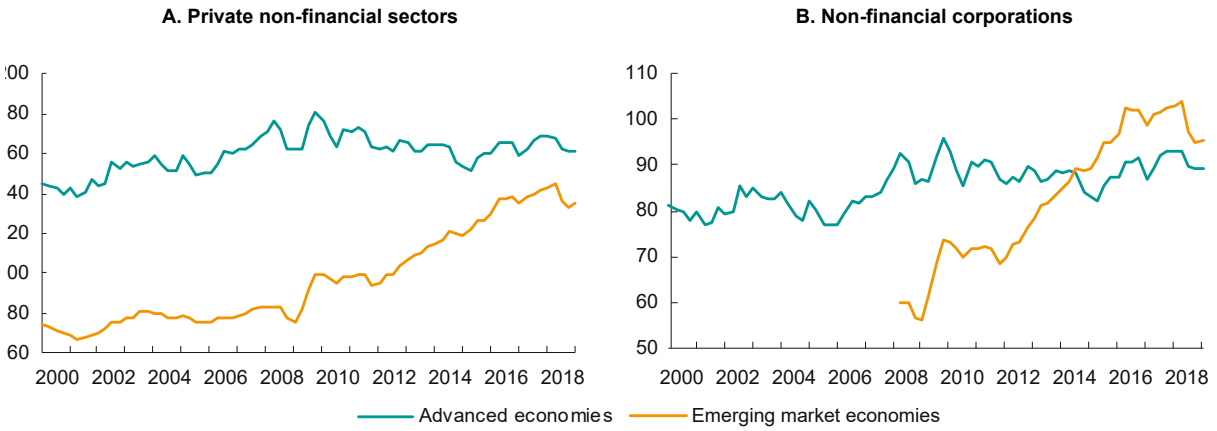
Clearly, this recent steep rise of private sector participation in developing-country debt, across per capita income groups, was not warranted by sudden improvements to their domestic banking and financial systems since 2008. Instead, the driving force is more likely to have been global "push factors", and in particular the relentless search by global financial investors for higher-risk but also higher short-term (expected) returns. Figure 4.3 A illustrates the extent to which deregulated credit creation and financial intermediation have targeted non-financial private sectors in emerging market economies over recent years.

While household debt also rose in emerging economies, from 25.4 per cent of GDP in 2011 to 40 per cent by 2018,[4] the bulk of the overall increase in lending to private non-financial sectors was lending to non-financial corporations in these economies. Such lending increased from around 60 per cent of GDP just before the GFC to over 100 per cent in 2017, falling only recently due to rising financial distress in some of these economies (figure 4.3 B). The steep increase in this lending since around 2012 is a prime example of "push factors" at work. In this case, original and leveraged quantitative easing in advanced economies reached corporate balance sheets in emerging market economies through several channels. By driving down yields on Treasury Bills and on safe financial assets more generally, central banks in developed economies sent asset managers and their clients scrambling for higher-yield and higher-risk investments, such as corporate bonds in emerging markets. In addition, central banks also bought Treasury Bills and asset-backed securities from commercial banks, who went on to lend to shadow-banking actors, such as hedge funds with high-risk investment strategies. Finally, quantitative easing cash also found its way to emerging economies through foreign direct investment, in particular in the form of intra-company loans that made up around 40 per cent of foreign direct investment in countries such as China and Brazil by 2014 (Chui et al., 2016).

Rising public debt in developing countries has been less prominent in the current build-up to rising overall

FIGURE 4.3 **Total credit to non-financial sectors and corporations, advanced and emerging economies, 2000–2018**

(Percentage of GDP)



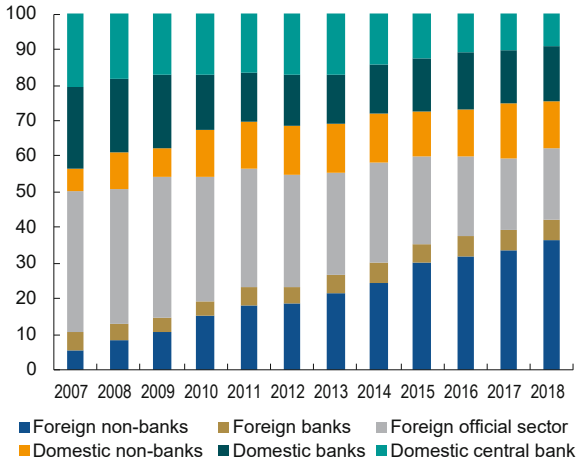
Source: UNCTAD secretariat calculations based on BIS Credit Statistics. Credit to non-financial sectors and non-financial corporations is from all sectors at market value.

Note: Emerging market economies comprise Argentina, Brazil, Chile, China, Colombia, Czechia, Hong Kong (China), Hungary, India, Indonesia, Israel, Malaysia, Mexico, Poland, the Republic of Korea, the Russian Federation, Saudi Arabia, Singapore, South Africa, Thailand and Turkey. Advanced economies comprise Australia, Canada, Denmark, Japan, New Zealand, Norway, Sweden, Switzerland, the United Kingdom, the United States and the euro area.

developing-country indebtedness compared to earlier episodes of acute financial and debt distress, largely because of pressure from international financial institutions to contain this. Even so, developing country public (or central government) debt also has become more vulnerable to the vagaries of international financial markets and the "subterranean credit system" by virtue of the changing ownership of this debt.

As figure 4.4 shows, in the space of just about a decade and a half, the central government debt of major developing countries has gone from being owned by developing countries' own banking systems and by foreign official creditors to being, if not entirely controlled, at least heavily dominated by the foreign, and to an extent domestic, shadow-banking sectors (non-banks). This fairly radical shift in the ownership of developing country central government debt signals a profound loss of control by developing country governments over the pace and direction of credit creation in their own economies, which is accentuated by the increased exposure of developing country private sectors to short-term financial investor and creditor interests.

FIGURE 4.4 **Who owns developing country government debt? Composition of government debt by creditors, selected developing and emerging economies, 2004–2018**



Source: UNCTAD secretariat calculations based on IMF Sovereign Investor Base Data Set for emerging markets and World Bank WDI Indicators.

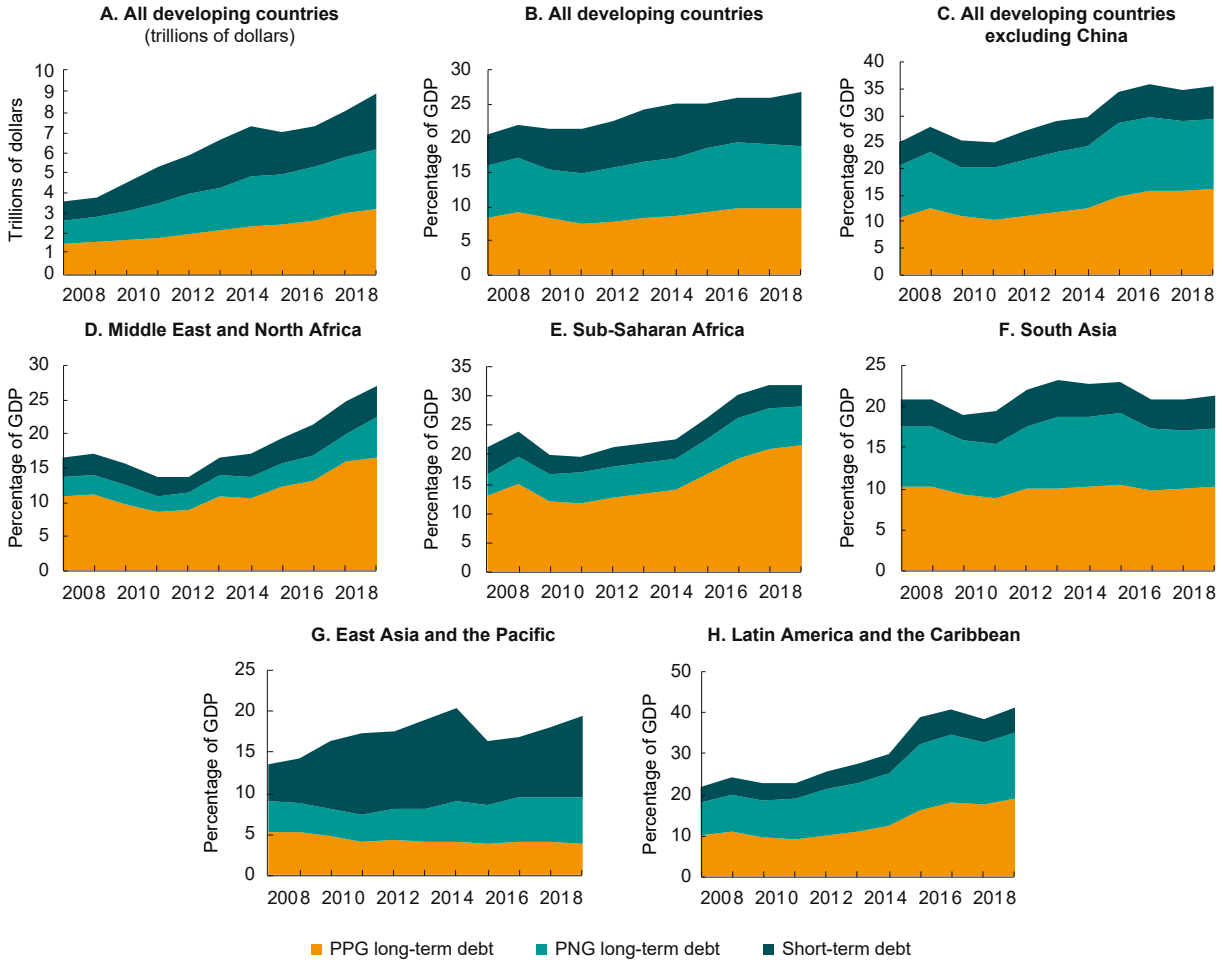
Note: Countries include Argentina, Brazil, Chile, China, Colombia, Egypt, India, Indonesia, Malaysia, Mexico, Peru, the Philippines, the Russian Federation, South Africa, Thailand, Turkey, Ukraine and Uruguay.

3. *Developing-country external debt: The falling threshold of debt distress*

External debt issued in foreign-denominated currency poses particular challenges to developing country debtor nations, as they have to generate export earnings to meet these external public or private debt obligations. In a system of floating exchange rates, exchange-rate volatility will affect the value of the debt owed externally and that of export earnings in

FIGURE 4.5 External debt, developing countries by region, 2008–2018[a]

(Trillions of current dollars and percentage of GDP)



Source: UNCTAD secretariat calculations based on World Development Indicators (WDI), IMF World Economic Outlook (WEO), Economist Intelligence Unit database (EIU) and World Bank Quarterly external debt statistics (QEDS).

Note: PPG = public and publicly guaranteed debt; PNG = private non-guaranteed debt. Regional groups are as per UNCTADstat classification, see: https://unctadstat.unctad.org/EN/Classifications.html.

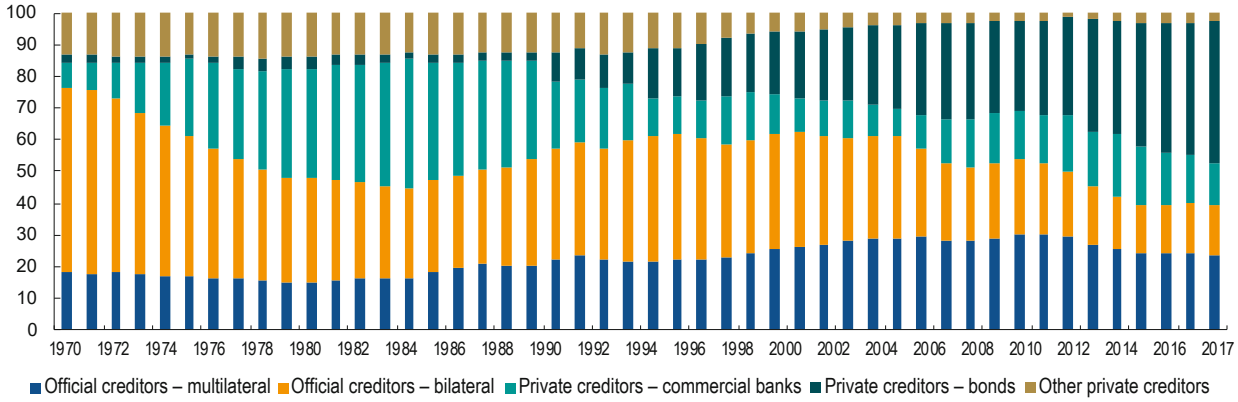
a 2018 figures are estimates.

opposite directions. If, in addition, much of public external debt is owed to international private creditors with short-term speculative interests and a growing share of external debt is held directly by private domestic entities rather than governments, the possibility of systemic debt distress in developing countries is real.

Total external debt stocks of developing countries more than doubled from $3.5 trillion in 2008 to an estimated $8.8 trillion in 2018 (figure 4.5 A). This was not balanced by concomitant GDP growth, so the ratio of total external debt to GDP consequently worsened from less than 22 per cent in 2008 to 29 per cent in 2018 (figure 4.5 B). This figure rises to 36 per cent if the Chinese economy is excluded. In the period 2008–2018, the external debt stock of China grew at a slightly higher rate than the average for all developing countries, albeit still at a modest 15.1 per cent of its GDP in 2018 (figure 4.5 C). By 2018, China accounted for 25.5 per cent of the total external debt stocks of developing countries and for 45 per cent of their combined GDP.

Over the past three years, developing-country external debt stocks also overtook their export earnings, with the ratio of external debt to exports reaching an average of 108 per cent since 2016, relative to 92 per cent for the past decade as a whole, signalling rising vulnerabilities. Moreover, long-term creditor holdings shrank to barely more than two thirds (68 per cent) of total external debt in 2018, with by now almost equal shares of public and publicly guaranteed external debt (PPG), at 51.8 per cent,

FIGURE 4.6 The rise of sovereign bonds in developing countries, 1970–2017: Composition of long-term external public debt by creditor
(Percentage)



Source: UNCTAD secretariat calculations based on World Bank International Debt Statistics database.

and private non-guaranteed external debt (PNG), at 48.2 per cent, respectively. Short-term external debt accounted for over 30 per cent of the total external debt stocks of developing countries in 2018, up from 24.5 per cent in 2008 (figure 4.5 B). This is a far cry from the start of the century when long-term debt accounted for 87 per cent of developing countries' total external debt stocks and PPG debt made up three quarters of this.

In terms of regional trends, the most salient features are rising levels of both public and private sector external indebtedness in Latin America and the Caribbean, the rise of private sector external indebtedness in the African regions (albeit from low levels) and the renewed rapid increase in short-term external debt in East Asia and the Pacific.

While these regional trends reflect different trajectories, a rising number of developing countries now face acute debt and financial distress at relatively modest levels of external debt-to-GDP ratios. By mid-2019, the number of LICs at high risk of debt distress or already in debt distress, according to the International Monetary Fund (IMF),[5] had almost tripled from 13 in 2013 to 32 in 2019 (of which 25 are at high risk and 7 are in debt distress), including 14 of the 34 LICs that earlier received debt relief under the Heavily Indebted Poor Countries or the Multilateral Debt Relief initiatives. At the same time, a growing number of HICs and MICs either have already experienced severe currency and debt crisis (most notably Argentina and Turkey) or are teetering on the brink of financial and debt distress, ranging from many Caribbean small island developing states to developing economies in South Asia and Africa. For larger and higher-income developing economies, 2013 seems to have been a turning point, after which they experienced a fairly drastic surge in financial stress episodes, as global financial instability impacted on domestic financial conditions through various channels such as capital flow reversals, commodity price and exchange-rate volatility and higher exposure to external private indebtedness (UNCTAD, 2019b).

As with developing countries' total debt, much of this was due to the changing ownership patterns of developing-country external debt. In 1970, official multilateral and bilateral creditors accounted for almost 80 per cent of developing country PPG debt, but this share fell to just 40 per cent by 2018. In the 1980s the difference was made up by commercial bank lending, but this has now largely been replaced by bond finance in the international financial markets, which accounted for almost half of developing-country PPG debt in 2017 (figure 4.6). At the same time, private debt has risen to make up almost half of overall developing-country external debt, with a steady share of bond financing of around 20 per cent of overall PNG debt.

The increased risk profile associated with this changing composition of external developing-country debt is a main cause of the rising threshold of debt distress, relative to overall external debt-to-GDP ratios. Governments, facing exposure to sudden and steep increases in the cost of market-based PPG debt, are also coming up against a "wall of debt" contracted in international financial markets since the early 2010s that will come to maturity in the first half of

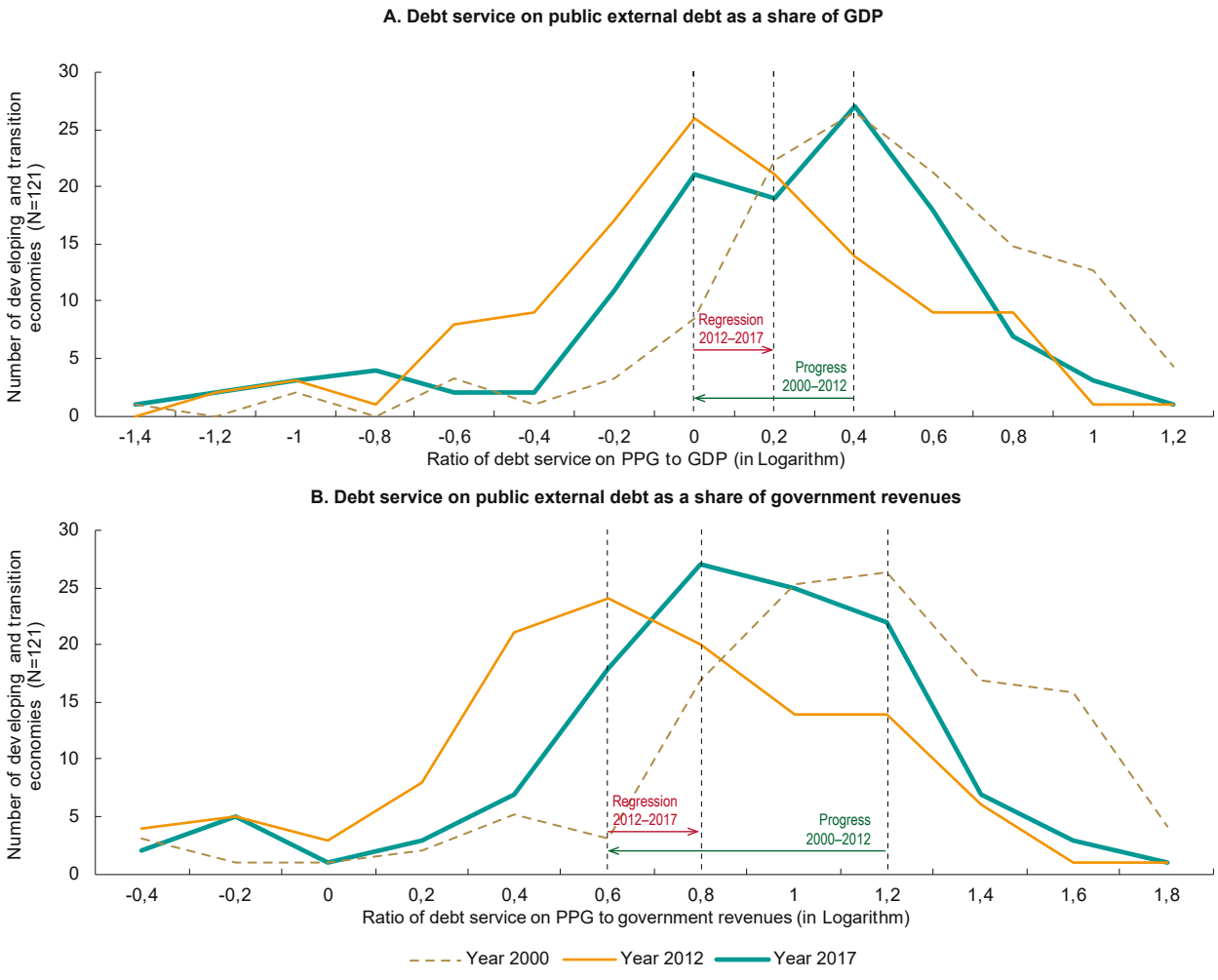
the 2020s. Moreover, unfettered access by domestic corporates to external debt poses systemic problems. Other than for China, where corporate bonds are predominantly domestically owned, large developing country corporates rarely manage to hedge their foreign-currency debt exposure appropriately through assets held abroad. Their liabilities are therefore ultimately backed by foreign-currency reserves in the domestic economy. If this debt becomes unsustainable and is large enough, governments will have little choice but to transfer the bulk of this debt onto public balance sheets, making their own positions even more untenable.

In response, many developing country governments shifted to issuing domestic debt in local currency. But this is no panacea, for a number of reasons. Many developing countries lack the financial infrastructure to issue long-term government securities at a sustainable rate of interest, but still need to be in a position to pay off or roll over maturing short-term obligations. Hence, they may simply be trading exchange-rate for maturity mismatches. Moreover, domestic developing-country debt in the local currency is not immune to foreign takeover by short-term private investor interests. According to IMF research, in the early 2010s the foreign holdings of local-currency denominated government debt ranged from 40 per cent or more of total local-currency denominated government debt (in Indonesia, Peru and South Africa) to between 20 and 30 per cent in other MICs (Arslanalp and Tsuda, 2014).

4. The fall-out: Rising debt servicing burdens, weakened "self-insurance" and not much to show for it

Rising debt burdens along with increased risk profiles of this debt translated into rising debt servicing costs on public external debt from around 2012.

FIGURE 4.7 Improvements in debt service burdens are reversing. Public debt service ratios, 2000, 2012, 2017

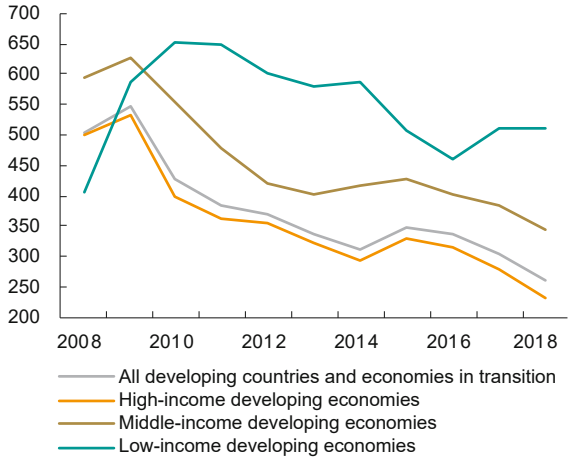


Source: As figure 4.5.

Figure 4.7 looks at the distribution of debt service burdens across developing countries in 2000, 2012 and 2017. The year 2012 marks a clear turning point, as debt service burdens that had been declining since 2000 (relative to GDP and to government revenues) began to increase again from that year.[6] In the first phase, the trend of decline was more pronounced in the case of debt service costs on PPG debt relative to government revenue than for the costs of servicing all external debt relative to GDP. However, disparities in this trend also grew, with slower progress for a group of countries comprising mostly LICs. After 2012, debt service costs started rising again, both for total external debt as a share of GDP and PPG debt as a share of government revenues, indicated by the rightward shift of these distributions in figure 4.7. This coincided with the end of quantitative easing in the United States, negative net capital flows, adverse commodity price shocks and increased exchange-rate volatility. By 2017, this reversal had not wiped out all of the earlier improvements – about half of these in terms of total external debt service as a share of GDP and about a third in terms of servicing PPG debt as a share of government revenues in the space of just five years – but the trend was clear.

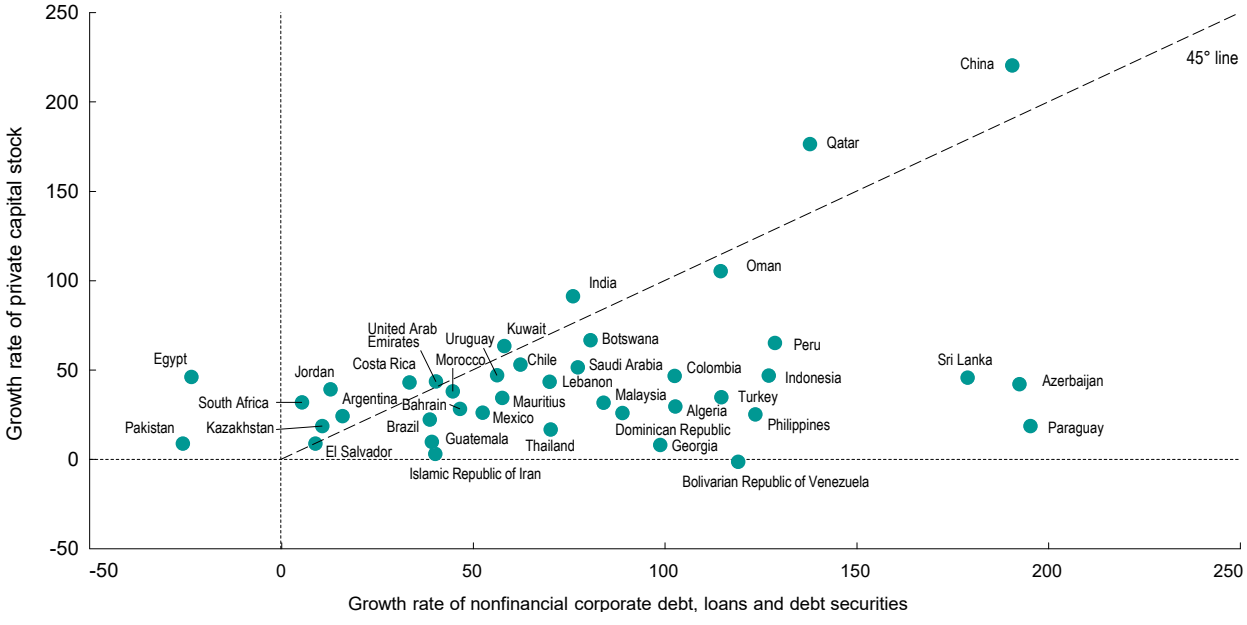
The total servicing bill on long-term public external debt obligations of developing countries as a whole increased from 2.6 per cent of GDP in 2012 to 3.7 per cent in 2017. This was still below levels in the early 2000s of around 5 per cent but indicates a clear upward trend. Similarly, servicing their external long-term public-debt obligations cost developing country governments 9.5 per cent of their government revenues in 2012, but 12.7 per cent in 2017. These debt servicing costs also absorbed 7.5 per cent of developing countries' export earnings in 2012, and 12.7 per cent in 2017. While the levels of the early 2000s (of around 24 per cent of government revenues going to service PPG debt and 15 per cent of export

FIGURE 4.8 International reserve "cushions" are shrinking: International reserves, developing countries 2008–2018
(Percentage of short-term external debt)



Source: As figure 4.5.

FIGURE 4.9 Does growing private corporate indebtedness yield developmental results? Growth rates of private corporate debt and private capital stock, selected developing countries, 2008–2015



Source: UNCTAD secretariat calculations based on IMF Global Debt Database and IMF Investment and Capital Stock Data.

earnings) have not yet been reached, the reversal in just a few years of the improvements achieved until 2012 should be of concern, in particular since the steepest reversals have taken place in poorer economies. Thus, for example, PPG debt service costs in less developed countries as a percentage of their government revenue more than tripled from 4.1 per cent in 2011 to 15 per cent in 2018.

At the same time, developing countries' ability to self-insure against the vagaries of international financial markets and against exogenous shocks to their economies has deteriorated rapidly over the past decade (figure 4.8). The ratio of international reserves to short-term debt is a standard indicator of this ability to self-insure. As figure 4.8 shows, this sharply decreased since 2009 across the developing world, led by HICs and MICs, with LICs following suit once the full impact of commodity price slumps and of their growing exposure to market risks was felt in the wake of their belated but very rapid integration into international financial markets. LICs have since tried to recover some degree of self-insurance through the renewed accumulation of international reserves, but this carries significant fiscal and economic costs, as described in chapter V.

Finally, a question arises over whether the rise of private indebtedness in developing countries, mostly by their non-financial corporations, has yielded results in terms of providing resources for long-term productive investment projects. Figure 4.9 suggests that it has not. Between 2008 and 2015, non-financial corporate debt grew considerably faster than investment in physical capital stock in the vast majority of developing countries for which such data are available (depicted by all observations situated below the 45-degree line in the figure).

C. Raising the bar: Developing-country debt sustainability and the Sustainable Development Goals

1. From short- to long-term debt sustainability: Rebalancing public and private interests

The previous section outlined the extent to which debt, in both the public and the private sectors, has become a dominant feature of the era of hyperglobalization. Nevertheless, in many countries, both developed and developing, rising levels of debt have failed to trigger a strong investment surge. This is of particular concern given that the structural transformation implied by a Global Green New Deal, and reflected in the SDGs, requires a large-scale investment drive. At a global level, chapter III estimated a 1 to 2 percentage-point increase in investment as a share of global income channelled into green investments, while previous UNCTAD research has, based on secondary sources, estimated an annual $2.5 trillion investment gap for developing countries in SDG-related sectors (*UNCTAD, 2014*). The kind of scaling-up implied by these estimates inevitably raises the question of developing countries' debt sustainability, and in particular of the sustainability of their public debt levels.

Debt sustainability is an elusive concept for two main reasons. First, assessing whether or not a debt will be sustainable is, by definition, a forward-looking exercise littered with uncertainties about the long-term future trajectories of core macroeconomic variables and their interactions. Small debts may fast become unsustainable and large debts may remain sustainable over long periods of time, depending on a wide range of global and country-specific factors. Second, the analysis of debt sustainability also is an inherently normative exercise that addresses the question of what debt should be sustainable, given wider policy objectives such as, for example, meeting the SDGs.

Mainstream debt-sustainability analysis, encapsulated in the joint debt-sustainability frameworks of the IMF and the World Bank, takes the view that borrower solvency[7] should be ensured all along the developmental growth path. Debt sustainability here is defined fairly broadly as a set of macroeconomic and policy variables consistent with excluding a number of events considered to send strong signals of future insolvency. These obviously include sovereign defaults but also the need for sovereign debt restructurings short of default, heightened rollover risks, and expectations of "improbably" large fiscal and current account adjustments required to avoid such events (IMF, 2013b: 4). Under this approach, whether or not a debt is sustainable is a short-term concern of meeting performance benchmarks defined independently of longer-term developmental goals, be this the general goal of raising living standards or more specific goals such as the SDGs. As a consequence,

domestic policy spaces, and in particular fiscal policy, are permanently constrained by the effort to ensure short-term debt sustainability as an end in itself.

In response to wide-ranging criticisms of the analytical foundations and operational detail of its debt-sustainability frameworks (e.g. Akyüz, 2007; Wyplosz, 2011; Guzman and Heymann, 2015), the IMF has undertaken several rounds of revisions. The latest of these, carried out in 2017 for the joint IMF and World Bank debt-sustainability framework for LICs, resulted in a more explicit consideration of the changing facets of debt vulnerabilities in these economies, including the role of domestic debt markets, and in increased flexibility and fine-tuning of core elements of the framework, such as baseline scenario projections, standardized stress tests and classifications of a country's debt-carrying capacity.[8] But the basic idea, that adjusting domestic resource use to meet external debt repayment schedules in every period takes priority over long-term national development strategies, has remained firmly in place.

An alternative approach that focuses on debt sustainability as an integral part of long-term national development strategies was suggested in the context of the United Nations Millennium Development Goals and has attracted renewed attention with the advent of the even more ambitious 2030 Agenda (Kregel, 2006; Pinto, 2018). In this view, developing-country debt sustainability should be assessed over the whole of a developmental cycle rather than at every point along the developmental growth path. In the early stages of development – or when investment requirements are particularly high, for example to meet the SDGs – debt, both domestic and external, should increase relative to overall economic performance, precisely to leverage the power of credit creation for developmental goals. Deteriorating debt ratios would therefore be a normal and necessary feature of these early periods. It is only when developmental targets are well on the way to being achieved that debt ratios can fall again and cumulative debt service obligations can be met without undercutting the very source of governments' ability to repay debt, namely their economies' productivity and income growth, and associated rising tax revenues and external earnings.

But for large-scale investment drives to be sustained in the early stages of development without disruption by major debt crises requires creditors' willingness to roll over existing debt and to provide new external financing beyond the limited objective of bridging short-term liquidity constraints. As former Secretary-General Kofi Annan proposed in 2005, debt sustainability should therefore be defined relative to overall developmental goals or "as the level of debt that allows a country to achieve the Millennium Development Goals and reach 2015 without an increase in debt ratios" (United Nations, 2005: 2). Fast-forward to the 2030 Agenda, and the same challenge remains: that of providing interim finance to developing countries to achieve developmental goals while also safeguarding long-term debt sustainability.

Such a longer-term (and inter-temporal) approach to addressing debt sustainability in developing countries is all the more relevant, given that many of the SDGs – such as poverty elimination, nutrition, health, education, climate action, clean water and energy – require expenditures that yield high social returns, not only for the citizens of developing countries but for everyone, yet only distant and uncertain private financial returns. Nor are these expenditures that will immediately boost export capacities. Affordable external financing to support developing countries' long-term debt sustainability with a view to their necessarily changing debt dynamics over the entire cycle of SDG-related investments is thus not an act of reckless charity, but one of collective reason. By contrast, the current short-term perspective on developing-country debt sustainability has developing countries locked into a (more or less) stable public debt-cum-low-growth scenario that risks systematic underinvestment in particular in those SDGs that yield the highest social returns.

2. Achieving the SDGs and development: The urgent need for multilateral action

The remainder of this section provides a brief analysis of the impact of meeting only the first four of the 17 SDGs (SDGs 1–4: poverty elimination, nutrition, good health and quality education) on developing-country debt sustainability, under different financing options. These are the SDGs that are expected to be met fully by public sectors (Schmidt-Traub, 2015). The analysis is based on a sample of 30 LICs and MICs across developing regions and consists of three components (see box 4.1 for more detail). The first of these components projects the impact of investment requirements arising from the four listed SDGs on the evolution of developing-country public (gross central government) debt until 2030. As, over the past decade, the share of

total public debt in GDP has steadily increased in developing countries across income categories (see figure 4.2), a narrow focus on external public debt would provide an incomplete picture of current debt vulnerabilities. The second component estimates the resource challenge posed by meeting these SDGs by 2030 without an increase in public debt ratios, and thus following the alternative long-term definition of debt sustainability suggested in section C.1. The third component provides an overview of complementary domestic and international financing options to close the SDG debt-sustainability gap on time. Taken together, the different components of the analysis provide a useful overview of the financial challenges posed by the 2030 Agenda to developing-country debt sustainability.

BOX 4.1 The SDG debt-sustainability gap: Main methodological assumptions

The debt-sustainability analysis in this chapter operationalizes and updates the debt-sustainability definition proposed by former Secretary-General Kofi Annan in 2005 (United Nations, 2005). Updating this definition from the Millennium Development Goals to the 2030 Agenda, debt sustainability is defined here as the set of policies that allows a country to achieve the SDGs by 2030 without an increase in debt ratios. It prioritizes the financing requirements of the 2030 Agenda and establishes that debt sustainability must be viewed as support for a process occurring over time (Kregel, 2006).

The analysis takes the long-term evolution of total public debt (both domestic and external) as its core target variable. Even though, as pointed out, the most recent revision of IMF / World Bank debt-sustainability frameworks for LICs takes on board domestic as well as external public debt, formal and short-term debt-sustainability assessments by the international financial institutions remain, for now, largely focused on the extent to which external transfers of foreign-currency denominated foreign savings, whether private or public, can be sustained by meeting foreign creditor and international financial institution performance benchmarks on a continuous basis. By contrast, the current analysis systematically incorporates the growing role of domestic public debt in developing countries that has steadily increased again over the last decade across all income levels of developing countries (see figure 4.2). An additional consideration is that the SDGs under consideration are particularly reliant on public (domestic and external) financing given their strong and unrefuted public good features. These are SDG 1 ("End poverty in all its forms everywhere"), SDG 2 ("End hunger, achieve food security and improved nutrition and promote sustainable agriculture"), SDG 3 ("Ensure healthy lives and promote well-being for all at all ages") and SDG 4 ("Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all"). The projected costs to achieve each of these goals are derived from research conducted by FAO et al. (2015),[a] Stenberg et al. (2017)[b] and UNESCO (2016).[c]

The analysis has three main components. The first component projects the evolution of public debt under two scenarios: a "baseline scenario", which excludes SDG-related expenditures, and a "SDG-scenario" for the four selected SDGs over the period 2018–2030. The second component of the analysis estimates the resource gap, in terms of additional GDP required, to meet the debt-sustainability criterion of no increase in current public-debt burdens (the SDG debt-sustainability gap). The third and final component analyses the costs and impact of different but complementary domestic and multilateral policies aimed at closing the SDG debt-sustainability gap.

Following from the focus on total public debt in developing countries and SDG investment requirements within a relatively short time-horizon, the macroeconomic framework underlying the projection of public-debt trends in the first component of the analysis prioritizes the financial dimension of debt sustainability, captured by the differential between interest and GDP growth rates. Specifically, public debt dynamics are driven by domestic and external interest rates, GDP growth rates, changes in domestic GDP deflators, changes in exchange rates and general government primary balances. Medium-term projections (up to five years) are strictly based on available data. Longer-term projections are informed by existing projections for individual countries, where available, or by five-year averages of the latest available data.

The SDG debt-sustainability gap in the second component of the analysis is defined as the difference between the primary fiscal balances consistent with the on-time achievement of the four selected SDGs and those required to meet the long-term debt-sustainability criterion of no increases in public debt-to-GDP ratios over the SDG-related developmental cycle.

For the third component – looking at the costs and relative impact of domestic and multilateral financing options to close the SDG debt-sustainability gap – the analysis, following empirical evidence (Gaspar et al., 2016, 2019; Manuel et al., 2018), introduces a number of basic assumptions in regard to the maximum contribution that

developing-country DRM can be expected to make. This takes on board basic thresholds which, if overcome, are expected to lead to a significant acceleration of GDP growth and includes breaching tax revenue-to-GDP ratios of around 13–15 per cent on the upper side and the capacity to increase tax revenue by an additional 5 per cent of GDP over the next five years. Where countries have already achieved tax revenue ratios of 15 per cent of GDP or over, the framework assumes a linear increase of government revenues over the next five years. These are both simplifying as well as highly optimistic assumptions given currently narrow tax bases in many of the sample developing countries, high levels of informality and considerable reliance on natural resource revenues.

Estimations for multilateral SDG-related concessional and relief programmes to support maximum DRM efforts follow a simple sequential logic: the SDG-related ODA programme of concessional lending is projected to provide affordable finance to cover 50 per cent of investment requirements that cannot be met by the DRM component in LICs, around 35 per cent in LMICs and 17 per cent in upper middle-income countries (UMICs), while the SDG-related debt relief programme is a residual element that covers debt relief to the extent that the SDG debt-sustainability gap has not been closed by either DRM or special ODA.

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[a] FAO et al., 2015, estimates the amount of resources required to accomplish SDGs 1 and 2. The cost assumption included in this exercise refers to a Poverty Gap Transfer programme designed to lift the income of the entire population of a country above a $1.75/day purchasing power parity line and the additional investments required to structurally overcome extreme poverty.

[b] Stenberg et al., 2017, estimate the resources required to achieve universal health coverage. This is defined as access for all people and communities to services that they need without financial hardship. The cost assumption included in the model refers to the public sector component of the total funding required to achieve this goal in the baseline scenario used by the World Health Organization.

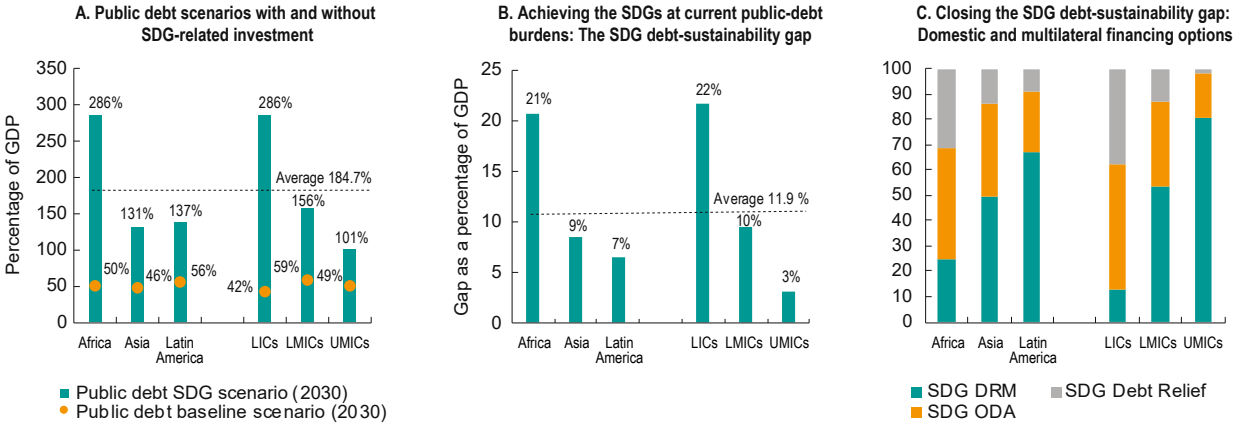
[c] The Education 2030 Framework for Action sets two benchmarks on domestic financing for education: 4 to 6 per cent of GDP and 15 to 20 per cent of public expenditure (UNESCO, 2016). This is the range of resources required to ensure that every child and adolescent in LICs and LMICs has access to good-quality education from the pre-primary to upper-secondary level. The cost assumption included in this assessment refers to the lower limit of the range (4 per cent of GDP and 15 per cent of public expenditure).

The first component of the analysis compares two different scenarios over the next decade. The "business-as-usual" or baseline scenario assumes that countries maintain current expenditure patterns and that short-term debt-sustainability requirements remain in place such that governments will continue to adjust internal resource use to servicing their external debt on an ongoing basis. Under this assumption (SDG baseline scenario in figure 4.10 A) average public debt for the sample developing countries is expected to increase from 47 per cent of GDP in 2018 to 51 per cent by 2030. The second scenario assumes that governments depart from "business-as-usual" to meet SDGs 1–4 on time and without external assistance other than current ODA grants (SDG public debt scenario in figure 4.10 A). Meeting the investment requirements of these SDGs would have a major impact on public debt, with the ratio of public debt to GDP increasing to 184.7 per cent of GDP by 2030, on average, for the sample group of LICs and MICs.

Under the SDG public debt scenario, LICs unsurprisingly experience the sharpest increase in public debt ratios rising to 286 per cent of their GDP by 2030 (figure 4.10 A). This reflects the fact that investment requirements to meet the four selected SDGs are particularly high. Furthermore, and given the current reality of relatively weak taxation systems and inadequate levels of ODA, more of the burden of additional investment requirements falls on public debt. This scenario thus pinpoints the growing concern that the most vulnerable countries and those in most need of urgent investments to meet the SDGs are the least likely to be able to afford these without triggering a debt crisis.

But challenges faced by lower-middle (LMICs) and upper-middle-income countries (UMICs) are also significant. Under the SDG public debt scenario, by 2030 public debt levels for these economies would reach between 100 and 150 per cent of their GDP by income classification, and between 130 and 140 per cent of GDP for Asia and Latin America, both of which have a higher share of LMICs and UMICs than LICs from a regional perspective (figure 4.10 A).[9] These may be half the projected public debt ratios for LICs, but they are not therefore any more sustainable.

FIGURE 4.10 Developing-country debt sustainability and the SDGs



Source: UNCTAD secretariat calculations based on IMF WEO, WDI, QEDS, FAO (2015), Stenberg et al. (2017), UNESCO (2016) and national sources.
Note: LICs = low-income countries; LMICs = lower-middle-income countries; UMICs = upper-middle-income countries. Classifications are World Bank classifications that, for the included countries, are identical with UNCTAD classifications but provide the additional breakdown into LMICs and UMICs. See https://unctadstat.unctad.org/EN/Classifications.html. Figures represent unweighted averages per country group. The sample is composed as follows, by region and income categories: **Africa:** Benin (LIC), Ethiopia (LIC), Malawi (LIC), Mali (LIC), Mozambique (LIC), Uganda (LIC), United Republic of Tanzania (LIC); Algeria (LMIC), Cameroon (LMIC) and Kenya (LMIC). **Asia:** Afghanistan (LIC), Nepal (LIC); Bangladesh (LMIC), Cambodia (LMIC), India (LMIC), Indonesia (LMIC), Myanmar (LMIC), Pakistan (LMIC), Viet Nam (LMIC); Thailand (UMIC). **Latin America and the Caribbean:** Haiti (LIC); Plurinational State of Bolivia (LMIC) and Nicaragua (LMIC); Brazil (UMIC), Colombia (UMIC), Dominican Republic (UMIC), Ecuador (UMIC), Jamaica (UMIC), Mexico (UMIC) and Peru (UMIC).

The second component of the analysis looks at the resource gap that opens, if the four SDGs were to be met without an increase in current public debt burdens. Defined as the SDG debt-sustainability gap, this statistic measures the difference between the primary fiscal balance consistent with achieving the four listed SDGs by 2030 and that required to maintain stable public debt ratios. From this perspective, developing countries would, on average, require 11.9 per cent of their GDP in additional annual resources. The requirements vary across income categories and regions, with LICs needing, on average, additional annual resources equivalent to 21.6 per cent of their current GDP, while this figure falls to 9.6 and 3.3 per cent of their current GDP for LMICs and UMICs, respectively (figure 4.10 B). The SDG debt-sustainability gap provides a concise overview of the challenges and trade-offs faced by sample countries in balancing SDG investment requirements with debt sustainability and financial stability, and could usefully be employed to inform Integrated National Financing Frameworks designed to facilitate the development of country-owned financing strategies for the implementation of the SDGs (IATF, 2019: chap. II).

The final component of the analysis considers domestic and external financing options to close the SDG debt-sustainability gap by 2030 and avoid proliferating debt crises in developing countries. As figure 4.10 C shows, this would entail massive external assistance, in particular for LICs. In the case of LICs, improved DRM is estimated to contribute at most 13 per cent of the resources required over the next decade, with this figure rising to 53 and 80 per cent in LMICs and UMICs, respectively. Estimations for the DRM component to close the SDG debt-sustainability gap reflect initial conditions in terms of institutional capacities for tax collection and budgetary management as well as the scale of required SDG investments. The higher current tax revenue-to-GDP ratios, the more governments have already aligned the composition of public expenditures to reflect longer-term SDG commitments, and the more they have already managed to successfully combat illicit financial outflows from their economies, the higher the contribution DRM can be expected to make over the next decade. In poorer economies with lesser taxation capacities at present, there may be more space for improvements but, for the reasons mentioned, these may not easily be achieved or become effective only towards the end of the time remaining for SDG implementation. Even so, the DRM scenario errs on the optimistic side in this regard and assumes that poorer economies can, in effect, reach critical thresholds of tax revenue-to-GDP ratios of around 15 per cent to support a significant acceleration of GDP growth over the next five years (see box 4.1). On the other hand, the extent to which improvements in SDG-oriented DRM have already been achieved provides only a limited guide to further achievements, as these also depend on the scale of required

SDG-related investments. For example, while in some cases stringent efforts had already been made, by 2017, to allocate almost half of public expenditures to meet the selected SDGs, accomplishing these SDGs by 2030 would still require raising this share to three quarters of all public expenditures over the next few years.

The need for substantive and affordable external financial assistance to reach only the first four of the SDGs on time without triggering widespread debt crises in the developing world should therefore be beyond doubt. Whatever the risk-managing magic blended finance is meant to perform to attract private finance to the 2030 Agenda, as pointed out, this is neither likely nor expected to include the selected SDGs with particularly high and long-term social returns but also prohibitively low short-term private returns. The analysis therefore looks at two complementary multilateral public funding options. First, a special ODA programme for SDG-related public investments that would provide participating countries with concessional finance to cover around half of required investment after DRM contributions in LICs, around 35 per cent in LMICs and 17 per cent in UMICs. The envisaged increase in ODA under this special programme would be in line with the commitment by developed countries to meet the target of 0.7 per cent of their gross national income to be dedicated to ODA, restated in the Addis Ababa Action Agenda and under the assumption that these ODA resources went to budgetary rather than project-specific support.[10]

Second, multilateral financial backstopping of developing country efforts to meet basic SDGs without incurring damaging debt crises would also require further efforts in the shape of SDG-related debt relief. However concessional, ODA lending still represents debt-creating capital inflows, with loan elements having steadily increased relative to grants over recent years (OECD, 2019). The scenario presented here is based on assumptions in regard to the evolution of DRM capacities and the modalities and scale of ODA that are, if anything, vigorously optimistic. Even so, debt relief remains a clear necessity, projected to having to finance around 37 per cent of public expenditures to meet only the first four of the SDGs by 2010 in LICs, around 13 per cent in LMICS, and less than 2 per cent in UMICs.

Table 4.1 summarizes the relative costs of the proposed SDG programmes across regions and income levels. Following from the above assessment, LICs stand to require the most multilateral support in the form of additional ODA and debt relief to meet the debt-sustainability criteria, amounting to annual transfers of 10.8 per cent of GDP through additional ODA and a debt write-down equivalent to 93.4 per cent of GDP by 2030. In the meantime, the relative costs for LMICs and UMICs would also remain substantial. Even in a scenario where efforts to increase DRM were to prove successful, LMICs would still require a combination of ODA equivalent to annual transfers of 2.9 per cent of GDP and debt relief equivalent to 17.7 per cent of GDP by 2030. These figures provide a sobering assessment of the degree of ambition required to meet the financing needs of the 2030 Agenda, in particular if allowing developing countries to meet developmental goals on a sustainable basis is the point of departure of debt-sustainability analysis as argued earlier on.

TABLE 4.1 Sustainable Development Goals programme financing requirements

	SDG debt relief programme 2030 (as percentage of GDP)	*SDG ODA programme (annual transfers as percentage of GDP)*
Africa	87.3	10.0
Asia	13.2	2.7
Latin America	15.7	2.1
LICs	93.4	10.8
LMICs	17.7	2.9
UMICs	1.9	0.6

Source: as figure 4.10.

The proposed framework to ensure developing-country debt sustainability over the next decade while also meeting the SDGs has a number of policy and research implications. First, as the assessment provided covers only four out of 17 SDGs, it strongly understates the need for multilateral action in coordination with domestic efforts for increased resource mobilization. As noted earlier, the four SDGs considered in this analysis are expected to be financed entirely out of the public purse, given their undisputed public good characteristics. However, it is unclear to what extent private finance can reliably be "leveraged", and at sufficient scale, to meet other SDGs that also have strong public good features, such as environmental protection and climate-change mitigation or "infrastructure" investments – an excessively broad category of required investments, many

of which may not be as easily amenable to being transformed into a tradable and privately profitable "asset class" as suggested by the G20 (EPG-GFG, 2018). Thus, and if the 2030 Agenda is to be met on time, even larger SDG-related multilateral programmes than those suggested here might have to be contemplated.

Second, the proposed framework makes a number of assumptions that potentially affect results in opposing directions. It assumes that developing countries in the sample will be able to refinance themselves in domestic and external markets on commercial terms throughout the period of analysis regardless of the levels of their public debt levels, thus excluding the possibility of acute debt distress and loss of market access. As shown in section B of this chapter, some developing countries are already experiencing debt distress and need to lower their current levels of public (and private) debt, if they are to retain or regain market access. This results in a downward bias of estimations, since the SDG debt-sustainability gap and the need for external financial assistance will increase with the advent or intensification of debt crises in developing countries. On the other hand, the framework does not take account of the impact of large projected increases in government expenditures on domestic aggregate demand and long-term productivity growth. Clearly, these could lower public debt burdens in the future and reduce requirements for affordable external financial assistance through multilateral programmes over time, thus introducing an upward bias to current estimations. These estimation biases pushing in opposite directions cannot be assumed to cancel each other out, as they are highly dependent on complex country-specific characteristics and their interaction with global economic dynamics. A decisive factor, however, is time. For the relatively short time period under consideration of just over a decade until 2030, gradual aggregate demand and productivity increases might come, if not too late, at least quite late in the day to substantially lower current public-debt burdens. Meanwhile, further and deepening debt crises in developing countries remain a very real prospect. Of course, the faster and the more decisive multilateral financial assistance is now, the more this outlook might reverse in time. Nevertheless, there clearly is a need for a more comprehensive dynamic debt-sustainability framework that includes the computation of feedback effects associated with investment in productive capacity, infrastructure and human capital (Guzman, 2018) and that looks beyond the immediate demands of meeting the 2030 Agenda.

Finally, the current framework highlights that, in relation to the 2030 Agenda specifically, but also looking further ahead, long-term debt sustainability in developing countries needs to be understood as a mutual national and multilateral responsibility. Developing countries must commit, as an utmost priority, to improved DRM, to strengthening the domestic profit–investment nexuses and to leverage credit (debt) for this purpose. But their ability to do so remains dependent on the political will of their development partners to manage the global economy in ways that are supportive of these domestic efforts. Therefore, there is an urgent need for international cooperation to enable greater tax mobilization, as outlined in chapter V, as well as to prevent the waste of domestic resources required for "self-insurance" in situations of volatile capital flows. These measures would contribute to easing the requirement for additional public debt that could become unsustainable.

Section D of this chapter turns to a broader consideration of constraints and possibilities in leveraging multilateral financial support for long-term debt sustainability in developing countries and considers a number of specific financing options and programme designs that could help to bolster development finance while also serving the planet and everyone's natural environment, much in the spirit of the Global Green New Deal proposed by UNCTAD. In addition, developing country options to step up own financial fire-power for their developmental requirements are discussed. Finally, developing-country debt crises are already unfolding and, as pointed out, further crises cannot be excluded. Thus, the following section also looks at changes to existing sovereign debt restructuring processes that could help to limit detrimental fallouts for both sovereign debtors and their creditors.

D. Making development wag the debt tail

An agenda for improving conditions, policy options and the space to pursue those options in developing countries so as to better mobilize financial resources to meet their development goals must grapple with the significant challenges posed by debt sustainability. The urgency of the problem is apparent when

considering the financing gap that is likely to emerge around efforts to meet the 2030 Agenda, as outlined in the previous section.

Moreover, as is also clear from the discussion above, debt sustainability in developing countries is hardly in the hands of the affected sovereigns. In a highly financialized and interdependent global environment, fragility can quickly turn to distress against the backdrop of falling commodity prices and weak growth in developed economies. If monetary policy decisions in advanced economies suddenly drive up borrowing costs, debt positions in emerging markets and other developing countries that previously appeared manageable can quickly become unsustainable. The procyclical nature of capital flows – cheap during a boom and expensive during downturns – is not the only drawback. Once a crisis hits, currency devaluations to improve export prospects simultaneously increase the value of foreign-currency denominated debt. For commodity exporters, the need to meet rising debt servicing requirements also generates pressures to expand production, potentially adding to excess supply and further downward pressures on commodity prices. Unreformed, the current global financial environment leaves little room for countries to determine their own strategies and growth paths. Instead there is an implicit surrender of policy decisions to the logic of financial markets whose image of superiority in determining efficient outcomes has remained intact in some quarters, despite the disastrous GFC.

Consequently, scaling up development finance efforts to meet the SDGs is closely linked to the need to reduce, as much as possible, the exposure of developing countries to external shocks, footloose cross-border capital flows and external debt service burdens. Reforms to the international financial architecture to better manage macroeconomic imbalances and deal with debt distress and possible crises need to be urgently put on the international policy agenda. Some possible reforms are discussed in this section. However, in the absence of an international monetary system supportive of developing countries' attempts to mobilize development finance, developing countries should also look to regional and South–South financial and economic cooperation and ensure that local, national and regional policy initiatives are connected and coordinated to limit the disruptive influence of global financialization. It is therefore crucial to begin by strengthening domestic public policy spaces and capacities in developing countries to raise domestic public funds and ensuring that both domestic and foreign private capital are reliably channelled into developmental investment projects whose short- to medium-term private profitability is uncertain. The quest is not for just any private capital, but "patient" capital. While this may be a second-best (bottom-up) option to a more sweeping pro-development reform of the international financial system, its strength lies not only in beginning to scale up productive development finance, but also in eventually forcing international economic governance reform back onto the multilateral agenda (Blankenburg, 2019).

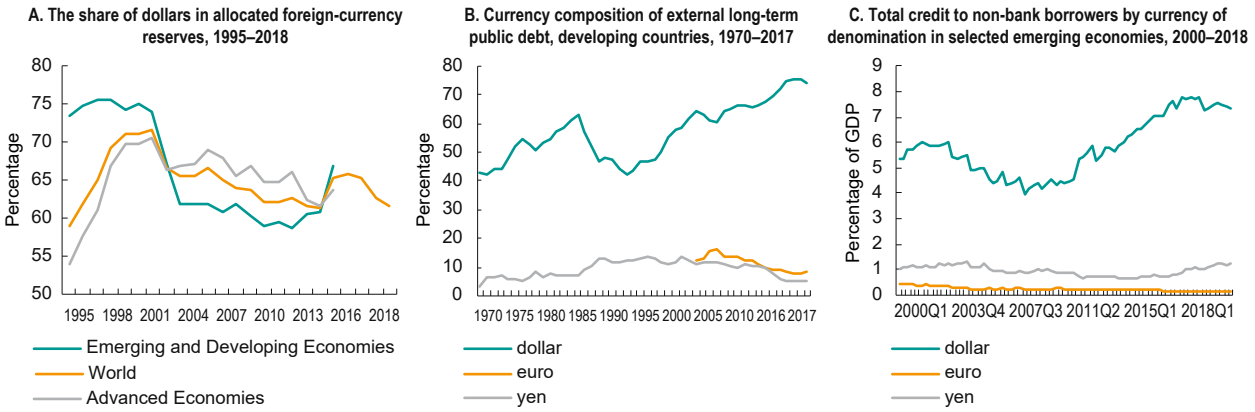
1. Revisiting special drawing rights and debt relief programmes

Ideally, a development-friendly international monetary system should ensure that high-productivity surplus economies systematically "recycle" their surpluses to lower-productivity countries by adopting expansionary policies at home to stimulate domestic demand for imports from lower-productivity deficit economies, by investing in these economies and by lending to them on reasonable, or better concessional, terms.

In many ways, this was the ideal pursued by the negotiators of the London Agreement between Germany and its creditors in 1953 which reduced the aggregate debt of Germany substantially and limited the debt servicing requirement to 3 per cent of the value of annual exports (UNCTAD, 2015: 134). While the London Agreement was a debt relief arrangement, the notion that there could be coordination between surplus and deficit countries was implicit in the original conceptions of the Bretton Woods institutions (Kregel, 2018: 89). The wider implication is that such a system would have to sustain significant macroeconomic imbalances that allow domestic development strategies to progress and, at a minimum, to generate the export earnings needed to meet external debt obligations.

When, in the midst of the Second World War, Keynes contemplated ways to rebuild a post-war international monetary system that would enable global economic prosperity and peace, he proposed the introduction of an international clearing union operating an international accounting currency that he called the "bancor" (Keynes, 1973).[11] This proposal focused on two main principles to guide international monetary

FIGURE 4.11 United States dollar hegemony



Source: UNCTAD secretariat calculations based on IMF Currency Composition of Official Foreign Exchange Reserves database (COFER, for panel A), World Bank International Debt Statistics (for panel B) and BIS Global Liquidity Indicators (for panel C).

Note: Panel C of this figure includes Argentina, Brazil, Chile, China, India, Indonesia, Malaysia, Mexico, the Republic of Korea, the Russian Federation, Saudi Arabia, South Africa, Turkey and Taiwan Province of China.

cooperation. First, it should respect national policy autonomy and support national growth strategies, in developed and developing economies. Second, it should avoid deflationary biases in the international economy by putting the burden of adjustments to international imbalances on surplus as well as on deficit countries.

The proposal of an international accounting currency (and clearing union) was essential to achieving these goals as it meant that the provision of international liquidity and the management of international imbalances would not remain hostage to the internal constraints and interests of the issuer of an international reserve asset, but would instead be governed by multilateral rules. In Keynes' words, "the Union can never be in any difficulty as regards the honoring of checks drawn upon it. It can make what advances it wishes to any of its members with the assurance that the proceeds can only be transferred to the clearing account of another member. Its sole task is to see that its members keep the rules and that the advances made to each of them are prudent and advisable for the Union as a whole" (Keynes, 1973: 171). The failure to adopt Keynes' proposal for multilateralism in international monetary affairs and the decision to remain within the confines of a global reserve system has played an important role in steering the international monetary system away from supporting national growth and development strategies to instead prioritize the policy choices of dominant issuers of international reserve currencies.

Expert opinion is divided about the future global robustness of United States dollar hegemony. Empirical views on this matter emphasize the continued large share of dollars in global foreign reserves (see figure 4.11 A), as well as in banks' foreign-currency assets and liabilities and in shares of world trade invoiced in dollars (Gopinath, 2015). Others consider that multipolar systems of international monetary governance, rather than their dominance by a single lead currency, have been the longer historical rule and will re-emerge (Eichengreen, 2019). An additional and rather different challenge arises from the creation and expansion of private money – or cryptocurrencies – in the international arena, using new technologies (see chap. I: box 1.1).

In any case, available evidence for developing countries would suggest that United States dollar hegemony is well entrenched for now (figure 4.11). As mentioned, the share of the dollar in global allocated foreign-currency reserves has waxed and waned, but it still holds the lion's share of around 60 per cent of these reserves. It has been on the increase for developing and emerging economies again over recent years (insofar as these data are available; see figure 4.11 A), against a backdrop of overall falling capacities, in developing countries, to use international currency reserves as an "insurance policy" (see figure 4.8). At the same time, developing country PPG long-term external debt has not only been dominated by the dollar, but the trend is rising (figure 4.11 B), and the dollar also,

takes the lead in regard to the rise of shadow-banking in larger developing and emerging economies (figure 4.11 C).

A long-debated and partially operative option to pierce the United States dollar hegemony is to increase the role of so-called special drawing rights (SDRs) in world foreign-currency reserves. SDRs are an international reserve asset that is valued based on a basket of key international currencies and serves as a claim on the reserve currencies of the IMF (D'Arista, 2009; Ocampo, 2011; *TDR 2015*). SDRs were introduced in the 1960s to cover expected international liquidity shortfalls in United States dollars and in gold. Borrowing limits in SDRs are determined by countries' SDR-denominated quotas. Following the latest round of quota increases in 2015 and 2016, SDRs currently amount to around $670 billion. One recent proposal (Akiki, 2019) is to regain traction in expanding SDRs by linking these directly to environmental objectives that command a high degree of collective and multilateral support, and specifically to holding global warming at below 1.5°C above pre-industrial levels. Under this proposal, national authorities of participating countries, in cooperation with the IMF, would work out long-term environmental and country-specific adjustment plans, including preservation targets and emission reductions, as well as the required investments and budgets to meet these targets. While some countries may be able to self-finance these plans, an IMF zero-interest loan funding facility would be put into place, in particular for developing countries. Maximum funding capacity would be measured using special environmental drawing rights (SEDRs) that represent an indefinite potential claim on the freely usable currencies for climate finance of the IMF.

This proposal provides a flexible and, in principle, unlimited financing mechanism for long-standing calls, by UNCTAD and others, for a global environmental protection fund that can provide predictable and stable emergency funding without strict policy conditionalities or limiting eligibility criteria. In addition, many poorer developing countries and small island developing states (SIDSs), now regularly exposed to natural disasters related to climate change, will need temporary debt moratoriums and automatic mechanisms to extend such moratoriums on debt servicing to safeguard government expenditure on essential social spending, such as health, education and sanitation, when such events occur. At present, assistance from the international community continues to rely on a combination of short-term aid, longer-term conditionalities of fiscal consolidation and preventative self-insurance schemes against catastrophic risk. This, however, is woefully insufficient to address the systemic impact of recurrent and increasingly frequent climate change-related shocks.

In the immediate aftermath of the earthquake that hit Haiti on 12 January 2010, UNCTAD (2010), alongside other organizations, called for an immediate temporary debt moratorium on debt servicing, to be followed by debt cancellation as quickly as possible. In effect, on this occasion, several of the bilateral creditors of Haiti agreed to a temporary standstill of debt servicing, and the World Bank and the Bolivarian Republic of Venezuela eventually waived the remaining debt. But the more far-reaching call by UNCTAD for a coordinated future approach to disaster management, including a global disaster fund, an automatic mechanism for extending a debt moratorium to countries hit by natural disasters and built-in insurance clauses for debt contracts to cover catastrophic risk, was mostly not heeded. Almost a decade later, the world remains as ill-prepared as ever to address the often-vicious debt cycles of environmentally vulnerable developing countries. Many of the affected countries have complicated histories of external indebtedness, such as for example Mozambique and Zimbabwe, hit in March 2019 by Cyclone Idai. But, more generally, an SDR-based global fund to leverage environmental reserve assets for environmental protection could provide a reliable and stable financing mechanism to also tackle the secondary and tertiary effects of climate change-related shocks on debt sustainability in developing economies. As an UNCTAD, 2010 study shows for 21 large natural disasters that struck LICs between 1980 and 2008, such large-scale shocks can add, on average, 24 percentage points to the debt-to-GDP ratio of affected countries in the three years that follow the event. If the event does not lead to a rapid increase in foreign aid, this figure can reach up to 43 percentage points. (UNCTAD 2010) Poor and even middle-income developing countries hit by natural disasters can still find themselves in a long-term debt trap as the use of public debt and renewed external borrowing to absorb the impact of a natural disaster leads to more burdensome debt servicing and constrains the capacity to invest in long-term climate-change mitigation. With each new disaster, financial vulnerabilities grow and domestic response capacities weaken.

Moreover, and as suggested in section C of this chapter, if the 2030 Agenda is to be met even only for the most basic goals, a global SDG-related concessional lending programme for low- and lower-middle-income developing countries should be considered. One proposal (Munevar, 2019) is to break down such a concessional lending programme into two components: first, a refinancing facility designed to allow participant countries to borrow on concessional terms and progressively repurchase the outstanding stock of public external debt issued in commercial terms over a short period of, say, three years and, second, an additional lending facility designed to cover the external share of gross financing needs of the public sector until 2030. A programme of this type would bring several benefits to participant countries. The reduction in effective interest rates on external debt and extension in maturities would simultaneously improve nominal long-term dynamics and reduce the net present value of debt outstanding. Furthermore, the provision of stable long-term and low-cost funding would allow national authorities to focus their efforts on the effective deployment of resources to accomplish the SDGs.

Ideally, such concessional SDG-related lending could also be financed by leveraging SDRs and expanding these while linking claims on these directly to SDG-related investments, as well as country-specific investment and budgetary plans. In addition, a global (SDG) development fund could be replenished by donor countries paying up to their unfulfilled commitments to the ODA target of 0.7 per cent of gross national income and provide dedicated resources to compensate for what was only partially delivered over past decades.[12] A complementary and more market- and contract-based version of financing mechanisms are debt-swap programmes, such as the ECLAC Climate Resilience Fund debt swap proposal (ECLAC, 2016). In a similar vein, an SDG debt-swap proposal would see the establishment of a special SDG investment fund to support SDG investments and address debt vulnerabilities in developing countries. This fund would require initial contributions from the international community to purchase the share of external public debt held by private creditors over a short period of time, around three years. Beneficiary countries would commit to pay into the SDG investment fund the amount that they would have paid to their former creditors as debt service. Such payments to the SDG investment fund would stretch over a 10-year horizon, over which the underlying liability to the fund would be paid on a rolling basis. The fund would use the payments from beneficiary countries to bolster investment in SDG-related projects while providing technical support and assistance. While welcome, such debt-swap based programmes have a number of drawbacks. They operate on a contract-by-contract basis that is usually slow, costly and subject to partial interests, and country debt would be acquired at times of already impending or unfolding crises when government bonds trade at steep discounts. They also provide no clear longer-term commitment to the fulfilment of collective environmental and developmental goals over time. As Akiki (2019: 18–19) points out, debt-for-nature swaps have been popular, as an instrument of debt relief conditional on environmental conservation, not least because they also allowed private corporate interests, engaging with such initiatives, to largely take control of environmental conservation.

2. Strengthening regional monetary cooperation: Regional clearing unions

Whether or not it will be possible to leverage SDRs, rather than less multilateral and more market-based financing mechanisms such as debt-swap programmes, for environmental conservation as well as development remains to be seen. In the meantime, an additional and important option for developing countries is to at least partially escape the United States dollar hegemony by strengthening regional monetary cooperation and marshalling their own financial fire-power to ease the constraints imposed on their development in the current debt-driven and dollar-based financialized global economy. This, it should be noticed, is not about longer-term South–South cooperation to prop up development finance through large-scale lending programmes, such as the Belt-and-Road initiative in China, much as these are both necessary and welcome in view of hesitant, limited and often unpredictable development financing initiatives from developed countries. Rather, such regional monetary cooperation, among developing countries, can complement and support longer-term South–South financial cooperation, if it substantially increases the ability of developing regions to refinance and promote intraregional trade and develop intraregional value chains out of their own pockets.

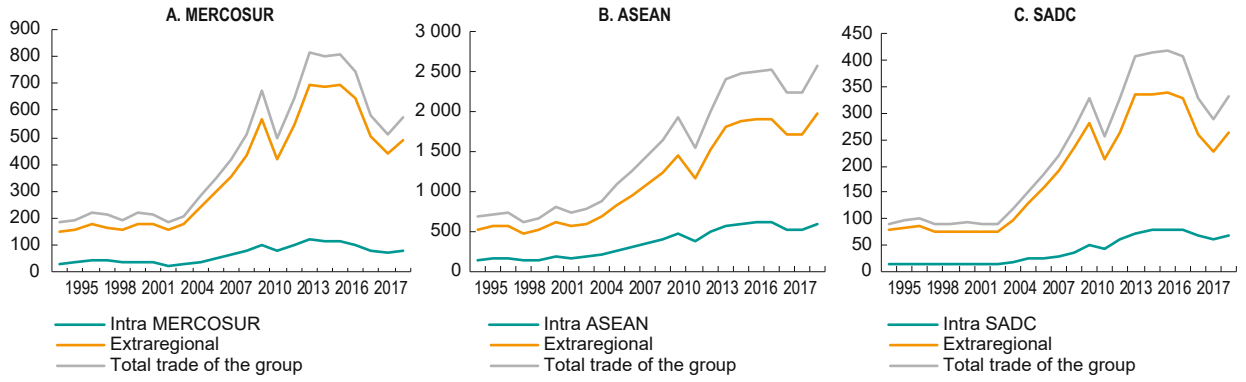
As has been pointed out elsewhere (*TDR 2015*; Blankenburg, 2019), just as at the international level,

the scope and effectiveness of regional monetary arrangements depends on agreed objectives. These range from simple regional reserve swap and pooling agreements to bridge liquidity constraints when these arise, to the more full-scale development of regional payment systems and internal clearing unions. The latter extend credit to members through the regular offsetting of accumulated (trade-related) debts and credits between them, and thus at least partially replace reliance on external foreign-denominated financial resource and associated exchange-rate volatility with financial resources created in-house. This requires the use of a non-tradable regional unit of account, much like the international accounting currency proposed by Keynes to manage the international monetary system, and that promotes intraregional trade by allowing accumulated credits within the regional clearing mechanism to be offset against debits only through imports from, or foreign direct investment in, member states, at fixed intraregional exchange rates against the regional unit of account (Kregel, 2018).

The importance of implementing regional monetary cooperation in support of development was first raised at the founding 1964 UNCTAD Conference (UNCTAD I). This resulted in the establishment of an expert group at UNCTAD II in 1968 and in the proposal of a framework for a Payments Union open to all developing countries. At the time, and against the backdrop of an international monetary system dominated by trade rather than financial flows, capital controls and pegged exchange-rate systems, the main objective was not primarily to escape United States dollar hegemony. Rather, it was to promote intraregional trade – largely by lowering transaction costs in convertible currencies of such trade, the establishment of automatic credit facilities linked to encouraging intra-Union trade, incentives for regional surplus countries to correct these and, relatedly, strong guarantees against default – while leaving open the door for developed countries to join in by providing preferential access to their markets for developing country industrial exports and through the provision of an agreed percentage of their gross national income as external assistance to developing countries. To ensure that its reserves would always be adequate to meet its liabilities, the Payment Union should be accorded membership status and SDRs at the IMF.[13]

This proposal demonstrates the importance accorded to regional payment systems and clearing mechanisms by developing countries from early on. In the event, it proved too ambitious at the time and instead smaller-scale regional clearing unions and payment arrangements among developing countries developed throughout the 1970s. These, too, eventually faded out or lost importance under growing pressures on developing country central banks to stave off debt crises. In addition, both public and private sectors in developing countries succumbed to the lure of apparently cheap credit available in international financial markets since the late 1980s. As seen, since then the persistence of United States dollar hegemony in a context of continued hyperglobalization, marked by open capital accounts, floating exchange rates and financial deregulation, has played an essential part in

FIGURE 4.12 **Intra- and extraregional trade, selected regional groupings, 1995–2017**
(Millions of dollars)



Source: UNCTAD secretariat calculations based on UNCTADstat Data Center International Trade in Goods and Services.
Note: **MERCOSUR** includes Argentina, Brazil, Paraguay, Uruguay and the Bolivarian Republic of Venezuela. **ASEAN** includes Brunei Darussalam, Cambodia, Indonesia, the Lao People's Democratic Republic, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Viet Nam. **SADC** includes Angola, Botswana, the Comoros, the Democratic Republic of the Congo, Eswatini, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, United Republic of Tanzania, Zambia and Zimbabwe.

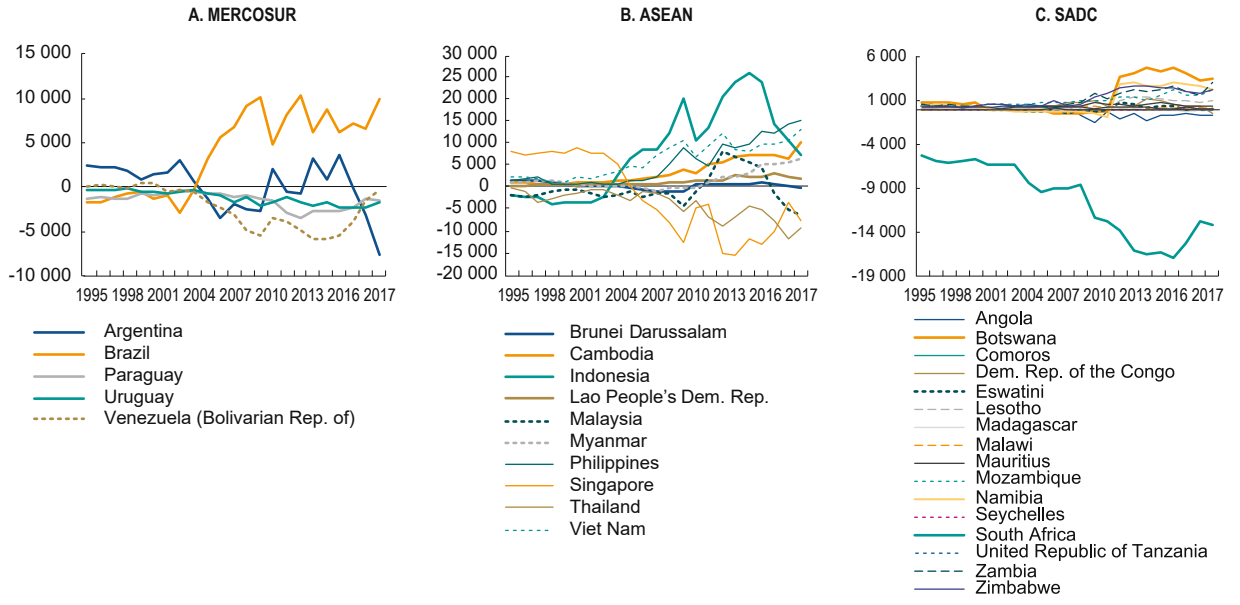
facilitating the emergence of an international monetary system that has favoured short-term financial and corporate interests over developmental ones in systematic fashion.

This also changes the stakes for developing countries in reconsidering expanding regional monetary integration and powering up regional credit creation for regional development to limit the detrimental impact of United States dollar hegemony on their economies. In response to the Asian financial crisis as well as other developing-country crises in the 1990s, multilateral and regional currency swap agreements have already emerged, with the Chiang Mai Initiative Multilateralization (CMIM) being the best known (*TDR 2015*). The scope for deeper monetary integration, in the form of payment systems and clearing mechanisms, largely depends on the initial trading patterns and positions of prospective member states, as the extent to which intraregional credit creation and clearing can be used to substitute for external financial resources depends on countries' ability to extend credit.

A brief overview of essential features of the current trading positions for three main developing country trade areas – MERCOSUR (Mercado Común del Sur), ASEAN (Association of Southeast Asian Nations) and SADC (Southern African Development Community) – provides some preliminary insights into the feasibility and potential benefits the use of internal clearing mechanisms might provide. This, first, looks at the share of intraregional commercial trade in member states' overall commercial trade. The higher the share of intraregional trade, the higher the scope for intraregional monetary arrangements to help expand this. As figure 4.12 shows for three developing country groupings with a history of economic integration in Latin America, Asia and Africa, while this share remains relatively low overall, it has been rising steadily in both ASEAN and SADC, but less so in the case of MERCOSUR.

Second, the net commercial trade balances within country groupings also matter, since the idea of a regional clearing union is precisely to use the extension of trade credits to participant deficit countries to replace covering trade imbalances through compensating external capital inflows. As figure 4.13 highlights, these intraregional dynamics are diverse. For MERCOSUR, Argentina and Brazil were clear net surplus economies capable of providing intraregional credit, at least until the recent Argentine financial crisis in 2018. But since the size of other MERCOSUR countries' net deficits within the region is relatively small, this limits the role of group-internal clearing even if this still remains relevant. For ASEAN, net intraregional trade balances have clearly

FIGURE 4.13 **Net intraregional trade balances, selected regional groupings, 1995–2017**
(Millions of dollars)



Source: as figure 4.12.

expanded since the mid-2000s. This would suggest that regional clearing could be beneficial, with the possibility of a growing number of deficit countries being provided with funding for their intraregional trade. But the region overall is also a surplus region with the rest of the world, with the exception of the Philippines and Thailand, thus making intraregional clearing less of a priority for most member states. By contrast, SADC presents a more difficult case: While SADC, with the exception of oil-exporting Angola, is a deficit region with the rest of the world, and intraregional clearing to reduce the need to cover trade imbalances through external capital flows and substitute these for the extension of intraregional trade credits would, in principle, be beneficial, the current intraregional trade dynamics are not favourable. Other than South Africa, most member countries are in surplus with the region, limiting the scope to which a wider number of member countries could benefit from internal clearing at present.

Thus, core features of current trading patterns provide a varied picture in regard to the benefits that could be derived from the use of regional clearing. While some regions (MERCOSUR, ASEAN) could benefit immediately, if to differing degrees, others (SADC) face more formidable obstacles. However, the purpose of such clearing arrangements is of course also to increase intraregional relative to extraregional trade, such that current trade patterns change. This, in turn, also requires political will. For regional clearing unions to function properly in the interest of freeing up own financial resources and policy space to pursue national development strategies, regional interests have to be prioritized, sometimes over immediate national interests, in the understanding that reverse priorities will, ultimately, undermine collective as well as national developmental goals.

3. Advancing sovereign debt crisis resolution

In response to rising debt vulnerabilities in developing countries amid fast-changing creditor landscapes and financial innovation in the form of complex new debt instruments, the IMF and the World Bank have recently made coordinated efforts to promote enhanced public debt transparency (IMF and World Bank Group, 2018), in particular in LICs. At the same time, the Institute of International Finance (IIF), representing the global financial industry, has developed Draft Voluntary Principles on Debt Transparency to promote voluntary information disclosure on debt instruments by private creditors (IIF, 2019).[14] Both initiatives have gained traction as part of the G20.[15]

In large part, these initiatives recognize that the availability of high-quality debt data is an indispensable prerequisite for the ability of national governments and the international community to minimize the risk of debt crises and to take timely remedial action when these occur. Beyond this, the new joint IMF–WB "multi-pronged approach [MPA] for addressing emerging debt vulnerabilities" embeds stronger support to strengthen capacities of downstream debt management, such as public debt reporting, recording and monitoring, in a wider surveillance programme that includes improved debt analysis and early warning systems, guidance on macrofiscal policy frameworks and the review of national debt policies by the IFIs (Nishio and Bredenkamp, 2018). While the benefits, to national governments as well as for external reporting to international databases, of more comprehensive, accurate and timely public debt data are uncontentious, this policy focus is hardly adequate to address the main current causes of developing-country debt crises rooted in their often premature integration into international financial markets and their growing exposure to market risks. As UNCTAD has long argued (UNCTAD, 2012), transparency, including but not limited to data, is an essential principle for successful debt crisis prevention through responsible sovereign lending and borrowing, alongside other core principles such as impartiality, good faith, legitimacy and sustainability.

While debt crisis prevention is of paramount importance, resolving sovereign external debt crises, when these happen, in ways that facilitate speedy economic recovery and avoid financial crises in the aftermath of de facto default is equally urgent. That the current state of affairs in this regard is unsatisfactory has long been recognized, including by UNCTAD (*TDR 2015*). Against a backdrop of growing private sector participation in the refinancing of sovereign debt (see section B) an already fragmented non-system to address sovereign default situations has further disintegrated.

With external debt often being the Achilles' heel of economies facing heightened financial instability, current arrangements for handling sovereign debt problems are fragmented, with different procedures for diverse kinds of external sovereign debt (bilateral, multilateral and debt owed to private creditors)

when difficulties arise. The shift from official to private, and from syndicated banks loans to bond financing (see figures 4.4 and 4.6) over past decades has entailed a significant increase in the complexity of debt restructuring, made even more complex by domestically issued debt held by non-residents that raise complex questions as to whether to differentiate between resident and non-resident holders of local-currency debt in sovereign debt restructurings.

This has, in particular, re-enforced concerns about the "too little, too late" approach to sovereign debt restructurings, by which private creditors and sovereign debtors alike have strong incentives to delay formal default procedures and to minimize restructuring requirements, be this to avoid self-fulfilling prophecies of financial and economic crises in the event of the initiation of formal default procedure or be it to protect creditor interests that, for the most part, will suffer haircuts in the event of such declarations. The result is an inefficient and unbalanced approach to resolving situations of debt distress which also gives rise to asymmetric and procyclical outcomes and is vulnerable to disruption from holdout creditors, thus often imposing very high costs on the countries looking to restructure their debts. As Guzman and Lombardi (2017) report, since 1970 half of sovereign restructuring episodes with private creditors have been followed by another default within a time window of three to seven years, and 60 per cent were followed by further restructuring.

In addition, sovereign debt restructurings have been made more difficult by the inclusion of arbitration clauses for sovereign restructuring disputes in many International Investment Agreements (IIAs), creating unresolved ambiguities between the use of public law – via the International Centre for the Settlement of Investment Disputes (ICSID) – and private law, in national courts designated in sovereign bond contracts to resolve litigation issues (Li, 2018). Finally, the growing complexity of sovereign debt restructurings has made the provision of advisory and legal services to sovereign borrowers a lucrative and increasingly concentrated business with often costly implications for debtor countries (see box 4.2).

BOX 4.2 Concentrated, costly and opaque: Sovereign debt restructuring and debt litigation

The process of sovereign debt restructuring is getting more concentrated, more costly and more cumbersome for sovereign states. Increasing complexity in sovereign debt instruments, a growing diversity of creditors and expected financial rewards have incentivized litigation of sovereign states by creditors – among them even creditor states. Since the Argentine debt crisis of 2001, over half of the recent sovereign debt crises have been litigated in foreign courts (Schumacher et al., 2018). Moreover, for the debtor states, there are difficult decisions to be made about the selection not only of the appropriate law firm to represent it, but also its sovereign adviser.

Sovereign advisory firms are distinct from the law firms representing sovereigns and their creditors in courts. Advisory firms guide the borrower on financial, policy and legal issues of the sovereign debt restructuring but are not involved in litigation per se. Moreover, most governments retain separate advisers on financial and legal matters. Together, these advisers develop and implement the terms and procedures for debt restructuring based on specific circumstances.

Advisory firms are credited with bringing expertise and market awareness in the highly specialized matter of sovereign debt restructuring, where internal governmental skills are lacking. Their professional skills are meant to level the playing field when dealing with creditors who come similarly armed with high-level skills. Moreover, the existing framework for sovereign debt restructuring demands the appointment of external advisers, given that the IMF financing assurance policy sees engagement of legal and financial advisers by a debtor state as one of the relevant factors in the evaluation that a credible process for restructuring is under way and hence the provision of financial support as appropriate (IMF, 2013c: 45).

Sovereign advisory firms have a significant influence on the debt restructuring process – they gather necessary information, make it available to creditors, analyse the information and propose alternative debt restructuring strategies (see Asonuma et al., 2018; Buchheit, 2019). Moreover, it is typically the advisers – together with the IMF – that determine the quantum of necessary debt relief (Abbas et al., 2019). Given their role over the fate of the public finances of a distressed sovereign, there is a marked lack of transparency and public oversight over the role of advisory firms. For instance, there is no way to monitor – or even be aware of – the conflict of interest where advisory firms provide services, even in different cases, to creditors and debtors. A small circle of recurrent players advises states in a debt crisis: 20 of the 25 sovereign debt restructurings with commercial creditors since 2005 were accomplished by just four financial advisory firms. The concentration in the legal

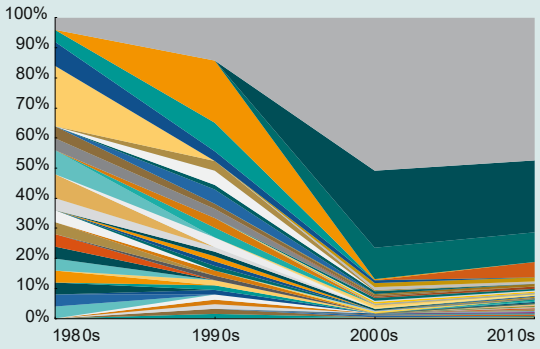
advisory sphere is even more acute, with just one firm as legal adviser in nearly two thirds of all sovereign debt restructurings since 2005 (Smith, 2019).

The market for sovereign debt litigation – at least in the United States – also appears to be highly concentrated in terms of the market share of the top five global law firms.[a] While 70 firms have overcome the supposed barriers to entry such as global presence – and have represented 44 countries since implementation of the *Foreign Sovereign Immunities Act* of 1976 – only a few law firms dominate the market.

Figure 4.2.1 shows the increasing market concentration in the share of litigation over the past four decades, with a sea change in the 2000s relating to the litigation against Argentina, which involved dozens of lawsuits that were handled predominantly by a single law firm, the current market leader. It appears that the size and publicity of the Argentine litigation produced and reinforced the position of the "go-to" law firms for sovereign debt disputes, resulting in the Herfindahl-Hirschman Index (HHI) for the top five law firms (Herfindahl -5) becoming highly concentrated, with the top five accounting for 87 per cent of the litigations (figure 4.2.2).

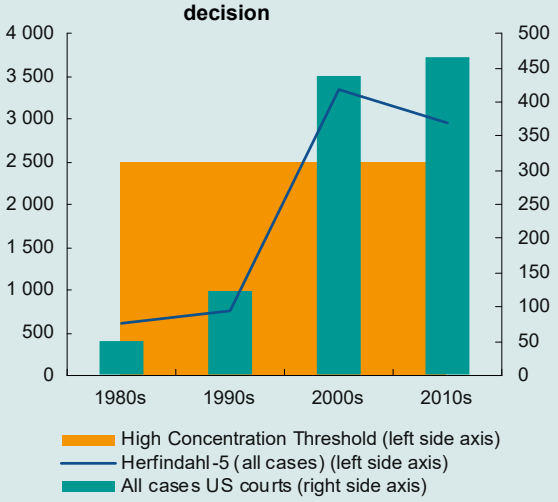
The unflinching approach adopted by Argentina in debt renegotiation towards creditors produced a stampede to the United States courts (see figure 4.2.2) and may be a watershed which provided incentives for litigation instead of cooperation. After a lengthy legal battle, which lasted over a decade, Argentina agreed to settle the case with holdout creditors in an offer that distinguished between those creditors that had obtained a *pari passu* injunction from the New York court and those that did not. The terms for creditors with a *pari passu* injunction were much more rewarding – one of the creditors received a 392 per cent return on the original value of the bonds. Another legacy of the Argentine saga is that the procedure of class actions in sovereign bond litigation was "fine-tuned" and most likely will be frequently used in future sovereign debt crises. Amassing litigation by retail investors in class actions in this way could have systemic effects on sovereign debt restructuring.

FIGURE 4.2.1 **Sovereign debt litigation in the United States: Evolution of market concentration of law firms**



Note: Every coloured line stands for a law firm which represented a sovereign borrower in the United States courts. The data include only distinct litigation cases between a creditor and a country.

FIGURE 4.2.2 **HHI of top law firms with number of sovereign debt restructuring cases in United States courts by year of decision**



Note: Market concentration refers to the Herfindahl-Hirschman Index (HHI).

Exposure to foreign governing law and the foreign forum has crucial implications for determining and interpreting contractual relationships on sovereign debt in that they guarantee that a sovereign debtor cannot interfere with rules applicable to creditor–debtor relations. The legal leverage possessed by creditors makes the sovereign debt instruments prone to complex and protracted litigation disturbing the debt restructuring process. The most popular foreign forums for international sovereign debt coincide with the global financial centres of New York and London – which govern approximately 96 per cent of the total outstanding stock of international sovereign bonds, in almost equal shares (IMF, 2015: 3). However, the number of disputes brought in front of English courts is many times lower than in the United States – which apart from reasons specific to the cases, can be explained by the conceptual differences between jurisdictions. While private enforcement

has a prominent role in the United States legal system, the English system adopts a more prudential and cooperative approach to disputes.

Provision of advisory and legal services to sovereign borrowers is a lucrative business for the professional firms involved. While the face value of the contested debt in an individual lawsuit varies between $60,000 and $9 billion, the median value is approximately $17.3 million. According to court records, the attorney's fees in sovereign debt disputes in the United States courts can pile up to millions due to the complexity and length of the litigation, which on average takes four and a half years. Furthermore, the appointment and negotiation of terms with financial and legal advisers and law firms occurs behind closed doors. There is anecdotal evidence of hefty performance-based remuneration obtained by sovereign advisory firms that have zero capital at risk (Smith, 2019; Chung and Fidler, 2006).

To sum up, sovereign debt restructuring is complex and costly, and the role played by advisory and legal firms is opaque to debtor states and their citizens. There are some possible quick fixes: selection of sovereign advisers should be on the basis of public procurement measures; legal advisers should pre-emptively utilize contractual tools to provide the framework for orderly debt restructuring; collective action clauses for new debt instruments and debt management process should be meticulously drafted; trust arrangements should be employed instead of fiscal agency structures for issuing bonds; and where litigation is inevitable, creative public interest defences should be used.

However, these fixes will not address the fundamental lack of transparency, highly concentrated market and inherent information asymmetry between advisers and debtor states. Nor can it mitigate the costly and disruptive process of sovereign debt litigation, or indeed, redress the underlying treatment of sovereign debt restructuring in the courts – that of the sanctity of contract prevailing over the public interest. While the professional firms themselves provide highly skilled services, the chaos and opacity that currently prevails in sovereign debt restructuring is their life blood.[b] Only an international public agency that provides financial and legal advice on sovereign debt restructuring to governments in need could begin to redress the balance, together with a multilateral debt resolution framework.

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[a] The market for legal services in England is more dispersed than in the United States and there is no visible market leader in England. However, elite law firms dominate the market and debtor states are usually represented by lawyers distinguished by a Queen's Counsel title, which speaks of high fees for the parties involved in litigation.

[b] The necessity to engage advisers is underscored by market experts themselves. See Buchheit, 2019.

Various attempts have been made to strengthen market-based approaches to debt restructuring and, in particular, to deal with the holdout problems and protect debtors against litigation in market-based restructuring. While these represent a step forward, UNCTAD (2015) has previously argued that they are insufficient to deal with existing debt vulnerabilities, let alone those that could emerge from external borrowing to meet the SDGs. Alternative mechanisms will be needed. One approach is to establish internationally agreed principles that provide for a higher degree of coordination and possibly also centralization than the market-based contractual approach. These would take the form of soft law principles or guidelines, based in international public law, such as the "Basic Principles on Sovereign Debt Restructuring Processes" adopted by the United Nations General Assembly in September 2015 (United Nations General Assembly, 2015). United Nations General Assembly resolutions on external debt and development also have repeatedly called for the consideration of such enhanced approaches to sovereign debt restructuring mechanisms (SDRMs) based on existing frameworks and principles, with the broad participation of creditors and debtors.[16] An example of such principles is the UNCTAD road map and guide on sovereign debt workouts (UNCTAD, 2015; see also Guzman and Stiglitz, 2016).

Proponents of such a semi-institutional, general principles–based approach have developed a range of suggestions on how to structure the institutional aspects of promoting general principles or guidelines for sovereign debt restructuring. One approach is for restructuring negotiations to continue to take place in established forums or on an ad hoc basis, but supervised and coordinated by a new independent body, such as a Sovereign Debt Forum (a private organization) or a Debt Workout Institute (endorsed

through a multilateral process).[17] A second, but complementary, approach highlights the usefulness of semi-institutionalizing SDRMs at the level of adjudication or arbitration short of a multilateral treaty. This includes mostly the promotion and use of specific rules and procedures – or applications of the general principles – across ad hoc arbitration processes.

Advocates of multilateral debt workout procedures often draw attention to the asymmetry between strong national bankruptcy laws, as an integral part of a healthy market economy, and the absence of any counterpart to deal with sovereign debt restructuring. UNCTAD was among the first international institutions to propose a more orderly and equitable rules-based framework, drawing on Chapter 11 of the United States Bankruptcy Code.

Given the unique role of sovereign actors with respect to economic, legal and political outcomes, any such framework should meet two objectives. On the one hand, it should help prevent financial meltdown in countries facing difficulties servicing their external obligations, which often results in a loss of market confidence, currency collapse and drastic interest rate hikes, inflicting serious damage on public and private balance sheets and leading to large losses in output and employment and a sharp increase in poverty. On the other hand, it should provide mechanisms to facilitate an equitable restructuring of debt that can no longer be serviced according to the original contract. Meeting these goals implies the application of a few simple principles:

- The enforcement of a temporary standstill, whether debt is public or private, and regardless of whether the servicing difficulties are due to solvency or liquidity problems (a distinction which is not always clear-cut). In order to avoid conflicts of interest, the standstill should be decided unilaterally by the debtor country and sanctioned by an independent panel, rather than by IMF, since the countries affected are among the shareholders of the Fund, which is itself also a creditor. This should provide an automatic stay on creditor litigation for a specified period.
- Standstills should be accompanied by exchange controls, including the suspension of convertibility for foreign-currency deposits and other assets held by residents as well as non-residents.
- Provision of debtor-in-possession financing, automatically granting seniority status to debt contracted after the imposition of the standstill and the generalization of the IMFs current policy on lending into arrears for financing imports and other vital current-account transactions[18].
- Debt restructuring including rollovers and write-offs, based on negotiations between the debtor and creditors, and facilitated by the introduction of automatic rollover and collective action clauses in debt contracts.

The essential feature shared by all proposals for a statutory approach to sovereign debt restructuring is that legal decision-making in debt restructuring cases would be governed by a body of international law agreed in advance as part of the international debt workout mechanism, and that the core purpose of any sovereign debt restructuring facility or tribunal would be to provide transparent, predictable, fair and effective debt resolution, with its decisions being binding for all parties as well as universally enforceable, that is, regardless of jurisdiction.

E. Conclusions

This chapter has argued that, for debt – whether external or domestic, public or privat– to play a forward-looking developmental role, it needs to be an integral part of wider efforts to scale up development finance. This requires a strong focus on channelling debt into supporting productivity-enhancing investment, through more robust domestic financial and banking systems and by strengthening public control over the pace and direction of credit creation. There is, however, no guarantee that debt will play this developmental role.

As section B of this chapter shows, current steep increases in the total debt of both advanced and developing countries are largely led by the rise of private sector debt. Even though this is primarily the case for advanced economies and HICs, this trend has also emerged in some of the poorest developing economies. On available evidence, this proliferation of private debt has not boosted productive investment. At the same time, substantial and rising shares of developing country public debt are now owed to private creditors, including "shadow-banking" actors,

bringing with them sizeable increases in servicing costs on external public debt, in particular. These trends run counter to debt playing the developmental role it should. Rather, in our hyperglobalized world, the growing global "business of debt" follows the logic of short-term private profitability and risk management rather than wider and longer-term collective economic objectives and the public risk management required to safeguard these.

These trends are of even greater concern because of the unprecedented investment requirements arising from the 2030 Agenda and their likely impact on developing country debt sustainability in the foreseeable future, if "business-as-usual" prevails. Section C of this chapter provides estimates of the impact of required investments to meet only a small but inherently public goods part of this Agenda, on developing country public debt to GDP trajectories under different policy scenarios. The conclusion is that his agenda cannot be met without very substantive increases in external public financial assistance reliably geared towards meeting these developmental goals.

Within the confines of an international monetary system increasingly geared to promoting footloose capital and unduly dependent on the United States dollar as a source of international liquidity, renewed consideration should be given to substantially increasing SDRs as a source of development finance, linking such expansion to core objectives of a Global Green New Deal in which environmental and developmental goals are complementary. In the meantime, alternative but complementary options would mean a substantial and immediate increase in ODA – even if only to make up for earlier and unfulfilled commitments – as well as new debt relief programmes.

Some practicable progress should also be made on extricating developing countries from the increasingly non-transparent and continuously fragmenting market-based, non-binding and decentralized approaches to sovereign debt restructurings. It is telling that, despite long-standing recognition that this current state of affairs is unsatisfactory and despite many substantive reform proposals, neither the current international agenda on financing for development nor the G20 have taken them up. The chapter nevertheless proposes some specific steps that, if agreed and applied, might at least ensure that developing countries can avoid being locked up in a "debtor prison" and keep open the door to further progress in moving towards a rule-based sovereign debt restructuring mechanism that takes on board collective and developmental concerns in a more systematic fashion.

At the same time, developing countries may have to look, more forcefully, to strengthening regional monetary integration as a way to prioritize their own developmental interests. Expanding or introducing intraregional payment schemes and trade-related clearance mechanisms is, in principle, a plausible way to leverage regional credit creation for purposes of promoting intraregional trade and to promote longer-term regional growth and developmental dynamics. What can be difficult to achieve at multilateral levels, may not be any less challenging to achieve at regional levels. But where multilateral governance is disintegrating – and this has been the case for much longer in monetary than trade affairs – the potential benefits of regional arrangements increase considerably. ■

Notes

1 See also recent reports by the Secretary-General on external debt sustainability and development A/71/276; A/72/253. Available at https://www.un.org/en/ga/second/archives.shtml; and A/73/180 available at https://www.un.org/en/ga/second/73/documentslist.shtml (both accessed 2 August 2019).

2 See, for example, IMF (Krueger, 2002), UNCTAD (*TDR 1986*; *TDR 2001*; 2015) and United Nations General Assembly (2015).

3 Almost a fifth (11) of the 57 MICs also received debt relief from these programmes.

4 BIS Credit Statistics. Available at https://stats.bis.org/statx/srs/table/f3.1.

5 See the IMF list of Debt Sustainability Assessments (DSA) in LICs for countries eligible for the Fund's Poverty Reduction and Growth Trust (PRGT-eligible countries), 16 July 2019. Available at https://www.imf.org/external/Pubs/ft/dsa/DSAlist.pdf.

6 Improvements until 2012 are depicted by the leftward shift of the distributions for 2000 to those for 2012 and by the fall in the distributions' median value.

7 The IMF defines the solvency condition for governments such that "the present value (PV) of future primary balances must be greater than or equal to the public debt stock", while for countries as a whole "the present value of future non-interest current account balances must be greater than or equal to its external debt" (IMF, 2013a: 6).

8 See, for example, the Joint World Bank–IMF Debt Sustainability Framework for Low-Income Countries factsheet available at https://www.imf.org/en/About/Factsheets/Sheets/2016/08/01/16/39/Debt-Sustainability-Framework-for-Low-Income-Countries (accessed 2 August 2019).

9 Much of the difference in the evolution of public debt levels between regions can be attributed to the large investment requirements associated with SDGs 1 and 2 (elimination of poverty and zero hunger) in Africa. The Food and Agriculture Organization of the United Nations estimates that countries in Africa would have to invest on average 15.6 per cent of their GDP annually to accomplish just these two SDGs. By comparison, this figure is 0.1 per cent of annual GDP in Latin America and the Caribbean and 1.3 per cent of annual GDP in Asia (FAO et al., 2015).

10 At present, project-specific aid accounts for over 70 per cent of ODA to least developed countries, compared to budget-supporting ODA, which accounts for less than 10 per cent of ODA (UNCTAD secretariat calculations based on OECD Common Standards Reporting).

11 Under this scheme, international liquidity would be provided through contributions by all participating member states in their national currencies to their accounts at the international clearing union, denominated in the international accounting currency. In addition, economies with persistent current account surpluses would be expected to deposit part of their cumulative surpluses in an account at the international clearing union. The foreign exchange reserves of each member state would remain in their national central bank, but all currency purchases and sales between national central banks would be operating through the international clearing union, that is, through accounts held in the international accounting currency. The system would furthermore run automatic overdraft facilities (relative to the size of an economy's international trade) and loans to deficit countries would not be conditional on adopting specific policy measures. The international clearing union would intervene only once the borrower's initial liquidity needs had been met and structural obstacles to repayment became an issue (Keynes, 1973; Skidelsky, 2000).

12 A simple calculation of the last 25 years of OECD Development Assistance Committee member countries missing the target to contributing 0.7 per cent of the gross national income to ODA generates a cumulative total of around $4 trillion (at constant 2017 dollars); part of these "arrears" could be used to capitalize such a fund.

13 For an account of these arrangements, see Kregel (2018).

14 See also UNCTAD comment on the IIF Draft Voluntary Principles for Debt Transparency at: https://debt-and-finance.unctad.org/Documents/IIF_Principles_debt_transparency_UNCTAD_10_May_2019.pdf (accessed 6 August 2019).

15 See Communiqué of G20 Finance Ministers and Central Bank Governors Meeting, Fukuoka. 8–9 June 2019. Available at: https://www.mof.go.jp/english/international_policy/convention/g20/communique.htm (accessed 6 August 2019).

16 See General Assembly resolutions 64/191, 65/144, 66/189, 67/198, 68/202 68/304, 69/207, 70/190, 73/221.

17 For the latter proposals, see UNCTAD, 2015.
Abbas AS, Pienkowski A and Rogoff K, eds. (forthcoming). Sovereign Debt: A Guide for Economists and Practitioners. Oxford University Press. Oxford.

18 The IMF's long-standing general policy barring it from providing financing to a country that was in arrears to official bilateral creditors was adjusted in 2015 to acommodate carefully defined specific circumstances, namely cases in which the role of non-Paris Club creditors is dominant and the need to mitigate the increasingly problematic role of hold out creditors. See: https://www.imf.org/en/News/Articles/2015/09/28/04/53/sopol120815a (accessed 4 August 2019).

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MAKING PRIVATE CAPITAL WORK FOR DEVELOPMENT

V

A. Introduction

Financing the 2030 Agenda and advancing a Global Green New Deal requires resources to be mobilized from many sources. As noted in chapter II, in developing countries private foreign capital is increasingly perceived as having the potential to narrow the resource gap. However, when it comes to capital inflows there is no guarantee that opening up the capital account and establishing an investor-friendly environment will attract the kind of capital inflows needed to strengthen a more inclusive and sustainable development path. Indeed, it is possible that large capital inflows actually diminish the options for financing long-term investments by creating financial vulnerabilities and macroeconomic imbalances.

This chapter advances various proposals as to how to regulate private capital and channel it into long-term productive investment with social and developmental public priorities. It estimates that implementing these proposals would improve resource availability in developing countries by roughly $510 billion to $680 billion a year.

One way in which foreign private capital can contribute to domestic development is by providing tax revenues that governments can use for essential public services, infrastructure spending and public investment. However, this contribution has diminished over time, partly because the increase in "tax-motivated illicit financial flows" (IFFs) by multinational enterprises (MNEs) means that many governments are losing sizeable fiscal revenue. Estimates of the volume of these losses vary widely, from $50 billion to $200 billion a year, depending on the methodologies used and the countries covered. Meanwhile, tax competition between governments makes for ever-lower corporate tax rates.

The contribution of private capital to development has also declined because digitalization is changing the nature of economic transactions in ways that further diminish the relevance of existing international corporate tax norms. This reflects the ongoing impact of digitalization on the location of production, the ownership of the underlying productive assets and the intangible nature of what is produced, which have accelerated the dematerialization and enhanced the mobility of economic activities.

The next section of this chapter takes stock of the current efforts towards reforming international corporate tax norms and outlines a way forward. It argues that an international tax system that contributes to funding the 2030 Agenda must adopt unitary taxation of MNEs, based on global formulary apportionment of profits and underpinned by a global effective minimum corporate tax rate. Recognizing that such a fundamental change could take time, the chapter also indicates some more immediate options for developing countries to improve the fairness and sustainability of international corporate taxation.

Ironically, the fiscal constraint on public investment is one of the main reasons the international community has made attracting private capital the policy of choice for delivering the 2030 Agenda. To maximize the benefits from these flows, it has been proposed that, as part of a broader effort to liberalize capital markets, additional measures should be put in place to attract international private investors, in particular, by creating a new developing country infrastructure asset class (EPG-GFG, 2018).

In practice, however, large capital inflows can generate macroeconomic and financial imbalances, such as currency overvaluation, economic overheating,

and unsustainable domestic credit and asset-price booms. Moreover, their sudden reversals, mostly triggered by factors extraneous to the recipient economy, often cause macroeconomic and financial instability and result in liquidity crises (e.g. *TDR 2014*). Many developing countries have tried to prevent such imbalances and liquidity crises through the accumulation of foreign assets, often in the form of foreign-exchange reserves. But as capital flows cumulate into stocks of external assets and liabilities, they generate other balance-sheet vulnerabilities, such as those resulting from variations in interest rates, asset prices and exchange rates that affect the value of these holdings and the income they generate. The operations of global private capital markets have therefore effectively caused a net resource transfer from developing to developed countries (Akyüz, 2018), thereby negating the very purpose of encouraging private capital flows to developing countries.

The chapter estimates that such reverse resource transfers amount to about $440 billion a year, about two thirds of which are due to differences in yields on the external assets of developing countries and their external liabilities, with the remainder coming from valuation effects. It concludes by making a case for comprehensive and long-lasting capital controls as an essential part of the macroeconomic policy toolkit in developing countries.

B. Strengthening domestic resource mobilization through taxation

1. *Illicit financial flows from multinational enterprises and tax revenue losses*

The maximization of domestic resource mobilization by developing countries requires containing public revenue leakages from tax-motivated IFFs. These mainly occur when MNEs reduce their corporate income tax liabilities by shifting their profits to affiliates in tax havens.[1] It also arises when MNEs exploit tax loopholes in domestic legislation or international tax treaties.[2]

The current international corporate tax norms were adopted by the League of Nations in the 1920s. Their main characteristics include the separate entity principle, which considers affiliates of MNEs to be independent entities; and the arm's-length principle, whereby the taxable transactions between the different entities of MNEs are treated as if these entities were unrelated.

These principles were adopted at a time when international trade primarily encompassed primary or finished goods produced with relatively simple enterprise structures. They have become less appropriate as intermediate products and intangible assets have assumed growing shares in international transactions and production has increasingly been organized in global value chains (*TDR 2018*). Moreover, tax authorities have faced growing difficulties in auditing the pricing of transfers between the various entities of an MNE, because of a lack of benchmarks from comparable transactions between independent entities. This has allowed MNEs to allocate their most valuable assets and the bulk of their profits to affiliates in low-tax jurisdictions. As a result, tax-motivated IFFs have proliferated.

(a) Quantifying the problem

The very nature of IFFs and the associated lack of transparency makes estimating the loss of public revenue from corporate tax avoidance a daunting task.[3] While two recent studies (table 5.1) have added further estimates to the existing literature (see e.g. Dharmapala, 2014, and Cobham and Janský, 2018, for detailed surveys), these estimates still vary significantly, due to differences in methodology, reference period and country coverage.

At the lower end of the estimates, Tørsløv et al. (2018) report a global loss of about $180 billion, with developing and transition economies losing about $49 billion,[4] half of which is accounted for by the BRICS countries (Brazil, the Russian Federation, India, China and South Africa). By contrast, Cobham and Janský (2018) find that public revenue losses amounted to about $500 billion per year, of which $194 billion was lost by developing and transition economies.[5]

Despite the wide divergence in the estimated volume of IFFs, there is general agreement on two issues. First, a small number of tax jurisdictions receive

disproportionately large volumes of profits that are related to economic activity elsewhere. These include several developed economies that host major financial centres, which contrast with the stereotype of tax havens being small island countries. Second, the revenue losses are widely distributed across other jurisdictions. In absolute terms, such losses are greater in high-income countries but, as a share of GDP or total tax revenues, the tax leakages are larger in low-income countries. Paradoxically, despite the small group of jurisdictions that have gained from tax-motivated IFFs for decades, broad-based policy responses from governments that have lost revenues have emerged only recently.

TABLE 5.1 Revenue loss estimates from corporate tax avoidance, selected recent studies

	Cobham and Janský (2018)		Tørsløv et al. (2018)	
Year of reference	*2013*		*2015*	
Country or area	*Billions of dollars*	*Percentage of GDP (median)*	*Billions of dollars*	*Percentage of GDP (median)*
Developed economies	**300.7**	**0.3**	**133.4**	**0.2**
Developing and transition economies	**193.6**	**2.3**	**49.4**	**0.2**
of which:				
Africa	18.8	2.3	n.a.	n.a.
Latin America and the Caribbean	35.6	2.3	n.a.	n.a.
Developing Asia and Oceania	138.8	1.7	n.a.	n.a.
Transition economies	0.4	0.6	n.a.	n.a.
World	**494.3**		**182.8**	

Source: UNCTAD secretariat calculations, based on Cobham and Janský (2018: table A2 – GRD estimates) and Tørsløv et al. (2018).

Note: Cobham and Janský (2018) cover more countries than Tørsløv et al. (2018), especially regarding developing and transition economies, and provide estimates for 145 individual countries. Tørsløv et al. (2018) cover 26 developed countries, eleven developing and transition economies (Brazil, Chile, China, Colombia, Costa Rica, India, Mexico, the Republic of Korea, the Russian Federation, South Africa, Turkey), as well as a 'rest of the world' residual, which is included in the second group. The numbers reported in the table exclude what the respective authors consider as tax havens.

(b) Recent and ongoing policy responses

Several measures to stem tax-motivated IFFs of MNEs have been undertaken at the multilateral and national levels, especially since the global financial crisis. This has largely been in response to public outcry about the continuing pressures of fiscal austerity, even as various scandals revealed that some MNEs pay little or no tax in the countries in which they operate, by transferring profits to low-tax offshore financial centres. This subsection takes stock of some recent achievements and highlights some of their main drawbacks.

(i) Multilateral level

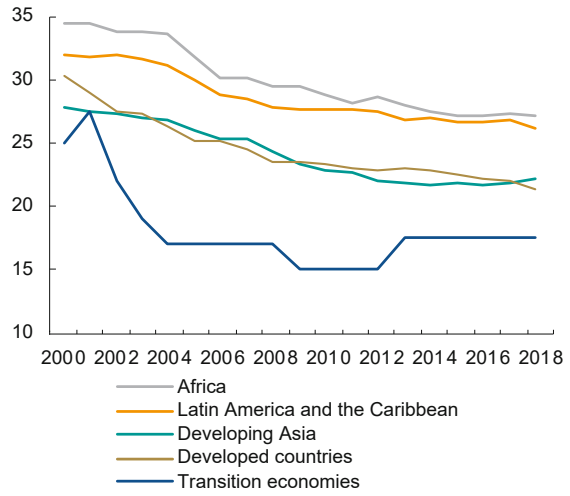
Launched in 2013, the OECD/G20-led Base Erosion and Profit Shifting (BEPS) project, which aims at taxing profits where profit-generating economic activities are performed and value is created, has issued a number of reports with policy recommendations in 15 action areas (OECD, 2013a, 2013b, 2015a). An Inclusive Framework was established in June 2016 to ensure broad and complete implementation. But despite its wide membership (as of June 2019, it had 129 members, representing more than 95 per cent of global output) the Framework still suffers from legitimacy concerns given the limited role of developing countries in decision-making (see e.g. Mosquera, 2015; Burgers and Mosquera, 2017; Fung, 2017).

The Inclusive Framework has achievements in two main areas.[6] First, it created the Multilateral Convention to Implement Tax Treaty Related Measures to Prevent BEPS, also known as the Multilateral Instrument (MLI), which entered into force on 1 July 2018. This MLI allows jurisdictions to integrate results from the BEPS project into their existing networks of bilateral double tax agreements, to reduce the opportunities for double non-taxation by MNEs. Second, the Common Reporting Standard on automatic exchange of information is designed to increase transparency and exchange of information for tax purposes. Over 100 countries[7] have committed to implementing this and the first data exchanges between early adopters occurred in 2017.[8] In parallel, under BEPS Action 13 and the implementation package on country-by-country reporting, tax authorities started to exchange key indicators for each entity of any MNE with consolidated group revenues of at least €750 million. These data exchanges relate to the amount of revenue reported, profit before income tax, income tax paid and accrued, stated capital, accumulated earnings, number of employees, and tangible assets. This information makes tax inspection by national authorities easier and may eventually serve as a basis for tax audits.[9]

These achievements of the BEPS project represent a milestone in the reform of the international tax architecture. Nevertheless, major shortcomings remain.[10] Of particular concern to developing countries, the added complexity of the new standards and their

disregard for some of the specificities of their economies are making it difficult to grasp and implement the full package of BEPS recommendations, further stretching the limited capacity of tax authorities in many developing countries. In addition, countries may feel pressured, for example by the threat of finding themselves on a list of countries that do not respect broadly agreed international tax standards. Trying to avert such listing and the ensuing sanctions could make countries divert resources to amend practices that may have little positive spillover effects or domestic benefits (IMF, 2019). Moreover, many observers expect tax disputes to increase, and there is a risk that these will be addressed by arbitration procedures that lack transparency (ICRICT, 2019a).[11]

FIGURE 5.1 Average statutory corporate income tax rates, by country group, 2000–2018
(Percentage)



Source: UNCTAD secretariat calculations, based on the OECD Corporate Tax Statistics database.
Note: The numbers shown are unweighted averages. Zero-rate jurisdictions are excluded.

While there are some ongoing international efforts to support developing countries in building tax audit capacity, resource constraints remain a key concern for them. Moreover, there is a concern that the soft law created by the BEPS project evolves into hard law. This has already taken place, for example, under the International Finance Corporation of the World Bank Group, the World Trade Organization (WTO) or bilateral investment treaties (BITs),[12] and it could happen with other international institutions.

Perhaps most significant, the problem of tax competition remains unaddressed by the BEPS project, except for extreme cases that may fall into the realm of "aggressive tax planning" under BEPS Action 5. Tax competition has been broad-based and translated into significant declines in statutory corporate income tax rates (figure 5.1). It has been estimated that the revenue loss from tax competition could be as much as five times that from tax-motivated IFFs.[13] While tax competition and tax avoidance are only indirectly linked, there is a risk that making tax avoidance harder for MNEs could even result in more intense tax competition for real investments, as it is likely that MNEs would respond by lobbying for more tax cuts. This could further strengthen a race to the bottom in terms of declining corporate tax rates. Also, MNEs could reallocate their real activities to low-tax jurisdictions to pass a "substance" test that would allow them to save on taxes, irrespective of how inefficient this shift would be from an economic point of view. Overall, this calls for recognizing that low/zero tax jurisdictions have adverse spillover effects and that a race to the bottom in setting statutory corporate income tax rates should be avoided.[14]

Despite the BEPS initiative, an emerging concern is the remaining scope for profit-shifting activities. The IMF (2019: 10–11) notes that "significant profit-shifting opportunities still arise – most notably, but not only, in relation to the allocation of risk within MNEs, the valuation of intangibles, and the avoidance or limitation of physical presence. With the increasing importance and salience of complex, intangible and technology-heavy business models, these difficulties will only increase". Some experts even argue that the BEPS work on harmful tax practices has led to pressure on countries to adopt certain measures, including the normalization (and increase) of "acceptable incentives" – such as Patent Boxes, special economic zones (SEZs) or export processing zones (EPZs). Such unilateral developments are detrimental to collective countermeasures (ICRICT, 2019a).

It is important to note that the BEPS project retained the principles of treating MNE subsidiaries as separate entities with arm's-length transactions, essentially because several OECD member countries insisted on this when the project was initiated. By dimming hopes that the BEPS project might eventually adopt a system of unitary taxation, this may have provided incentives for corporations to step-up

their tax "planning". Nevertheless, the long-standing call of UNCTAD for a shift towards unitary taxation has recently gained support from the head of the IMF (Lagarde, 2019). Moreover, in early 2019, OECD started consultations that were nominally on "digitalization" but uniformly understood to address the guiding principles of international tax rules more generally, and these are considering various options of moving beyond the arm's-length principle towards formulary apportionment.[15]

(ii) Country level

Among country-specific initiatives, the 2017 *Tax Cuts and Jobs Act* of the United States was a game changer. Apart from lowering the federal corporate income tax rate from 35 to 21 per cent and relying on some of the BEPS principles, in particular the single tax principle, whereby all income should be subject to tax only once,[16] it adopted a minimum effective global corporate tax rate on offshore profits. This could pave the way for similar approaches elsewhere as reflected, for example, by related calls expressed by France and Germany in late 2018 and early 2019 (Reuters, 2018a, 2019).

The European Union's Anti-Tax Avoidance Directive took effect for all 28 Member States on 1 January 2019. In addition to the BEPS minimum standards,[17] a key recommendation was made mandatory for Member States: a common general anti-avoidance rule so that "aggressive" tax schemes can more easily be declared illegal when challenged in courts. Meanwhile, the recent adoption of "diverted profits taxes" in the United Kingdom and Australia – which aim at countering the use of aggressive tax planning techniques – departed from the consensual approach of the BEPS project.[18,19] While this does reflect frustration with the slow speed of the BEPS process, such unilateral measures may not always be tailored to developing country needs.

In parallel, several Latin American countries have made efforts to curb the use of tax havens by establishing and actively maintaining lists of these jurisdictions. Brazil, for instance, has imposed a higher rate of withholding taxes (25 per cent) for any payments for services with entities located in identified tax havens, in comparison to those in compliant jurisdictions (15 per cent). In parallel, several developing countries have adopted the "sixth method" for transfer pricing valuation, following the Argentinian experience, as further discussed below.[20]

Both the multilateral and the country-specific initiatives have helped to move tax issues to the top of the international agenda. Yet, they have made the system more complex and thus harder to manage, especially for small developing countries. Further, there is no indication that public revenues losses due to tax-motivated IFFs have diminished. Altogether, this casts doubt on the current approach and calls for an in-depth reform of the international tax system. The main principles on which such a reform should be based are elaborated below.

(c) The way forward

It is clear the MNEs are able to take undue advantage of national systems of taxation that treat their subsidiaries as separate individual entities. Once it is recognized that the profits of MNEs are generated collectively at the group level, the adoption of a system of unitary taxation of the group as a whole makes much more sense. Introducing a global minimum effective corporate income tax rate on all MNE profits would limit harmful tax competition between countries and prevent tax arbitrage. This rate could be set at around 20–25 per cent, which is the average of current nominal rates across the world. This would greatly simplify the global tax system and help to increase tax revenues for all countries.

The question then is how these taxes on corporate profits should be distributed across countries, and various options for this are now being discussed. One option is residual profit allocation, which involves attributing a "normal" return to the source countries and using a formula to allocate the residual profits to other countries in which the MNE operates. Another is the destination-based cash-flow tax, whereby the country where the goods are sold gets to levy the tax (so that imports are taxed, but exports are not) and the tax is not on profits but on cash flows, that is on revenue minus all non-financial spending, including capital spending and wages. The third option – and most promising for developing countries – is that of "formulary apportionment", whereby the total taxes of the MNE group are allocated across countries according to an agreed formula. Of course, the formula and the choice of factors to be used matter greatly, but a commonly agreed formula would limit subsequent disputes. Developing countries would benefit more from a formula that prioritizes employment and productive physical assets over total sales.

In order to support the levying of corporate income tax at the country level, it would be necessary to establish global public registries of the real parent companies of all companies, trusts and foundations, together with their financial and real assets. ICRICT (2019b) proposes practical steps on how to implement such a global registry. The idea is to start by developing pilots of global registries in major OECD financial centres where residents from all over the world hold their assets, since these centres have the financial and technological capacities to develop such registries and they host a major part of global assets. The second step would be to get a complete global picture by connecting all national asset registries, since otherwise hidden wealth would go to countries that lack such an asset registry. Guaranteeing public access to these registries would reduce the control and the oversight burden of tax administrations, because information could easily be verified. Due to its universal membership, the United Nations is the most legitimate body to coordinate this process.

It will take time to reach multilateral agreement for each of these reforms. In the interim, countries could use existing transfer pricing guidelines of the United Nations and the OECD to move towards a system of formulary apportionment (BEPS Monitoring Group, 2018: 2). In parallel, developing countries may also consider adopting unilateral transitory measures, though this would have to be done without violating existing bilateral tax treaties that aim at preventing double taxation. Recently, the Indian Central Board of Direct Taxes has signalled its intent to examine and plausibly change the existing taxation rules, which it has argued is acceptable under tax treaties as well as the Indian Income Tax laws (EY, 2019).

When bilateral tax treaties are negotiated or renegotiated, adding a general anti-avoidance rule (GAAR) would counter potential avoidance of the tax in a form that cannot be predicted in advance, while setting specific anti-avoidance rules (SAARs) would control known tax avoidance schemes.[21] It is also crucial to add adequate carve-out provisions in international investment agreements, to prevent investor–State dispute settlement tribunals from scrutinizing tax measures adopted by governments. Even when MNE tax implementation currently remains limited in a country, it is worth inserting an effective rule for controlled foreign corporations, which would restrain opportunities for profit shifting and long-term deferral of taxation using partly artificial transactions.

There are various ways in which base erosion or profit shifting can be curbed in the interim before a global tax agreement is reached. For example, the "sixth method" for transfer pricing is useful for large commodity-exporting developing countries, as it aims to establish a clear and easily administered benchmark price for transactions (Grondona, 2018). This method uses a market price (usually the futures price) to determine the arm's-length price, instead of comparing prices agreed between unrelated parties. This simple technique can limit the underreporting of export values and thereby preserve the tax base. In the same vein, setting a rule to limit interest deductions based on ratios such as debt/equity or interest/earnings would curb thin capitalization. Similarly, allowing the taxation of capital gains arising from indirect transfers of participating interests arising abroad but related to assets located in the country would also increase the country's tax base, and thus its revenues. Finally, all transactions with tax havens should be considered as being conducted between related parties and tax authorities could even consider increasing the withholding tax rates for such transactions.

2. Foregone fiscal revenue from the increasing digitalization of economic transactions

(a) Digitalization: Impacts on corporate taxation, indirect taxation and customs duties

While the analogue economy has long struggled with the damaging consequences of tax avoidance and evasion by MNEs, the rapidly increasing digitalization of economic activities has made the assumptions underlying the current international tax framework less and less relevant to determine where taxable value is created and how to measure and allocate it between countries.[22] In particular, the concept of permanent establishment, which allows a tax jurisdiction to tax profits made by non-resident companies if these companies have physical presence in the jurisdiction, cannot capture the nature of digital cross-border transactions, where physical presence is often not required. Companies without any physical presence in a tax jurisdiction can nevertheless conduct economic activities through the Internet and fragment these into several activities spread across different tax jurisdictions, using digitized business models that rely on users and sales.

Another assumption is that the allocation across jurisdictions of taxable profits made by different entities of MNEs can rely on the arm's-length principle, according to which economic transactions between associated entities are to be priced as if they were transactions between independent enterprises, as discussed in the previous section. Digitalization generates the possibility of economic transactions based on intangible assets, such as software, algorithms or intellectual property. These assets are difficult to price because of their uniqueness, which makes it challenging to determine what the taxable value of a transaction is. In addition, the increasingly intangible character of their assets makes it easier for MNEs to spread their assets across multiple tax jurisdictions and transfer both legal ownership of its intangible assets and the profits arising from their use to a holding company located in a low-tax jurisdiction. This can be done irrespective of whether this holding company is effectively involved in the development, enhancement, maintenance, protection or exploitation functions related to those intangible assets. In other words, the "digital economy exposes all the contradictions of the arm's-length principle to the extreme and demonstrates that it is no longer fit for purpose" (ICRICT, 2019a: 11).

Measurement of digital activity is a third reason why the current international tax framework is becoming less and less relevant. A large part of value creation in the digital economy relies on users, either as a source of big data in the form of personal data and user-created content – such as images, videos, text and audio that have been posted on online platforms and may attract further users – or simply as parts of ecosystems whose increasing size generates value in the form of network externalities. Measuring the resulting profits is effectively impossible because data provision and user participation generally occur at zero nominal prices.

In addition to these three challenges for the direct taxation of corporate profits, the online purchase of goods and services, such as through e-commerce platforms, also complicates indirect taxation, and especially the collection of value added taxes (VAT) and goods and services taxes (GST). Indirect taxes are generally based on the destination principle. They are eventually paid by the final consumer but collected by the supplier of the taxable goods and services. In the case of an imported tangible good, this means that VAT is collected from the importer at the same time as customs duties. In the case of imported intangibles, by contrast, the destination principle cannot be applied because there are no customs controls that can effectively confirm the transaction and impose the VAT at the point of importation.

These four aspects associated with the dematerialization and mobility features of digitalization are fundamentally at odds with the existing tax frameworks that were developed for the traditional economy. They aggravate the extent of foregone tax revenue resulting from tax planning that takes advantage of gaps in the interaction of different tax systems to reduce taxable income or shift profits, as discussed in the previous section. The resulting additional loss of tax revenue is likely to be large and increasing, for all countries, because the digitalization of the economy is growing rapidly. The spread of digitalization across the economy also means that narrowing the gap between existing tax rules and what would be required for appropriately taxing the digital sector now requires an overhaul of the entire international tax regime.

Foregone fiscal revenues from digitalization are particularly high for developing countries because they are less likely to host digital businesses but tend to be net importers of digital goods and services; corporate taxation as a share of their total tax revenues is higher than in developed countries; and VAT often is their most important source of tax revenues overall (Li, 2017; United Nations, 2019). An additional reason relates to the WTO moratorium on customs duties on electronic transmissions, which was adopted as a temporary measure in 1998 and has since been extended. Based on conservative assumptions on the development of electronic transmissions, a recent study (Banga, 2019) estimates that in 2017 this moratorium implied a loss in fiscal revenue of more than $10 billion globally, 95 per cent of which was borne by developing countries.[23] Since this estimate is based on only a small number of products and digitalization is rapidly affecting an increasing number of products, this estimate of foregone fiscal revenue could rapidly multiply.

(b) The way forward

Finding a workable system to charge VAT on digital goods and services from e-commerce is essentially a practical problem. Two approaches could be used to deal with this for imported digital transactions: (1) self-assessment by the importer under a so-called reverse-charge mechanism; and (2) a requirement for

non-resident suppliers to register for VAT purposes and to collect and remit the VAT.[24] Use of the latter approach would require the termination of the WTO moratorium and VAT could then be collected at the same time as customs duties were charged on electronic transmissions.

For corporate taxation, by contrast, reworking the existing international tax framework to allow for the location of the source of corporate profits in a digitalized economy and for their fair sharing represents a conceptual challenge. It requires reviewing many features of the current system: the nexus rules, which determine which jurisdiction has taxing rights; the profit allocation rules, which determine how cross-border transaction between different entities of MNEs are treated; and how to measure value creation when intangible assets play a key role in economic transactions and when users provide a significant part of value creation. While digitalization may merely exacerbate existing problems regarding the profit allocation rules, it creates aspects concerning the nexus rules and the determination of value creation which the existing international tax rules are unable to capture.

The efforts towards "addressing the tax challenges of the digital economy" under the BEPS project – BEPS Action 1 – have been inconclusive. The debate has supported the view that the remote and centralized operations that are characteristic of the digital economy merely exacerbate existing BEPS concerns, without presenting additional issues, unique to the digital economy (OECD, 2019a). While the BEPS project recognizes that new challenges arise concerning the collection of indirect taxes on cross-border online purchases, it recommends that countries implement the OECD International VAT/GST Guidelines (OECD, 2017). At the same time, however, the report on addressing the tax challenges of the digital economy (OECD, 2015c) concluded that further analysis was required, and it was agreed that the Task Force on the Digital Economy (TFDE) would undertake a comprehensive review on the impacts of digitalization on the nexus and profit allocation rules with a view to working towards a consensus-based solution to be presented by 2020 (Martin, 2018). At the same time, the Public Consultation Document proposes standardized rules for taxing digital companies that build on measures already proposed in the European Union and go beyond the arm's-length principle and the nexus rule based on physical presence. These proposals, further discussed below, could represent a breakthrough towards a comprehensive overhaul of existing corporate tax norms.

There are a range of options that can address the need created by digitalization to change international norms regarding corporate taxation. Arguably the most promising one is to move towards the concept of "significant economic presence".[25] This would create a taxable nexus for a company operating in a digital environment if it generates revenue from sales or transactions in the market jurisdiction and develops a "significant economic presence" from at least one of the following six activities: (1) data input by an existent user base; (2) significant volume of digital content derived from the jurisdiction; (3) billing and collection in local currency or with a local form of payment; (4) maintenance of a website in a local language; (5) responsibility for the final delivery of goods to the customer or the provision of other support services such as aftersales services or repairs and maintenance; and (6) sustained marketing and sales promotion activities.

Possibly the most important advantage of moving towards a nexus rule based on significant economic presence is that the nexus could be established based not exclusively on where, in a digital economy, the factors that produce income (assets and employees) are located (mostly in developed countries). Instead, it could take into account also where a digitalized MNE supplies goods and services and where associated sales and users generate revenues (including in developing countries). Accordingly, an inclusion of both supply- and demand-side elements would benefit not just developed but also developing countries. Moreover, it would facilitate the unitary taxation of MNEs, such as through the formulary apportionment discussed in the previous section, as it would enable the inclusion of values created from using a company's intangible assets and from user-generated content as factors in the formula, in addition to the other three factors: assets, employees and sales.

While waiting for international consensus to arise on both how to subject digital transactions to indirect taxation in line with international practice and, especially, how to redefine corporate taxation by a redefinition of nexus rules and an inclusion of user-generated value and sales, several developed and developing countries have explored temporary unilateral domestic tax measures for the digitalized economy (e.g. Committee of Experts, 2017, 2019;

Jones et al., 2018; OECD, 2018; AICPA, 2019). Policymakers in these countries may realize that the tax challenges raised by digitalization are global and, therefore, that global solutions are needed; they are probably also aware that international processes were launched precisely to avoid country-specific measures that risk causing regulatory inconsistency, uncertainty and controversy. Nevertheless, they may be resorting to temporary unilateral measures for several reasons. These include frustration with the slow progress at the international level, efforts to drive the international debate in certain directions,[26] as well as attempts to ensure economic fairness and equality of taxation for local companies competing against large MNEs that undertake digital business and generate value in their jurisdictions.

The various measures that have been adopted unilaterally partly take up options that the BEPS project had discussed without reaching agreement for its final report (OECD, 2015c). They mainly concern the following five categories (for detailed discussion, see, for example, Committee of Experts, 2017, 2019; Jones et al., 2018; OECD, 2018; AICPA, 2019): (1) virtual physical establishment measures; (2) equalization levies on Internet advertising and digital services taxes; (3) withholding taxes on certain digital transactions, such as advertising; (4) diverted profit taxes; and (5) VAT/GST type indirect taxes, based on the geographical location of the consumer market.

One example of these measures is the excise tax, equalization tax or levy that several countries, many of which are members of the European Union, have considered or actually started to apply on revenues from activities like advertising, sales and data processing and on companies that exceed a certain threshold of revenues from these digital services globally, as well as in their own tax jurisdiction.[27] This is based on the perspective that individual users generate value, that there is a particularly large gap between such user-generated value and the ability to tax it, and that this confers on a country where a user is physically located at the time of the non-financial transaction, the right to tax that value.

Given the increasing digitalization of the whole economy, there is a question of whether it is useful to develop new rules that apply only to digital transactions. There may also be concerns about undue discouragement of desirable innovation and the extension of digital goods and services to developing countries. Moreover, some have interpreted such measures as specifically targeting the large social media platforms, search engines and online marketplaces based in the United States (since the relatively high thresholds that make a company subject to the tax will tend to be exceeded only by large companies from the United States) raising the risk of ensuing restrictions on exports of domestic firms to the United States and/or double taxation of domestic firms operating in the United States.[28]

Yet, such unilateral measures provide undeniable benefits, if only because the OECD aspiration to reach a global solution by 2020 appears unlikely. Most importantly, taxing the digitalized economy extends the indirect and direct tax bases in developing countries and provides additional fiscal revenues. The level of these additional revenues will depend on country-specific regulations, such as the definition of tax rates and thresholds, and the number of individuals using the Internet, but could be substantial.

A simple estimation of potential additional tax revenues from such unilateral measures can be made based on a sample of the European Union as a whole and eight individual countries (mostly European Union members that have considered national digital taxes) for which estimations of expected revenues are available. The expected total annual revenue and the annual revenue per individual using the Internet (given in parentheses)[29] in developed countries amount to €5 billion ($13.7) in the European Union (European Commission, 2018), €300 million ($44.0) in Austria (The Economist Intelligence Unit, 2019), €500 million ($10.8) in France, €1.2 billion ($34.5) in Spain (Bloomberg Tax, 2019), £275 million to £440 million ($5.7–$9.0) in the United Kingdom (HM Treasury, 2018), €190 million ($5.9) in Italy (Reuters, 2018b); and in developing countries reach $250 million ($16.8) for Chile (The Economist Intelligence Unit, 2018), Rs5,600 million to Rs5,900 million ($0.2) in India (The Economic Times, 2018), and $10 million ($4.2) in Uruguay (Taxamo, 2019). Taking the median annual revenue per individual using the Internet for the three developing countries in the sample as the lower benchmark, $4.2, and that of the entire sample as the upper benchmark, $10.8, and combining this with the number of individuals using the Internet, the estimated potential additional annual tax revenue ranges between $11 billion and $28 billion for developing countries, of which $3.2 billion to $8.2 billion would be for China; $0.9 billion to $2.4 billion for sub-Saharan Africa; $0.5 billion to

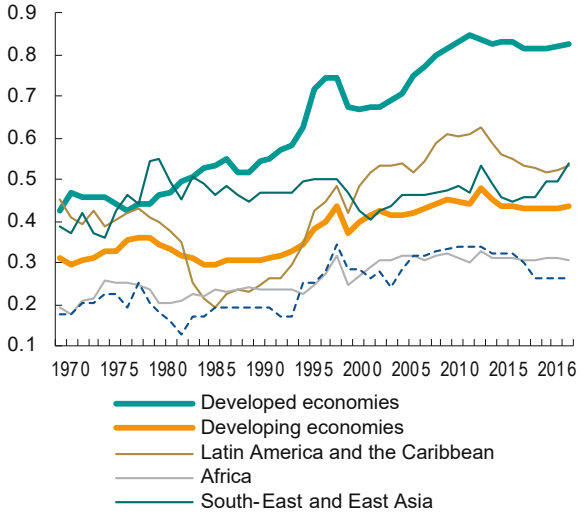
$1.1 billion for North Africa; $1.7 billion to $4.3 billion for Latin America and the Caribbean, of which $0.9 billion to $2.4 billion for Brazil and Mexico; $1.8 billion to $4.5 billion for South and South-East Asia excluding India; and $0.8 billion to $1.9 billion for the least developed countries.[30] By using these additional fiscal revenues to expand Internet connections in their economies, developing countries could continue expanding domestic resource mobilization, even though any such additional revenues must be weighed against additional compliance and administration costs.

Even recognizing the various caveats expressed above, these unilateral measures may have other advantages from a longer-term perspective. Their adoption may help to contain MNE lobbying that could unduly delay or even eventually prevent international tax frameworks to respond better to digitalization. Since the digitalized economy exposes the weaknesses in the fundamental design of the existing rules most clearly, focusing on the challenges raised by digitalization may become a means for appropriately addressing these fundamental design issues and allocating international tax revenues fairly across countries. Attaining these objectives is not possible without taking due account of developing countries' interests, as well as the capabilities of their tax administrations to effectively implement revised tax laws and norms.

C. Benefiting from private capital flows through improved regulation

This section focuses on the potential direct contribution of cross-border private capital flows[31] to external financing in developing countries. Increased net capital flows to developing countries can provide a much-needed additional source of financing; however, in many cases the associated macroeconomic imbalances – including exchange-rate overvaluation, economic overheating and asset-price inflation – have made macroeconomic management more complicated for recipient countries. An examination of countries' stock of gross external assets and gross external liabilities (i.e. a country's external balance sheet, where inflows generate gross liabilities, and outflows plus current-account surpluses generate gross assets) reveals vulnerabilities, which result from mismatches between assets and liabilities in terms of currency denomination, liquidity and investment category. Such mismatches have resulted in sizeable transfers of resources from developing to developed countries. Some developing countries have employed capital controls to tackle the macroeconomic imbalances and balance-sheet vulnerabilities associated with capital flows, and this suggests policy implications that are considered at the end of this chapter.

FIGURE 5.2 Capital-account openness, selected country groups, 1970–2016



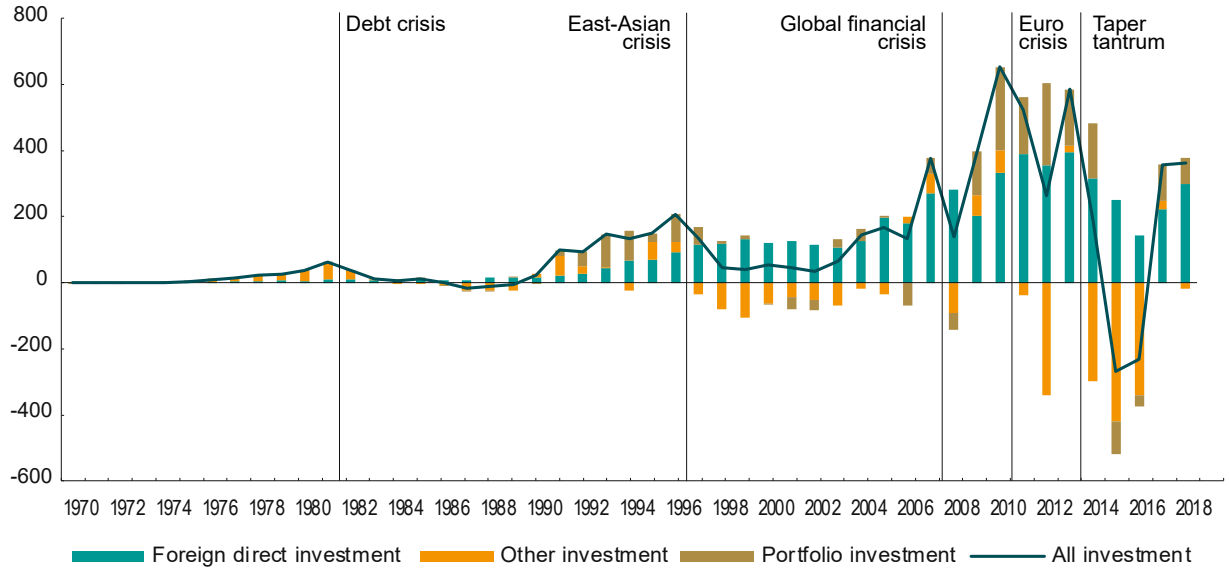
Source: UNCTAD secretariat calculations, based on Chinn and Ito, 2006, and subsequent data updates.

Note: The figure shows the normalized value of the Chinn-Ito index of capital-account openness, with a minimum value of 0 and a maximum value of 1. The data set covers 182 countries. Group numbers are unweighted averages for countries with comprehensive data.

1. Net private capital flows to developing countries: Evidence and challenges

Capital-account liberalization progressed rapidly in developed countries during the 1970s and 1980s (figure 5.2).[32] The average level of capital-account openness in developing countries has remained considerably below that of developed countries. It has also proceeded less steadily, with interruptions in Latin America and the Caribbean, following the debt crisis of the early 1980s and the Mexican crisis in 1994–1995, and in South-East and East Asia, following the 1997 Asian crisis; it peaked in 2007–2008 when the global financial crisis (GFC)

FIGURE 5.3 Selected developing countries: Net capital flows, by category, 1970–2018
(Billions of dollars)



Source: UNCTAD secretariat calculations, based on IMF International Financial Statistics.
Note: Negative values indicate outflows. The numbers shown exclude reserve asset and other official investment flows. They refer to the 31 developing countries that are included in the MSCI EFM Index and for which data are available (for the country composition of the index see https://www.msci.com/documents/10199/00e83757-9582-444f-9160-d22a4e33c5f6). Numbers for 2018 partly estimated.

triggered a moderate reversal of the liberalization trends.

The closer integration of developing countries into the international financial system has been accompanied by a sharp increase in both the level and volatility of net private capital flows to these countries (figure 5.3). Since 1970, net private capital flows to developing countries have shown four boom–bust cycles, with a first peak of $64 billion in 1980 followed by the debt crisis, a second peak of $207 billion in 1996 followed by the Asian crisis, a third peak of $378 billion in 2007 followed by the GFC, and a fourth peak of $650 billion in 2010 and $584 billion in 2013 followed by the taper tantrum, that is, the nosedive of several developing country currencies, which had soared during 2009–2012, following the mere announcement in May 2013 by the then Chair of the United States Federal Reserve that it would eventually taper off its expansionary monetary policy. Net private capital flows to developing countries even entered negative territory in 2015 and 2016, though this was largely driven by Brazil, China and the Republic of Korea.

Increased net capital flows to developing countries can be a valuable source of external financing. However, the volatility and procyclical nature of these flows complicates macroeconomic management and increases financial vulnerabilities. For example, capital inflows tend to cause an appreciation of the exchange rate and feed domestic credit booms and asset-price appreciations, boosting economic growth and attracting further capital inflows in the short term, but creating macroeconomic imbalances, such as domestic economic overheating and exchange-rate overvaluation, with adverse consequences on external competitiveness and current-account balances. Moreover, they increase financial vulnerability, as growing indebtedness and asset-price inflation combined with deteriorating current accounts eventually lead to the reversal of capital flows and, possibly, financial crisis.[33]

These risks are particularly large in developing countries because they are exposed to global financial cycles – the co-movement in global and domestic financial condition across countries – to a considerably greater extent than developed countries. A global financial cycle implies that capital flows to developing countries are generally driven more by factors external to the receiving country (such as low interest rates in developed economies, especially the United States, high commodity prices, and low global risk aversion), rather than by local factors (such as capital-account openness and strong economic growth) that may pull international capital flows towards their economies (e.g. Eichengreen

and Gupta, 2018). One recent study (Goldberg and Krogstrup, 2019) found that the sensitivity of capital flows to push factors has increased since the GFC and that global financial conditions are five times more important as determinants for capital flows to developing than to developed countries. A recent example is the "taper tantrum", mentioned above.

Another reflection of the challenges associated with financial integration is the decoupling between gross and net flows and the resulting false sense of safety that a financially integrated economy may get from a balanced current account. Prior to the GFC, for example, the euro area had an almost balanced current account but recorded massive gross capital flows with the United States. European banks used short-term loans from the United States to invest in security-backed sub-prime mortgages in the United States. Although this implied only small net flows between the United States and Europe, the gross flows made the euro area very vulnerable to collapsing asset prices from the sub-prime crisis in the United States.[34] This indicates that the current-account balance has become a less reliable measure of the evolution of a country's net foreign asset (NFA) position, as that position increasingly reflects changes in the market value of external assets and liabilities (e.g. Gourinchas and Rey, 2014; Akyüz, 2018).

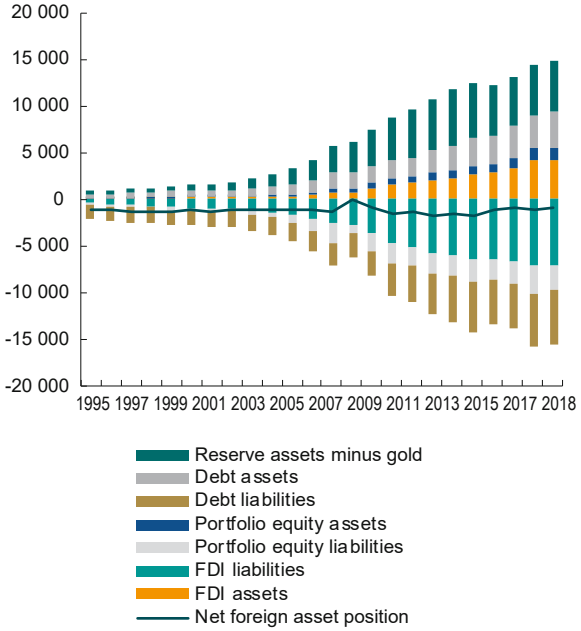
As a result of these processes, the debate on capital flows has increasingly moved from a focus on net capital flows towards an emphasis on stocks of gross external assets and liabilities.

2. Rising stocks of gross external assets and liabilities and related balance-sheet vulnerabilities

(a) Stock of gross external assets and liabilities: Recent evidence

The sharp increase in capital flows since 1995 has translated into an 8-fold increase in developing countries' stock of external liabilities and a 16-fold increase in their stock of external assets (figure 5.4).[35] This increase was interrupted only by the decline in portfolio equity and debt liabilities in both 2008 and 2015, as well as by a reduction in foreign-exchange reserves in 2015. The almost continuous increase also means that close to 95 per cent of developing countries' gross external assets and close to 90 per cent of their gross external liabilities outstanding in 2018 were accumulated since 1995.

FIGURE 5.4 Stocks of gross external assets and liabilities, group of selected developing countries, 1995–2018
(Billions of dollars)



Source: UNCTAD secretariat calculations, based on Lane and Milesi-Ferretti (2018) and International Monetary Fund International Investment Position (IIP) database.
Note: Data for 2016–2018 partly estimated. Negative numbers indicate stocks in the domestic economy held by non-residents. The numbers reflect data for the 22 developing countries that are included in the MSCI EFM Index and for which comprehensive data are available.

One implication of the strong contemporaneous expansion of gross assets and gross liabilities is that a large amount of the increase in developing countries' external assets was linked to their external liabilities, that is, they were borrowed.[36] This has been particularly related to the accumulation of foreign-exchange reserves, undertaken by developing countries with current-account surpluses, as well as those recording current-account deficits, as a form of self-insurance to prevent a sudden capital-flow reversal and/or to contain its adverse effects.[37] Another implication of this expansion is that the income receipts and payments from external stocks have become significant for the current account of developing countries' balance of payments. A deficit in net international investment income may now arise not only when their external liabilities exceed their external assets – as is the case in figure 5.4 for the group of developing countries – but also when the total rate of return on their foreign assets is below that on their foreign liabilities.

A situation when the return on gross external liabilities (i.e. investment income payments) exceeds the return on gross external assets (i.e. investment income receipts) can occur through a mismatch in the relative importance of debt and equity categories in gross external assets and gross external liabilities. Equity is generally riskier and therefore carries a higher rate of return than debt. With respect to developing countries' gross external assets (annex table 5.A.1), the period 1996–2018 saw a considerable shift from debt (foreign bond holdings, deposits held abroad and foreign-exchange reserves) to equity (foreign direct investment (FDI) and portfolio equity).[38] While the decline in the share of foreign-exchange reserves in total gross external assets is relatively small, and largely occurred in recent years, the share of debt instruments declined strongly and in many developing countries (such as Brazil, Chile, Egypt, Morocco and Turkey), even though some developing countries (such as Argentina, China, Indonesia, Malaysia and the Republic of Korea) saw a slight rebound in the importance of debt instruments in 2017–2018. By contrast, the share of direct equity in total gross external assets increased significantly, even though the share of FDI in total gross external assets is still low compared to that of low-yielding reserve assets. Moreover, this increased importance of FDI is largely due to firms that increased their FDI in other developing countries. For example, the share of developing countries in the recorded stock of outward FDI for Brazil increased from about 50 per cent in 2005–2013 to about 80 per cent in 2015–2017, in the Philippines from about 70 per cent in 2009–2012 to about 90 per cent in 2015–2017, and in South Africa from about 15 per cent in 2001–2004 to over 60 per cent in 2015–2017. China is the only developing country that saw a sizeable increase in its stock of FDI in advanced economies, from about 5 per cent prior to the GFC to about 14 per cent in 2012–2017, with the share of India also increasing from about 40 per cent in 2010–2013 to about 50 per cent in 2016–2017.[39]

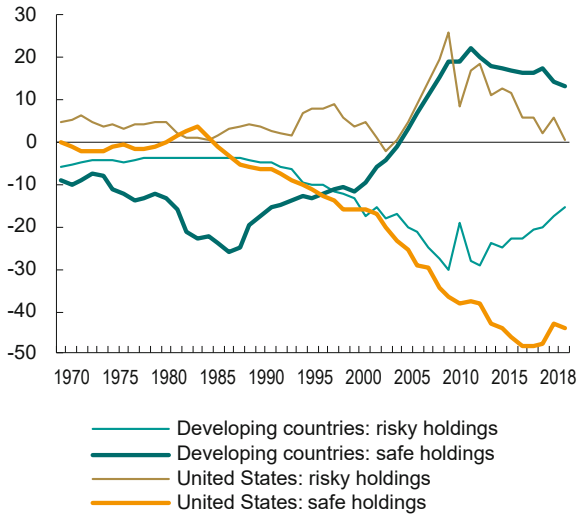
The composition of developing countries' gross external liabilities (annex table 5.A.2) also recorded a shift from debt to equity during the period 1996–2018, which was considerably larger and more widespread than that in gross external assets. This implied rising shares of both FDI and portfolio equity in developing countries' total external liabilities. Outside East Asia, much of the stock of inward FDI is owned by residents of advanced economies. This is the case for Latin America and the Caribbean, as well as for Africa until 2010, when the recorded share of other developing countries, mainly China, in the stock of inward FDI increased sizeably. This rising share of equity has been combined with a steep decline in the share of debt in total external liabilities, especially between 1996–1997 and 2010–2011. Many developing countries – notably Argentina, Egypt, Indonesia and Turkey – have seen an increase in the share of debt more recently, particularly of corporate debt, as further discussed in chapter IV of this *Report*.

Many of these changes resulted from deliberate policies that responded to the recurrent crises in the 1990s and early 2000s. Policymakers in developing countries sought to reduce the share of debt in external liabilities by liberalizing their FDI regimes and by opening their equity markets to non-residents. They also sought to reduce currency mismatches by opening bond markets to foreigners and by borrowing in domestic currencies. These changes no doubt improved the profile of developing countries' gross external liabilities and reduced susceptibility to the kind of shocks they had suffered in past crises. However, the greater presence of foreigners in bond and equity markets also increased the potential instability of exchange rates, since surges in entry and exit of non-residents affect not only asset prices but also exchange rates (for further discussion, see Akyüz, 2017).

Tables 5.A.1 and 5.A.2 also indicate that financial derivatives, especially foreign-exchange futures contracts, have assumed non-negligible shares in developing countries' external assets and liabilities. While this was mainly true of developing countries with relatively well-developed financial markets (such as Argentina, Brazil, Chile and South Africa), it nevertheless points to the increasing complexity of cross-border capital flows that involve developing countries. It also suggests that regulating capital flows is becoming increasingly complex, with country-specific features of financial markets playing an important role.

The changes in the composition of developing countries' gross external assets and liabilities shown in tables 5.A.1 and 5.A.2 have also been reflected in changes in their "net risky" and "net safe" holdings of external assets.[40] Comparing the evolution of these net positions for the United States and the developing countries covered in the two tables shows that the United States had a net positive position

FIGURE 5.5 Net risky and net safe holdings of external assets, United States and selected developing countries, 1970–2018
(Percentage of GDP)



Source: UNCTAD secretariat calculations, based on Lane and Milesi-Ferretti (2018), International Monetary Fund International Investment Position (IIP) database, and International Monetary Fund World Economic Outlook (WEO) database.

Note: Net risky holdings = (portfolio equity assets + FDI assets) – (portfolio equity liabilities + FDI liabilities); net safe holdings = reserve assets + debt assets – debt liabilities. The group of developing countries includes Argentina, Brazil, Chile, China, Egypt, India, Indonesia, Malaysia, Mexico, Morocco, Pakistan, the Philippines, the Republic of Korea, South Africa, Thailand and Turkey.

in risky assets and a net negative position in safe assets during almost the entire period 1970–2018 (figure 5.5). Being a creditor in risky and a debtor in safe external assets reflects the function of the United States as the issuer of the main reserve currency and global provider of official liquidity (*TDR 2015*). By contrast, developing countries have recorded net negative positions of risky assets during most of this period, since the increase in their stocks of FDI and portfolio equity liabilities exceeded that of FDI and portfolio equity assets. Since 2003, they have also had a net positive position in safe assets, driven by their accumulation of foreign-exchange reserves and a decline in their debt liabilities. Being creditors in safe and debtors in risky assets suggests that the returns that developing countries pay on their external liabilities are likely to exceed the returns that they earn on their external assets. In other words, this implies a net transfer of resources from developing to developed countries.

(b) Implications for the transfer of resources

To assess the direction and size of transfers of resources, it is useful to compare the yield on developing countries' gross external assets with that on their gross external liabilities, as well as total rates of return including capital gains and losses. Developing countries experienced negative yield differentials between their gross external assets and their gross external liabilities over the entire period 1995–2018 (table 5.2).[41] The average yield differential was within a relatively stable range of 2–3 per cent but was somewhat larger after than before the GFC. Moreover, the yield differential is quite similar across the 16 developing countries. The finding that China experienced a sizeable negative yield differential despite its large positive NFA position and sizeable current-account surplus may be related to the combination of a relatively low share of equity in the country's external assets and a relatively high share of equity in its external liabilities (annex tables 5.A.1–5.A.3).

For the two transition economies in table 5.2, the negative yield differentials are significantly larger than those for the developing countries, both before and after the GFC. This is true even for the Russian Federation that had a sizeably positive NFA position where, however, the share of high-yielding equity positions in its external liabilities far exceeded that in its external asset positions (annex tables 5.A.1–5.A.3).

In the four developed countries reflected in the table, by contrast, the yield differentials have on average been positive over the period 1995–2018, with this differential being slightly larger after than before the GFC. Moreover, on average, they received higher yields on their gross assets and paid lower yields on the gross liabilities than the developing and transition economies in the table.

The net effect of these yield differentials on a country's current account depends on its NFA position. Countries with a positive NFA position might be expected to record positive net international investment income streams. However, there is no clear association between a country's NFA position and the size and sign of its international income flows (annex table 5.A.3). Rates of return may differ for similar NFA positions, both because of different shares of high-yielding, risky and low-yielding, safe categories in countries' gross external assets and gross external liabilities and because of cross-country differences in returns on similar assets or liabilities related, for example, to different maturity structures and currency denominations.

TABLE 5.2 **Yields on gross external assets and liabilities, selected countries, 1995–2018**
(Percentage)

	Gross assets				Gross liabilities				Memo item: Yields on gross assets minus yields on liabilities			
	1995–2007	*2008–2009*	*2010–2018*	*1995–2018*	*1995–2007*	*2008–2009*	*2010–2018*	*1995–2018*	*1995–2007*	*2008–2009*	*2010–2018*	*1995–2018*
Developing countries												
Argentina	3.8	2.3	1.2	2.7	6.7	7.5	7.5	7.1	-2.9	-5.3	-6.3	-4.4
Brazil	3.2	2.4	2.1	2.7	6.7	6.2	4.7	5.9	-3.5	-3.7	-2.6	-3.2
Chile	3.3	3.7	2.8	3.1	8.6	11.3	6.1	7.9	-5.3	-7.6	-3.3	-4.7
China	3.2	3.8	3.3	3.3	6.9	6.3	6.3	6.6	-3.7	-2.5	-3.0	-3.3
Egypt	3.8	2.8	0.8	2.6	2.4	2.6	4.9	3.3	1.4	0.1	-4.1	-0.8
India	4.6	4.2	1.9	3.5	4.5	3.4	3.5	4.0	0.1	0.8	-1.6	-0.5
Indonesia	4.5	2.7	1.6	3.3	6.2	6.7	5.7	6.0	-1.7	-4.1	-4.1	-2.8
Malaysia	4.0	4.4	3.4	3.8	7.9	7.1	5.8	7.0	-3.9	-2.6	-2.4	-3.2
Mexico	3.4	2.1	1.8	2.7	5.4	3.4	3.8	4.6	-2.1	-1.3	-2.0	-2.0
Morocco	2.3	2.7	1.9	2.2	4.1	3.2	3.0	3.6	-1.9	-0.5	-1.0	-1.4
Pakistan	2.8	5.0	2.7	3.0	6.6	6.2	5.0	6.0	-3.8	-1.2	-2.4	-3.0
Philippines	5.9	3.5	1.6	4.1	5.1	5.2	4.5	4.9	0.8	-1.7	-2.9	-0.8
Republic of Korea	3.4	3.0	2.9	3.2	4.2	2.8	2.3	3.4	-0.8	0.2	0.6	-0.2
South Africa	3.1	1.9	1.4	2.4	5.9	4.2	3.6	4.9	-2.8	-2.3	-2.2	-2.5
Thailand	4.0	2.5	1.6	3.0	6.2	6.9	6.8	6.5	-2.2	-4.4	-5.2	-3.5
Turkey	4.9	3.4	2.4	3.8	4.9	3.3	2.3	3.8	0.0	0.1	0.1	0.1
Average	*3.8*	*3.1*	*2.1*	*3.1*	*5.8*	*5.4*	*4.7*	*5.3*	*-2.0*	*-2.3*	*-2.6*	*-2.3*
Median	*3.6*	*2.9*	*1.9*	*3.1*	*6.0*	*5.7*	*4.8*	*5.4*	*-2.4*	*-2.8*	*-2.9*	*-2.3*
Transition economies												
Kazakhstan	3.6	3.8	1.5	2.9	8.9	13.7	11.5	10.3	-5.3	-9.9	-10.0	-7.4
Russian Federation	3.2	4.2	3.3	3.3	7.2	7.7	8.0	7.5	-4.0	-3.5	-4.7	-4.2
Average	*3.4*	*4.0*	*2.4*	*3.1*	*8.1*	*10.7*	*9.7*	*8.9*	*-4.6*	*-6.7*	*-7.3*	*-5.8*
Median	*3.4*	*4.0*	*2.4*	*3.1*	*8.1*	*10.7*	*9.7*	*8.9*	*-4.6*	*-6.7*	*-7.3*	*-5.8*
Developed countries												
Germany	4.3	3.5	2.6	3.6	4.7	3.0	2.0	3.5	-0.4	0.5	0.6	0.1
Japan	3.7	3.3	3.3	3.5	2.1	1.5	1.5	1.9	1.6	1.8	1.8	1.7
United Kingdom	4.8	2.5	1.6	3.4	4.5	2.6	1.8	3.3	0.3	-0.1	-0.2	0.1
United States	*4.9*	*3.6*	*3.6*	*4.3*	*3.8*	*2.6*	*2.1*	*3.1*	*1.1*	*1.0*	*1.5*	*1.2*
Average	*4.4*	*3.2*	*2.8*	*3.7*	*3.8*	*2.4*	*1.9*	*2.9*	*0.7*	*0.8*	*0.9*	*0.8*
Median	*4.5*	*3.4*	*2.9*	*3.5*	*4.1*	*2.6*	*1.9*	*3.2*	*0.4*	*0.8*	*1.0*	*0.4*

Source: UNCTAD secretariat calculations, based on Lane and Milesi-Ferretti (2018), International Monetary Fund International Investment Position (IIP) database, and International Monetary Fund Balance of Payments (BOP) statistics.
Note: Data for 2017–2018 partly estimated.

In addition to the effects stemming from differences in the relative shares of risky and safe categories in countries' stocks of external assets and liabilities, discussed above, the yield differentials reported in table 5.2 may relate to several other factors. One such factor could be jurisdiction risk. Governments in developing countries can inflict losses on foreign creditors by defaulting on sovereign debt that is issued locally and comes under local jurisdiction (Du and Schreger, 2016). Perhaps more importantly, developing country currencies usually do not, or only marginally, perform the three international functions of money: unit of account (invoicing currency); medium of payment (transaction currency); and store of value (investment and reserve currency). In the current international monetary system, all three functions are performed by the dollar, with some of the functions partially performed by a range of currencies from other advanced economies.[42] Differences in the ability of currencies to perform these three functions make them acquire different degrees of liquidity, with the dollar being the most liquid currency and positioned at the top of what has been called "currency pyramid" (Cohen, 1998) or "currency hierarchy" (Andrade and Prates, 2013; Kaltenbrunner, 2015). Currencies of other core developed countries occupy intermediate ranks, and currencies of developing countries are at the bottom. To compensate for differences in liquidity, assets in less liquid currencies need to offer higher total returns to be attractive to international investors. Developing countries can achieve this by offering a higher yield (such as from higher interest rates) or higher capital gains (such as from asset-price or exchange-rate appreciation) on

comparable assets offered in developed countries and/or by changing the composition of their external liabilities towards a higher share of riskier, and thus higher yielding, categories. However, doing so augments developing countries' exposure to push factors of global financial cycles and associated macroeconomic and financial vulnerabilities. Moreover, it tends to cause negative net income streams from their gross external assets and liabilities and associated net resource transfers to developed countries.

Turning to total rates of return including capital gains and losses, valuation changes on gross external assets and gross external liabilities can arise from changes in asset prices or exchange rates, as well as from a change in the relative shares of assets and liabilities denominated in domestic and foreign currency. While systematic and comprehensive data on the currency denomination of countries' external assets and liabilities are not available, a recent study (Akyüz, 2018) that looks at several individual countries and investment categories concludes that (1) the United States generally holds external assets in foreign currency and external liabilities in dollars; (2) other advanced countries hold most external assets in foreign currencies and most external liabilities in domestic currencies with, however, also a substantial part held in dollars; (3) developing countries tend to hold external equity and debt assets in foreign currencies, while external equity and an increasing part of debt liabilities are denominated in the domestic currency; the latter is a result of the opening of deposit and bond markets to foreigners, growing private sector debt pressures on

TABLE 5.3 **Total rates of return on gross external assets and liabilities, selected countries, 1995–2018**
(Percentage)

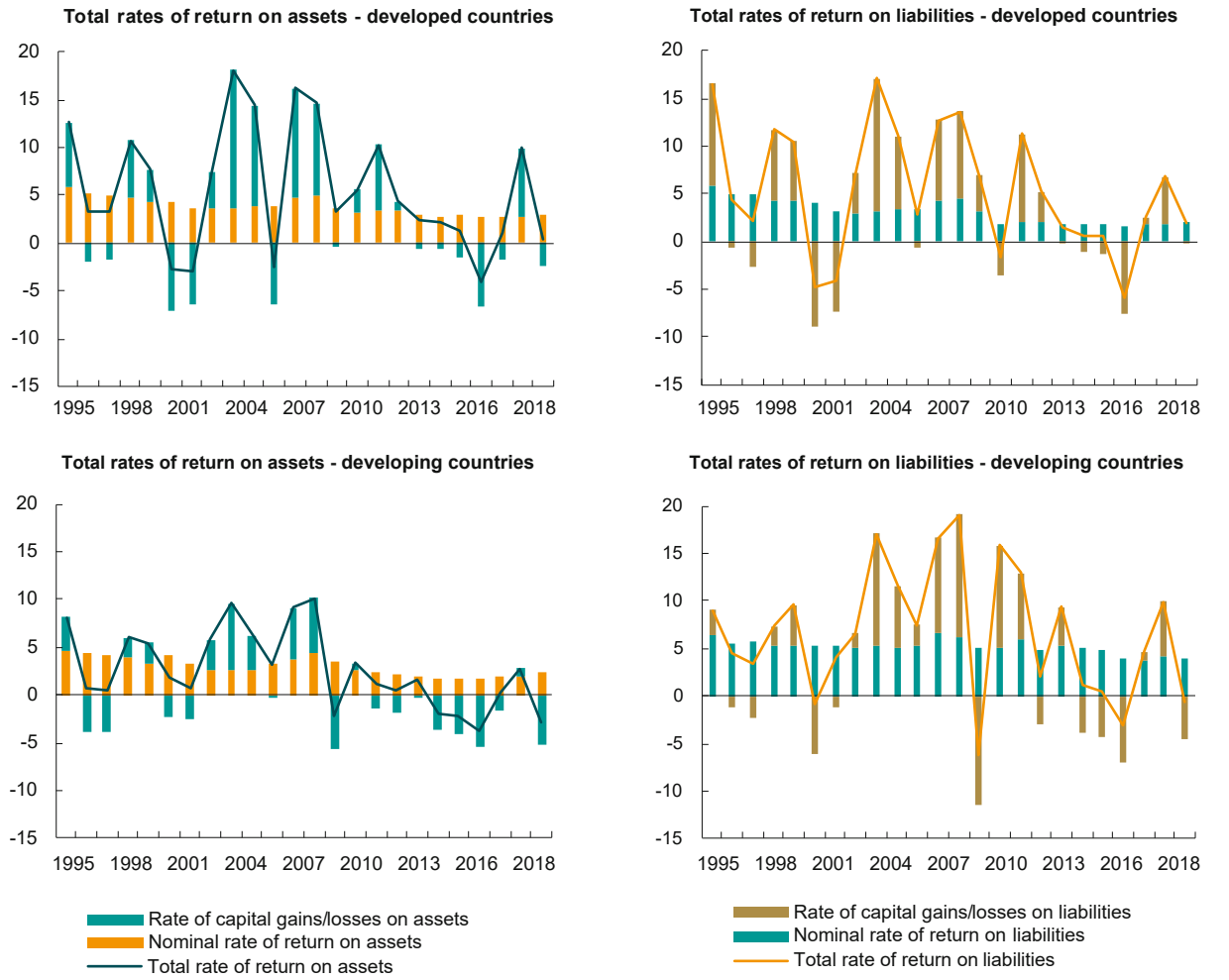
	Gross assets				*Gross liabilities*				*Memo item: Total return on gross assets minus total return on gross liabilities*			
	1995–2007	*2008–2009*	*2010–2018*	*1995–2018*	*1995–2007*	*2008–2009*	*2010–2018*	*1995–2018*	*1995–2007*	*2008–2009*	*2010–2018*	*1995–2018*
Developing countries												
Argentina	5.0	-0.6	0.4	2.8	5.2	3.3	2.1	3.9	-0.2	-3.8	-1.7	-1.1
Brazil	4.3	-0.4	-0.9	1.9	10.2	11.1	0.6	6.7	-6.0	-11.5	-1.6	-4.8
Chile	4.4	-1.6	1.9	3.0	8.4	11.7	5.7	7.6	-4.0	-13.3	-3.7	-4.7
China	0.0	3.0	0.7	0.5	7.1	14.0	6.5	7.4	-7.1	-11.0	-5.9	-6.9
Egypt	2.8	-4.2	-10.4	-2.7	3.2	5.0	4.3	3.7	-0.4	-9.2	-14.7	-6.5
India	4.2	1.8	-7.3	-0.3	8.4	2.5	-2.9	3.7	-4.3	-0.7	-4.4	-4.0
Indonesia	8.3	-14.1	2.2	4.2	11.3	12.7	6.3	9.6	-3.0	-26.8	-4.1	-5.4
Malaysia	1.5	-3.2	-2.3	-0.3	12.8	7.9	6.8	10.1	-11.3	-11.1	-9.0	-10.4
Mexico	11.1	-4.4	-1.6	5.0	8.9	-2.9	3.0	5.7	2.2	-1.6	-4.7	-0.7
Morocco	14.2	7.2	6.0	10.6	12.6	8.3	3.6	8.9	1.6	-1.1	2.5	1.7
Pakistan	21.3	16.1	1.8	13.5	10.1	2.1	5.7	7.8	11.2	14.0	-3.9	5.8
Philippines	2.3	5.8	-0.9	1.4	5.3	3.7	6.3	5.5	-2.9	2.1	-7.3	-4.2
Republic of Korea	1.6	0.3	2.9	2.0	9.3	-1.2	5.2	6.9	-7.7	1.5	-2.3	-4.9
South Africa	9.0	11.3	7.1	8.5	11.3	5.3	3.7	8.0	-2.3	6.0	3.4	0.5
Thailand	7.6	7.7	-1.6	4.2	8.9	5.2	11.8	9.7	-1.3	2.5	-13.4	-5.5
Turkey	9.3	5.5	3.1	6.7	11.6	-3.1	-2.1	5.2	-2.3	8.6	5.2	1.4
Average	*6.7*	*1.9*	*0.1*	*3.8*	*9.0*	*5.4*	*4.2*	*6.9*	*-2.4*	*-3.5*	*-4.1*	*-3.1*
Median	*4.7*	*1.1*	*0.5*	*2.9*	*9.1*	*5.1*	*4.7*	*7.2*	*-4.4*	*-4.1*	*-4.2*	*-4.3*
Transition economies												
Kazakhstan	-19.3	-0.9	-1.8	-11.2	14.9	11.2	10.1	12.8	-34.3	-12.1	-11.9	-24.0
Russian Federation	-0.1	-9.7	-2.6	-1.9	16.5	-2.5	6.0	11.0	-16.6	-7.1	-8.6	-12.8
Average	*-9.7*	*-5.3*	*-2.2*	*-6.5*	*15.7*	*4.3*	*8.0*	*11.9*	*-25.4*	*-9.6*	*-10.2*	*-18.4*
Median	*-9.7*	*-5.3*	*-2.2*	*-6.5*	*15.7*	*4.3*	*8.0*	*11.9*	*-25.4*	*-9.6*	*-10.2*	*-18.4*
Developed countries												
Germany	6.5	-0.4	1.6	4.1	7.7	0.5	2.2	5.0	-1.2	-0.9	-0.6	-1.0
Japan	3.2	8.0	2.6	3.4	2.9	3.0	3.1	3.0	0.3	4.9	-0.5	0.4
United Kingdom	9.9	1.7	1.8	6.2	9.6	1.2	1.5	5.9	0.2	0.6	0.3	0.3
United States	*12.3*	*1.0*	*5.3*	*8.7*	*7.8*	*1.2*	*4.3*	*5.9*	*4.5*	*-0.2*	*1.0*	*2.8*
Average	*8.0*	*2.6*	*2.8*	*5.6*	*7.0*	*1.5*	*2.8*	*5.0*	*1.0*	*1.1*	*0.1*	*0.6*
Median	*8.2*	*1.4*	*2.2*	*5.1*	*7.7*	*1.2*	*2.6*	*5.5*	*0.4*	*0.2*	*-0.4*	*-0.3*

Source: See table 5.2.
Note: See table 5.2.

domestic markets, and the increased willingness of international lenders to assume exchange-rate risks in return for significantly higher yields than they could obtain in advanced economies; (4) combined, this suggests for developing countries that a rising share of their external liabilities is denominated in domestic currencies (given the high and increasing share of direct and portfolio equity in total external liabilities) and that their net domestic currency position – gross assets minus gross liabilities denominated in domestic currency – is likely to be negative (given that all equity liabilities and part of external debt are in the domestic currency while external equity and debt assets are predominantly in foreign currency). Since advanced economies do not borrow in developing country currencies but have large stocks of equity in these currencies, this implies that "currency appreciations in … [developing] economies would generate capital losses and deteriorate their NFA positions while bringing capital gains for advanced economy holders of their local-currency assets" (Akyüz, 2018: 24). What is more, these valuation effects from exchange-rate appreciations could trigger portfolio inflows that may create price changes in the form of assets price bubbles and further upward pressure on the domestic currency, which together would result in further valuation gains for holders of equity liabilities denominated in domestic currency. It would also increase a country's vulnerability to a sudden stop or reversal of capital inflows and to currency depreciation.

The evidence for total rates of return including capital gains and losses (table 5.3)[43] largely shows

FIGURE 5.6 Total rates of return on gross external assets and liabilities, selected country groups, 1995–2018
(Percentage)



Source: See table 5.2.
Note: Data for 2017 and 2018 partly estimated. Group numbers are medians. For the composition of country groups, see table 5.2.

the same pattern as that for yield differentials, discussed above: total rates of return are negative for developing countries, and particularly for transition economies, while they are positive for developed countries.[44] Over the period 1995–2018, the return differential between assets and liabilities for the 16 developing countries in the table taken as a group is about -3.1 to -4.3 per cent, with about two thirds of it due to yield differentials (table 5.2) and the rest due to valuation changes. Moreover, the total rates of return on developed countries' gross external assets are larger and those on their gross external liabilities smaller than those for developing and transition economies. For the period 1995–2018, on average, developing countries earned about 2 percentage points less on their gross external assets and paid about 2 percentage points more on their gross external liabilities than developed countries, implying a total return differential of about -4 percentage points between developing and developed countries.[45] Among the developed countries, the United States achieved by far the most favourable total return on its external balance sheet.

By contrast, group average and median numbers for total rates of return diverge more than for yield differentials, indicating significant cross-country differences in capital gains and losses. Significant fluctuations in capital gains and losses over time are also reflected in the significant annual variability in median group total returns (figure 5.6).

The changes in the composition of developing countries' gross external assets and liabilities, combined with the currency denomination of the related investment categories, imply that developing countries are exposed to valuation losses on their external balance sheets and that they pay higher returns on their external liabilities than they earn on their external assets. For this return differential not to entail a deficit on their international investment income account and a transfer of resources to developed countries, developing countries would either need to have a strongly positive NFA position or run a trade surplus large enough to offset the deficit on investment income and attain a current-account balance. However, developing countries as a group do not have a strongly positive NFA position (annex table 5.A.3) and the current low-growth environment in developed countries, combined with the strong decline of commodity prices from their pre-GFC levels, offers only bleak prospects for them to attain a sizeable trade surplus.

This discussion highlights a significant and underrecognized area of concern with the international capital market integration of developing countries. The liberalization of private capital flows by developing countries obviously increases their macroeconomic and financial vulnerability to boom–bust cycles in international capital flows. But in addition, it also implies that yield differentials and changes in interest rates, asset prices and exchange rates in major advanced economies alter the value of developing countries' stocks of gross international assets and liabilities. This causes a transfer of resources from developing countries that largely goes to developed countries because, as discussed above, developing countries' assets and liabilities are predominantly with developed countries. For the period 2000–2018, the 16 developing countries examined here recorded just such a resource transfer, amounting to about $440 billion on average per year, equivalent to about 2.2 per cent of these countries' GDP.

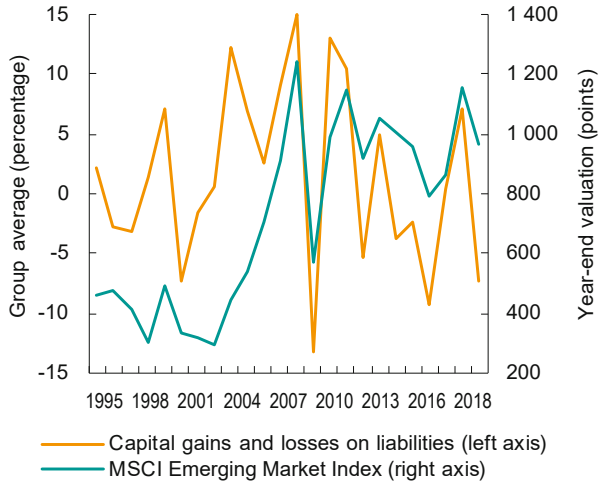
This has utmost damaging implications for the persistent belief that financial integration into global private capital markets is a vital and desirable strategy for developing countries to attract foreign savings so as to meet their development goals. Instead, it appears that on balance such integration has been associated with a net outflow of potentially investible resources, driven by both stock and flow variables in the balance of payments.

3. Potential implications of a greater involvement of institutional investors

Mobilizing institutional investors – pension funds, insurance companies, mutual funds and sovereign wealth funds – including through the creation of a large asset class, mainly for infrastructure, has recently been highlighted as carrying significant potential for development finance (see chapter II).

As institutional investors have very large funds and a relatively long-term horizon, they could be expected to adopt buy-and-hold strategies and provide stable and long-term finance to developing countries (Della Croce et al., 2011). However, a recent survey of evidence on institutional investors' actual investment patterns (Abraham and Schmukler, 2018) indicates that they tend to engage in momentum trading and herding, resulting in their investments being procyclical and often transmitting shocks originating

FIGURE 5.7 Group of selected developing countries: Valuation effects in gross external liabilities and the MSCI Emerging Markets Equity Index, 1995–2018



Source: UNCTAD secretariat calculations, based on Lane and Milesi-Ferretti (2018), International Monetary Fund International Investment Position (IIP) database, International Monetary Fund Balance of Payments (BOP) statistics, and Thompson Reuters data.

Note: Data for 2017–2018 partly estimated. The numbers in the figure reflect the annual averages of valuation effects in the 16 developing countries' gross external liabilities shown in table 5.A.2 and the year-end quote of the MSCI Emerging Markets Equity Index. Data for the MSCI EFM Index are available only from June 2004 but closely trace the data for the MSCI Emerging Market Index (https://www.msci.com/documents/10199/00e83757-9582-444f-9160-d22a4e33c5f6).

in their home countries. One reason for this is that institutional investors often adopt passive, index-driven investment, with the volume of their assets benchmarked against emerging market bonds or an MSCI Emerging and Frontier Markets Equity Index (MSCI EFM Index). As such, their investment patterns are very sensitive to global financial cycles and their determinants, such as global risk appetite and (expected) movements in United States monetary policy and the dollar. One effect of the specific investment patterns of institutional investors may be the increased sensitivity of developing countries' capital gains and losses to movements in the MSCI EFM Index, with the correlation coefficient between this index and valuation changes in developing countries' gross external liabilities reaching 0.7 for the period 2009–2018 (figure 5.7).[46]

The tendency of institutional investors to engage in momentum trading and herding would probably cause an increased involvement of institutional investors in developing countries' capital flows to exacerbate the instability of asset prices and exchange rates in developing countries, while attempts to attract them through offering high yields will tend to exacerbate resource transfers from developing to developed countries, as discussed in the previous section.[47] To contain these risks, developing countries, especially those with large negative NFA positions and persistent current-account deficits (i.e. those most in need of additional sources of sustainable external financing) will need to reduce their exposure to capital flows and improve their NFA positions. Capital controls could greatly support these countries' attempts to influence the size and composition of their external balance sheets.

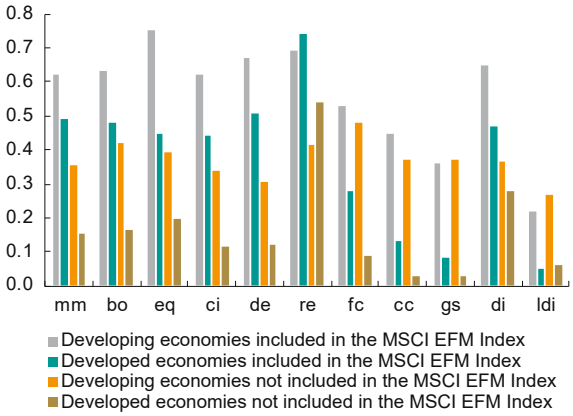
4. The use of capital controls to regulate international capital flows

The usefulness of capital controls has now become widely recognized, especially to deal with capital-flow surges and ensure that the recipient economy remains resilient when flows recede or reverse and when changes in international financial conditions affect the valuation and returns profile of a country's external balance sheet.[48] While dissenting voices (e.g. *TDR 1998*; Stiglitz, 2002) had long existed, the received wisdom prior to the GFC was that developing countries should allow their currencies to appreciate in the face of capital inflows. This should be combined with fiscal policy tightening, if there was a risk of economic overheating; foreign-exchange intervention to counter very short-term market volatility; capital requirement for banks to contain domestic credit expansion; and deepening of domestic financial markets to reduce financial sector volatility. Using capital controls to control the volume and composition of capital flows directly had no place in this view.

A more favourable look at capital controls draws on the mounting empirical evidence indicating that there is no clear positive relationship between capital-account liberalization and economic growth (e.g. Jeanne et al., 2012). Studies also indicate that those nations that had regulated capital flows were among the least hard hit during the GFC, and in the post-crisis period grew faster than countries that had not regulated cross-border finance (Ghosh et al., 2017).

Another part relates to the development of a new welfare economics of capital controls (Jeanne and Korinek, 2010; Korinek, 2011). This approach makes a case for temporary capital-account regulations that internalize externalities by aligning private and

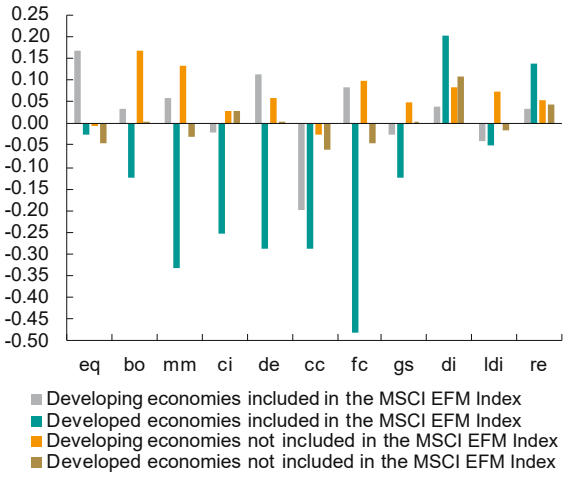
FIGURE 5.8 Proportion of observations with capital controls on inflows, by asset category and selected country groups, 1995–2016



Source: UNCTAD secretariat calculations, based on Fernandez et al., 2016.

Note: The group "Developing economies included in the MSCI EFM Index" comprises the 31 developing economies included in both Fernandez et al., 2016, and the MSCI EFM Index; the group "Developed economies included in the MSCI EFM Index" comprises the six developed countries included in the index and in Fernandez et al., 2016; the group "Developing economies not included in the MSCI EFM Index" comprises 30 economies (Algeria, Angola, Bolivia (Plurinational State of), Brunei Darussalam, Burkina Faso, Costa Rica, Côte d'Ivoire, the Dominican Republic, Ecuador, El Salvador, Eswatini, Ethiopia, Ghana, Guatemala, Islamic Republic of Iran, Jamaica, Myanmar, Nicaragua, Panama, Paraguay, Saudi Arabia, Singapore, Togo, Uganda, United Republic of Tanzania, Uruguay, Venezuela (Bolivarian Republic of), Yemen, Zambia, Hong Kong (China)); the group "Developed economies not included in the MSCI EFM Index" comprises 26 economies (Australia, Austria, Belgium, Bulgaria, Canada, Cyprus, Denmark, Finland, France, Germany, Iceland, Ireland, Israel, Italy, Japan, Latvia, Malta, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, United States). Group numbers are unweighted averages. mm = money market instruments (debt instruments with maturity of 1 year or less); bo = bonds (debt instruments with maturity longer than 1 year); eq = equities; ci = collective investments; de = derivatives; re = real estate; fc = financial credit; cc = commercial credit; gs = guarantees and sureties; di = direct investments; ldi = liquidation of direct investments.

FIGURE 5.9 Change in the proportion of observations with capital controls on inflows, by asset category and selected country groups, 1995–2004 and 2009–2016



Source: See figure 5.8.

Note: See figure 5.8.

social costs of capital flows, thereby correcting for market failures and restoring efficient market equilibrium.[49] From this perspective, capital controls are not considered distortionary but as making markets work better.[50]

In particular, it has been suggested that capital controls should be used countercyclically, especially limiting inflows during good times, as well as such that they steer inflows towards less volatile categories, such as FDI (e.g. Jeanne and Korinek, 2010; Benigno et al., 2016; Erten and Ocampo, 2017; Ghosh et al., 2017). The question then is to what extent developing countries have used capital controls and how effective they have been.

An examination of capital controls by asset category and direction of flow, aggregated across country groups and the period 1995–2016, shows that those developed and developing countries that are included in indices that international private and institutional investors often use, such as the MSCI EFM Index, employ controls on capital inflows to a larger extent than countries not included in such indices; and this is true for the vast majority of asset categories (figure 5.8).[51] This indicates that policymakers in all these countries use capital controls to address macroeconomic and financial vulnerabilities. Moreover, apart from real estate, the prevalence of capital controls in these countries is highest in those categories that are usually associated with portfolio investment – such as equities, derivatives, bonds and money market instruments. The fact that, except for real estate, capital controls are more prevalent in developing than in developed countries, independently of whether they are included in the MSCI EFM Index, may reflect their particularly high exposure to global financial cycles.

It is also interesting to see that changes in the prevalence of capital controls by asset category between the period prior to the drop in the use of capital controls in 2005 (Fernandez et al., 2016) and the period following the GFC significantly differ in those countries included in the MSCI EFM Index from those in the other countries (figure 5.9). While the developing countries included in the MSCI EFM

Index increased the prevalence of controls on capital inflows particularly in equities and derivatives, other developing countries focused on bonds and money market instruments. Again, this may closely correspond to the ways in which developing countries are included in the portfolios of international private and institutional investors.

In order to supplement evidence based on the low-frequency nature of publicly available data, some country-specific studies have used specifically constructed higher frequency data. Two such studies find that a consistent trend towards capital-account liberalization remains and that most developing countries change capital controls rather infrequently and prioritize monetary policy adjustments, macroprudential measures, exchange-rate adjustments and intervention in foreign-exchange markets to respond to capital-flow cycles (Ghosh et al., 2017; Gupta and Masetti, 2018). However, exchange-rate appreciation and tighter monetary and fiscal policies risk creating a deflationary macroeconomic environment with adverse impacts on investment and development.

Brazil has been identified as being particularly active in calibrating its controls to surges in capital inflows, adjusting them both before the GFC and in the post-GFC environment of abundant global liquidity; and Indonesia and the Philippines also imposed or tightened inflow controls during these periods (Ghosh et al., 2017). Another study adds that the Republic of Korea also significantly tightened its controls on capital inflows, whereas Chile and South Africa did not use capital controls as countercyclical policy instruments even though they were facing similar surges in capital inflows (Gallagher, 2015). This indicates the prevalence of country-specific factors on the appetite for the countercyclical use of capital controls, as further discussed below.

Various assessments of the effectiveness of capital controls indicate that these measures were a partial success.[52] For example, those nations that had regulated capital flows were among the least hard hit during the GFC and in the post-crisis period grew faster than countries that had not regulated cross-border finance (Ghosh et al., 2017). Moreover, an often quoted meta study, drawing on close to 40 empirical studies of capital controls, indicates that controls on capital inflows "seem to make monetary policy more independent [by introducing a wedge between domestic and international interest rates] and alter the composition of capital flows [towards less volatile categories]; there is less evidence that they reduce [pressure towards an appreciation of the] real exchange rate" and capital controls seem to have little impact on the volume of inflows (Magud et al., 2018: 3–4).

Variation in the effectiveness of capital controls may depend on accompanying structural, macroeconomic and institutional factors. For example, country-specific institutional arrangements can accentuate the general difficulty in distinguishing between short-term capital and FDI.[53] Moreover, the constraints posed by regulation may be too weak relative to the capital gains or variations in returns that international investors expect to realize from exchange-rate changes and interest rate differentials. This will be the case especially in the absence of controls on capital outflows in advanced economies.

5. Policy implications

Capital-account liberalization has made private capital flows an increasingly important source of external financing. This has caused greater exposure of developing countries to global financial cycles, whereby the inherent volatility of capital flows tends to widen macroeconomic imbalances, create financial vulnerabilities and impair monetary autonomy. Under the current set-up of the international monetary and financial system, developing countries have addressed these tendencies by accumulating external assets, usually in the form of short-term dollar-denominated bonds, as self-insurance to prevent a sudden capital-flow reversal and/or to contain its adverse effects. However, the return differentials between safe external assets held to insure against risky external liabilities creates a resource transfer from developing to developed countries which, for the period 2000–2018 and the 16 developing countries examined in this chapter, amounted to roughly $440 billion a year, or 2.2 per cent of these countries' GDP.[54]

Much of the yield differentials that, in addition to impacts from valuation changes, underlie this resource transfer, result from the fact that developing country currencies occupy the lower rungs on the international currency hierarchy, forcing them to offer a premium on the assets held in their countries. These are systemic problems of the international monetary and financial architecture that should be tackled

as such. Creating a developing country asset class and mobilizing significantly greater private sector participation would aggravate these problems.

One important response to these systemic problems would be recognizing capital controls as an essential part of the macroeconomic policy toolkit. This would make them comprehensive and long-lasting regulations on cross-border finance, rather than just temporary and narrowly targeted. It would also enable their use as changes in domestic and international macroeconomic and financial conditions warrant regulating both the volume of capital flows in a countercyclical way and their composition, including with a view to reducing currency, liquidity and investment category mismatches between gross external assets and gross external liabilities that are at the heart of the resource transfer issues, emphasized in this section.

The new institutional view of the IMF is a step in the right direction (see also Gallagher and Ocampo, 2013).[55] Based on multilateral consensus, it recognizes that capital-account liberalization should be sequenced, gradual and not the same for all countries at all times. It also acknowledges that capital controls form a legitimate part of the policy toolkit, stating that, in addition to their potential benefits, capital flows carry risks, and that "there is no presumption that full liberalization is an appropriate goal for all countries at all times" (IMF, 2012: 13).

However, if capital controls are considered only as measures of "last resort" – that is, after macroeconomic adjustments such as accumulating reserves, letting currencies appreciate and tightening fiscal policy – this in effect maintains capital-account liberalization as a policy goal. This approach fails to acknowledge the lack of a strong correlation between capital-account liberalization and growth, especially in developing countries. It also downplays the partial overlap and mutual reinforcement between capital controls and prudential policies. Most importantly, developing countries need multiple instruments without preconditions for their use. These instruments should combine macroeconomic policies that secure economic growth and sustainable macroeconomic and external conditions with prudential policies, comprehensive and lasting capital controls, and other regulatory measures (such as the regulation of foreign-exchange derivatives) that insulate domestic conditions from externally generated destabilizing pressures.[56] Such insulating measures, including capital controls, will need to be country specific, determined by the nature and degree of a country's financial openness and by the institutional set-up of its financial system.

Many developing countries currently lack the institutional set-up required for effective monitoring of capital controls. They may also fear that their adoption may be perceived by international financial markets as a signal that an economy's underlying problems are worse than anticipated (Gupta and Masetti, 2018). By contrast, having in place legislation providing for comprehensive and lasting capital controls allows policymakers to act quickly and avoid lengthy debates and procedures especially during surges of capital inflows when the build-up of macroeconomic and financial vulnerabilities is greatest and when the political forces against regulation tend to be strongest.[57] Two factors could significantly facilitate the policymakers' task in this respect: (1) gaining the backing of domestic economic agents, such as exporters, that are more interested in a competitive exchange rate than in access to global finance,[58] as well as by the general public that may have a collective memory of the adverse impacts of past boom–bust cycles of capital flows in their own and other developing countries; and (2) designing capital controls in the context of prudential measures, such as by casting them in the accepted discourse of the new welfare economics of capital controls and the need for macroprudential regulations. This could appease decision makers in global economic governance institutions such as the IMF and the WTO, as well as international financial markets, thereby alleviating fears, particularly in countries with chronic current-account deficits, that controlling capital inflows would impede long-term access to international capital markets.[59]

To enhance the effectiveness of these domestic policies, two measures at the international level seem to be indispensable. First, policymakers' ability to use capital controls requires keeping capital-account management out of the purview of regional and bilateral trade and investment agreements, or at least establishing safeguards in such agreements that grant countries the right to regulate capital flows without conflicting with their contractual commitments. Combined with developing countries' enhanced use of existing exceptions for prudential measures in WTO agreements, such safeguards would considerably ease the use of capital controls as ordinary policy tools.[60]

Second, capital controls would be significantly more effective if capital flows were controlled at both ends. This could be achieved through multilateral endorsement of specific cooperative mechanisms, as Keynes and White envisaged when framing the Bretton Woods system (Helleiner, 2015).[61] Such mechanisms would particularly help recipient countries with limited capability for the enactment of capital controls, either for lack of institutional capacity or because of legal constraints, such as from trade and investment agreements. Source-country governments may have an incentive to regulate outflows to enhance the effectiveness of accommodative monetary policy by steering credit towards productive investment in their economies and preventing a leakage of monetary stimulus into financial investment abroad. Moreover, regulating capital outflows would contain damage from a potential financial crisis in a recipient country to systemically important financial institutions in source countries, especially once the international community recognizes statutory debt restructuring as a legitimate tool to resolve crises and share the burden between creditors and debtors. Finally, coordinating capital controls might achieve a given reduction in capital flows from relatively lower levels of restrictions at both ends, instead of stricter controls at one end (Ghosh et al., 2017). Such coordination may build on the reciprocity that Basel III mandates in the application of countercyclical capital buffers but could also result from broadening the notion of containing "undesirable" financial flows that was discussed in section B. If it is recognized that such changes may be essential for achieving the Sustainable Development Goals, this may provide additional motivation for their enactment.

Notes

1 Apart from providing highly preferential tax regimes, tax havens often excel in financial secrecy, which facilitates IFFs.

2 Tax-motivated IFFs associated with MNEs primarily relate to tax schemes that go against the spirit though not necessarily against the letter of the law and, thus, are sometimes dubbed "aggressive tax planning" or "tax avoidance". This contrasts with tax evasion and tax fraud, which are illegal. The frontier between what is considered legal and illegal is, however, often blurred in practice. Tax-motivated IFFs by MNEs fall mostly under three broad categories: (1) manipulation of intragroup export and import prices (either services or goods), commonly referred as trade mispricing; (2) excessive intragroup interest deductions, also known as thin capitalization; and (3) strategic location of intangibles. *TDR 2014* discusses the key concepts related to such IFFs and its mechanisms in detail. Shaxson (2019) discusses the various definitions of IFFs and corporate tax avoidance, as well as the grey areas that surround the notion of tax avoidance, evasion, etc.

3 As Cobham and Janský (2018: 221) acknowledge: "The real breakthrough […] is likely to come only when multinationals' country-by-country reporting data are made public".

4 This figure refers to the United Nations grouping classification, not the OECD grouping categories these authors refer to. It is based on Tørsløv et al. (2018: Online table C4d).

5 Forstater, 2015, however, expresses general scepticism as to how much revenues governments could plausibly tap by addressing IFFs.

6 A report by the OECD/G20 Inclusive Framework on BEPS on the current state of play in progressing its mandate, covering the period from July 2017 to June 2018 is available at http://www.oecd.org/tax/beps/inclusive-framework-on-beps-progress-report-july-2017-june-2018.pdf (accessed 3 July 2019). Additionally, the EY Global Tax Alert articles – available at https://www.ey.com/gl/en/services/tax/oecd-base-erosion-and-profit-shifting-project (accessed 3 July 2019) – allow keeping track of the fast-moving developments related to the BEPS project.

7 For an updated list see http://www.oecd.org/tax/transparency/AEOI-commitments.pdf (accessed 3 July 2019).

8 Adopting this measure also implied a transformation of the Global Forum, a multilateral structure that was created in 2000 and whose membership broadened in 2009 when several developing countries, including small low-tax jurisdiction, were included. The Global Forum, whose membership counted 154 countries in June 2019, aims at: (1) peer-reviewing members' adherence to their commitment to implement

the standard of transparency and exchange of information, and (2) establishing a level playing field, even among members that have not joined the Framework.

9 As this process began in 2018 for the 2016 tax year, further evidence will be required in the coming years to assess the impact of these measures.

10 See ICRICT (2019a: Box 1) for further assessment. The United Nations Committee of Experts on International Cooperation in Tax Matters has undertaken several initiatives to address specific concerns of developing countries; information on the Committee and its publications are available at https://www.un.org/esa/ffd/ffd-follow-up/tax-committee.html (accessed 3 July 2019).

11 In the context of rising arbitral disputes of tax-related measures between States and private investors, Uribe and Montes (2019) analyse carve-out provisions incorporated in international investment agreements (IIAs) and their effectiveness with regard to restricting the protection and dispute settlement provisions of IIAs only to non-tax-related claims. The authors find that even in cases where taxation carve-out provisions have been incorporated into IIAs, investor–State dispute settlement (ISDS) tribunals have scrutinized tax measures adopted by States and, in some instances, even determined that domestic tax measures breach the State's obligations under the agreement.

12 For a discussion of specific cases where non-binding principles, initially discussed on a "without prejudice" basis under the BEPS project, became binding even to countries that had not fully endorsed these principles, see e.g. Beyer, 2018; and Victor, forthcoming.

13 OECD, 2015b, finds that revenue loss from tax avoidance might be as high as 10 per cent of global corporate tax revenues. Rough calculations presented in IMF (2019: 11) suggest that this is approximately equivalent to a cut in statutory corporate income rate of around 2.5 percentage points, assuming an initial average rate of 25 per cent – which was approximately the one that developed countries had registered since 2005 (figure 5.1). However, in comparing with earlier periods one would find that tax avoidance has only been a fraction of the observed cut of statutory tax rate since 2000. Starting earlier would provide even greater estimates as standard tax competition, which appears primarily in declining statutory corporate tax rates, started way before this cut-off date. Between 1985 and 2018, the global average statutory corporate tax rate has fallen by more than half, from 49 to 24 per cent (Tørsløv et al., 2018). This would be about five times the tax avoidance if one assumes an initial rate about 50 per cent (whose 10 per cent amounts to a 5-percentage-point reduction, compared to the 25 percentage points observed during this period). Yet, this estimate could be a lower benchmark, given that numerous MNEs have been granted special tax incentives, further reducing effective corporate tax rates.

14 Efforts to devise objective criteria to identify jurisdictions that have not made sufficient progress towards a satisfactory level of implementation of the agreed international standards, raises the possibility of countries adopting "defensive measures" on this basis (*TDR 2014*: 177). More generally, several developed countries, and even locations within these countries, have some key features in common with more traditional tax havens and some of the economically powerful residents of these economies are the primary beneficiaries of IFFs (Rodrik, 2014); Akhtar and Grondona, 2019, provide a recent critical assessment of tax haven listing.

15 Formulary apportionment is a method of allocating total worldwide profit earned by an MNE and all its affiliates and subsidiaries to a particular tax jurisdiction in which it has a taxable presence, based on factors such as the proportion of sales, assets or employees it has in that jurisdiction. In this context, accounts of all affiliates are consolidated based on country-by-country reporting at the level of the company group to generate a single tax base that is apportioned across jurisdictions on a formulaic basis.

16 The *Tax Cuts and Jobs Act* also contains three BEPS-related provisions: a tax on past offshore accumulations, a tax on future offshore accumulations and a tax on base erosion payments to related parties (Avi-Yonah, 2017).

17 The four BEPS minimum standards refer to Action 5 on harmful tax practices, Action 6 on treaty abuse, Action 13 on country-by-country reporting and Action 14 on dispute resolution.

18 See HM Revenue & Customs, "Factsheet on HMRC and multinational corporations", 9 February 2016. Available at https://www.gov.uk/government/news/factsheet-on-hmrc-and-multinational-corporations (accessed 3 July 2019).

19 See Australian Government, "Diverted profits tax", 26 September 2018. Available at https://www.ato.gov.au/general/new-legislation/in-detail/direct-taxes/income-tax-for-businesses/diverted-profits-tax/?=redirected (accessed 3 July 2019).

20 The sixth method is an additional transfer pricing method distinct from the other five methods for

transfer pricing valuation recommended by the 1995 OECD Transfer Pricing Guidelines. It is applicable to commodities as it draws a comparison for the transfer pricing valuation with a market quote (usually future prices) to determine the arm's-length price, instead of allowing the comparison to be made with transactions and prices agreed between unrelated parties.

21 An alternative to renegotiating bilateral tax treaties would be modifying the OECD commentaries, which accompany the OECD Model Convention and help with the interpretation and the application of tax treaties, including some treaties between countries that are not members of the OECD.

22 While the use of digital technologies can enhance domestic resource mobilization by improving tax compliance and collection, as well as supporting the formalization of the informal economy, this section focuses on the needs for changes to the international tax framework that digitalization creates.

23 Banga, 2019, identifies 49 digitizable products – mainly concerning films, music, printed matter, software and video games – and estimates electronic transmissions of these products in 2017 by calculating the difference between the actual physical trade in these products and what physical trade would have been if its average rate of growth during the period 1998–2010, i.e. 8 per cent per annum, had continued during the period 2011–2017, rather than declining, supposedly because of being replaced by electronic transmissions. The revenue shortfall is calculated by applying the simple cross-country average of bound duties on the physical imports of these 49 products to their estimated electronic transmission.

24 For detailed discussion of these two approaches, see, for example, KPMG, 2017, and OECD, 2017.

25 The two other options are the user participation proposal, which mainly addresses social media platforms, search engines and online marketplaces, and the marketing intangibles proposal, which emphasizes brand and trade name, as well as customer data, customer relationships and customer lists derived from activities targeted at customers and users in the market jurisdiction (Committee of Experts on International Cooperation in Tax Matters, 2017, 2019; Li, 2017; OECD, 2019b).

26 For example, the unilateral measures discussed below imply allocating taxing rights and income rules independent of a company's physical presence, moving profit splitting away from the arm's-length principle, and considering user participation as a part of value creation.

27 Nobel laureate and former World Bank chief economist Paul Romer recently supported such tax measures not only for revenue generation, but also suggested that such taxes could be progressive, with higher rates for larger companies, to limit their size. This would facilitate market entry for new companies, increasing consumer choice and containing monopolization tendencies in the process. See Romer, 2019.

28 Regarding the latter concern, AICPA, 2019, argues that digital taxes based on gross revenues operate outside the scope of tax treaties, so that no relief from double taxation is provided; this study also discusses a range of additional objections to temporary unilateral taxes on the digitalized economy.

29 The numbers are calculated based on average exchange rates with the dollar for 2017 (from IMF, International Financial Statistics).

30 These numbers are the sum of numbers for individual countries, calculated based on the medium-variant estimated population for 2017 (from United Nations World Population Prospects) and the percentage of individuals using the Internet in 2017 (from International Telecommunication Union, https://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx).

31 Capital flows refer to the financial account of the balance of payments. Private capital flows exclude reserve assets and other official investment flows. Net capital flows are the difference between capital inflows (i.e. the acquisition of domestic assets by non-residents, with sales of such assets and the repatriation of the proceeds defined as negative inflows) and capital outflows (i.e. the acquisition of foreign assets by residents, including foreign companies and individuals that are domestic residents, with sales of such assets and the repatriation of the proceeds defined as negative outflows). Net inflows need to be distinguished from gross inflows, which describe net liability flows. The "gross flow" terminology is used here only occasionally because it does not allow determining whether flows originate from non-residents (giving rise to liability flows) or residents (reflected as asset flows). For definitions, see also Ghosh et al., 2017: 11–12.

32 The figure reflects the Chinn-Ito index (Chinn and Ito, 2006), a financial globalization indicator obtained from the principle component analysis of the IMF's Annual Report on Exchange Arrangements and Exchange Restrictions (AREAER) summary binary coding of regulations relating to current-account and capital-account transactions. The index does not distinguish between inflow and outflow restrictions but covers a wide range of countries over

a long period of time and is updated periodically.

33 See *TDR 2014* for more detailed discussion of the implications of capital flows for macroeconomic management and financial stability in developing countries. See also Akyüz, 2017; Erten and Ocampo, 2017; and Ghosh et al., 2017.

34 Another example is the Republic of Korea that prior to the GFC recorded current-account surpluses and a positive net foreign asset position. However, the sectoral structure of the country's international investment position included a large net debtor position by the corporate and the banking sector, which experienced severe adverse effects from the GFC that was only partially balanced by the positive net investment position of the official sector (Avdjiev et al., 2015).

35 On the methodology and assumptions used for the estimation of gross foreign asset and liabilities positions, see Lane and Milesi-Ferretti, 2018.

36 Borrowed in the sense that their counterpart is increased external liabilities in one form or another, which all generate outward income transfers.

37 Developing countries have felt a need for such self-insurance because of difficulties in accessing international liquidity in times of stress (*TDR 2015*).

38 Interpretation of these numbers should recognize that the distinction between FDI and portfolio equity is somewhat arbitrary, and that FDI statistics consider retained earnings as being reinvested and loans and advances between parent companies and their foreign affiliates as direct equity rather than debt, though it is not possible to determine whether this is actually the case (Akyüz, 2017). It has also been found (Damgaard and Elkjaer, 2017) that almost 40 per cent of global FDI positions is financial investment passing through corporate shells with no real activity involved.

39 Data on bilateral FDI in this and the following paragraph are from UNCTADstat.

40 Risky holdings are direct investment and equity claims; safe holdings are reserve assets, bank loans and debt instruments.

41 This is not the case, for example, for Turkey (for the entire period) and the Republic of Korea (since 2010), both OECD members.

42 The currency of China has recently also assumed some international role (*TDR 2015*).

43 These calculations follow the methodology suggested by Akyüz, 2018.

44 An analysis of the relative importance and complex interplay of asset-price and exchange-rate changes as drivers of the valuation effects that determine country-specific differences between total return differentials (table 5.3) and yield differentials (table 5.2) is beyond the scope of this chapter. The valuation effects of exchange-rate changes will vary substantially across countries, depending on the currency composition of their external asset and liability positions and resulting net foreign-currency positions (i.e. gross assets minus gross liabilities in foreign currency). Asset-price changes will be affected by the relative shares of equity and debt categories, and the relative weight of government bonds versus corporate debt and asset-backed securities in total debt. Making some strong assumptions on the currency composition of debt and equity positions, Gourinchas et al., 2012, discuss the valuation effects of the interplay between asset-price and exchange-rate changes for a small number of countries and the four quarters following the beginning of the GFC in the third quarter of 2007. For the countries included in both samples, the findings in Gourinchas et al., 2012, for developed countries are mirrored in the numbers for 2008–2009 in table 5.3; they slightly differ for the developing countries, most likely because of the use of a longer time period and annual data in this chapter, the particularly sharp swings in asset prices and exchange rates in developing countries during 2007–2009 and ensuing sizeable differences between quarterly and annual data.

45 This result is consistent with Adler and Garcia-Macia, 2018, who analyse 52 economies for the period 1990–2015 and find that developing countries' total rates of return are 5 percentage points lower than those in developed countries. It is also consistent with Akyüz, 2018, who analyses nine emerging economies for the period 2000–2016 and finds a return differential of 7 percentage points. In addition to the effects coming from different time periods, this larger number is likely to be due to the inclusion of the Russian Federation in the group of emerging economies, with this country's negative return differential exceeding, often by a large margin, that of each developing country included in tables 5.2 and 5.3.

46 Adler and Garcia-Macia, 2018, also find that asset-price changes, rather than exchange-rate movements, account for a significant part of developing countries' capital gains and losses.

47 The current modest level of institutional investment in developing countries, which lies at the heart of proposals that recommend policy and structural reforms that create a more favourable investment climate and build private sector confidence with a view to ensuring that private capital be channelled

from developed to developing countries, also explains the lack of country-specific evidence of the impacts of increased institutional investment.

48 However, dissenting views continue to exist. For example, Agustin Carstens, the then governor of the Bank of Mexico and former deputy managing director of the IMF remarked in 2015: "I have only eight seconds to talk about capital controls. I don't need more: they don't work, I wouldn't use them, I will not recommend them". Available at https://www.imf.org/external/mmedia/view.aspx?vid=4176918093001 (accessed 4 July 2019). Moreover, the OECD has continued to view the effectiveness of capital controls as uncertain and to judge their use undesirable. It recommends relying on structural reforms and macroeconomic policies, including letting the exchange rate appreciate and tightening fiscal policies, and holds that capital "controls are best seen as a last resort and as [a] temporary solution and should preferably be subject to multilateral surveillance as in the framework created by the OECD Code of Liberalisation of Capital Movements" (OECD, 2011: 289).

49 For a review of this literature, see Erten et al., forthcoming.

50 Capital controls are often economically equivalent to macroprudential measures, whose use enjoys wide support (Ostry et al., 2012; Forbes, 2019). Capital controls discriminate against non-residents and target capital flows themselves, i.e. they are intended to regulate the volume of cross-border movements of capital and/or to change their composition towards less risky forms. Macroprudential measures apply to regulated financial institutions and intend to contain the adverse impacts of capital inflows on the stability of the domestic financial system. The two types of measures overlap when they concern, for example, capital requirements and limits on currency mismatches. By contrast, however, neither of these instruments fully covers foreign-exchange derivatives, i.e. a capital-flow category that, as further discussed below, has increasingly also been used for developing countries with advanced financial markets. Prudential regulations only cover the balance sheets of resident financial institutions but not foreign-exchange operations of non-resident investors or of resident non-financial investors. At the same time, capital controls only cover cross-border transactions but not foreign-exchange operations in domestic markets (Prates and Fritz, 2016).

51 It should be noted that the numbers shown in the figure indicate the presence of restrictions and not their intensity. As such, they capture broad trends but cannot pick up cyclical variations in the use of capital controls. Data on change-based measures of the use of capital controls (e.g. Gallagher, 2015; Ghosh et al., 2017; Gupta and Masetti, 2018) cover either a short timespan or a small number of countries, and are not publicly available.

52 These assessments generally relate to exchange-rate developments, the levels of portfolio inflows, monetary policy independence, inflation, financial volatility, and to specific measures to reduce financial fragility, such as bank leverage, credit growth, asset bubbles, foreign-currency exposure, or short-term liabilities. Erten et al., forthcoming, provide a detailed review of empirical findings concerning the effectiveness of capital controls.

53 Regarding general difficulties, Blanchard and Acalin (2016: 1), note that some "measured FDI flows are much closer to portfolio debt flows, responding to short-run movements in US monetary policy conditions rather than to medium-run fundamentals of the country". Specific regulations in Brazil, for example, allowed foreign investors to acquire shares and perform interfirm loans that were considered FDI but used to purchase debt (Carvalho and Garcia, 2008).

54 A precise geographic mapping of this resource transfer would require going beyond countries' aggregate external asset and liability positions, as used here, and analysing comprehensive high-quality data on bilateral positions and flows. However, such data are not available.

55 This step by the IMF is remarkable not least because in 1997 its members debated whether to incorporate capital-account convertibility in the Articles of Agreements of the IMF. On the fact that this initiative failed to garner enough support and was not implemented, Ghosh et al. (2017: 59) note that not only developing countries, "alarmed by the unfolding Asian financial crisis, and concerned that – even with transitional arrangements – the IMF would use this mandate to force premature liberalization on reluctant countries", opposed this initiative but also the financial community in the United States, fearing that it would give "the IMF too much power, including scope to legitimize capital controls of which the IMF did approve".

56 For earlier calls to this effect by UNCTAD, see, e.g., *TDR 1998*, *TDR 2006* and *TDR 2016*; see also UNCTAD, 2012: 31–32.

57 This may be crucially important as "the effectiveness of the measures depends on the level of short-term capital flows at the moment that the controls are put in place" (Magud et al., 2018: 4). Opposition to

capital controls on inflows may be strongest during surges because "a surge is initially associated with exchange-rate appreciation, asset-price increases, and an increase in GDP; thus firms, workers and households can purchase more goods and services during a surge, feel wealthier due to asset price increases, and see that the economy is growing" (Gallagher, 2015: 102–103).

58 This could be achieved, for example, by a strengthening of development banks to help to diversify sources of development finance not tied to international capital, as discussed in chapter VI of this *Report*. For example, Prates and Fritz, 2016, argue that exporters widely supported policymakers in Brazil regarding regulations on capital inflows as they could get subsidized credit from both commercial banks and the Brazilian National Development Bank.

59 One example would be regulating bank transactions in foreign currency. Applying to banks, such regulation could be considered as a macroprudential measure but at the same time be a form of capital controls, as it would apply to most transactions with foreigners but not between domestic agents, i.e. discriminate by residency. Given the important role of carry trade and foreign-exchange derivatives in capital flows, such regulation could sizeably reduce the level of capital inflows.

60 Many trade and investment agreements, especially those with the United States, prohibit the adoption of capital controls, except for highly exceptional circumstances (for further discussion, see Gallagher et al., 2019). Membership in the OECD and the European Union also excludes the use of capital controls (e.g. Ghosh et al., 2017: 386).

61 The finally agreed arrangement was limited to unilateral action and accorded to every member of the IMF the right to control all capital movements without needing approval from the IMF, as long as the controls did not restrict payments for current-account transactions.

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TABLE 5A.1 Composition of gross external assets, selected countries, 1996–2018
(Percentage of total)

	FDI				*Portfolio equity*				*Debt*				*Financial derivatives*				*FX reserves excl. gold*			
	1996–1997	*2006–2007*	*2010–2011*	*2017–2018*	*1996–1997*	*2006–2007*	*2010–2011*	*2017–2018*	*1996–1997*	*2006–2007*	*2010–2011*	*2017–2018*	*1996–1997*	*2006–2007*	*2010–2011*	*2017–2018*	*1996–1997*	*2006–2007*	*2010–2011*	*2017–2018*
Developing countries																				
Argentina	11.5	14.6	13.2	12.5	3.6	7.2	4.4	4.1	68.7	57.6	62.6	65.9	n.a.	n.a.	n.a.	n.a.	16.3	20.6	19.8	17.5
Brazil	26.7	38.9	31.9	44.2	1.1	1.6	2.5	3.6	26.6	19.3	14.2	10.3	n.a.	0.0	0.1	0.1	45.6	40.2	51.2	41.8
Chile	14.1	20.2	28.3	34.3	5.9	37.6	34.7	35.7	29.0	28.6	21.3	17.9	n.a.	0.9	1.5	1.6	51.0	12.7	14.2	10.5
China	6.4	5.0	8.4	25.9	0.5	0.9	2.1	4.0	37.5	30.6	20.4	26.4	n.a.	n.a.	n.a.	0.1	55.6	63.5	69.1	43.7
Egypt	0.9	2.0	8.6	10.2	0.4	1.4	1.3	1.4	56.3	58.8	53.8	39.3	n.a.	n.a.	n.a.	n.a.	42.4	37.9	36.3	49.1
India	1.9	12.8	25.4	27.2	1.6	0.4	0.6	0.7	31.1	7.7	6.8	7.4	n.a.	n.a.	n.a.	n.a.	65.5	79.0	67.2	64.7
Indonesia	1.3	10.6	12.6	23.2	0.8	0.9	1.1	1.9	41.5	36.4	22.1	38.8	n.a.	n.a.	0.1	0.1	56.4	52.2	64.1	36.0
Malaysia	23.2	28.7	35.8	37.4	2.4	4.5	7.8	14.1	29.0	21.1	20.1	23.4	n.a.	0.3	0.6	0.6	45.3	45.5	35.7	24.5
Mexico	12.7	23.9	27.8	38.3	3.0	6.1	4.8	6.7	57.1	41.4	36.6	24.8	n.a.	n.a.	n.a.	0.5	27.2	28.6	30.8	29.8
Morocco	3.2	3.2	6.1	14.0	n.a.	1.4	2.6	3.3	60.4	36.3	25.6	20.7	n.a.	n.a.	n.a.	n.a.	36.4	59.1	65.7	61.9
Pakistan	5.5	5.7	6.3	8.2	1.3	1.6	0.5	0.6	75.6	28.6	30.6	32.2	n.a.	n.a.	0.1	0.1	17.6	64.1	62.5	58.9
Philippines	5.0	9.7	17.6	30.7	3.1	3.0	1.3	1.0	53.1	44.8	21.3	23.8	n.a.	n.a.	0.2	0.2	38.9	42.5	59.6	44.3
Republic of Korea	14.5	11.7	21.8	25.2	0.9	13.3	10.6	17.2	63.3	27.4	23.0	29.7	n.a.	0.4	3.7	1.6	21.3	47.2	41.0	26.4
South Africa	52.0	24.1	27.7	49.5	27.4	36.8	39.0	30.3	13.2	21.5	14.9	9.8	n.a.	4.3	6.0	1.6	7.4	13.2	12.4	8.8
Thailand	6.9	6.6	12.5	26.9	0.1	1.8	2.0	5.6	19.6	37.5	21.0	24.6	n.a.	0.8	1.9	0.5	73.4	53.3	62.6	42.4
Turkey	2.2	6.7	14.8	23.1	2.7	1.4	1.0	1.1	47.8	48.9	39.2	39.0	n.a.	n.a.	n.a.	n.a.	47.2	42.9	45.0	36.8
Group average	*11.8*	*14.0*	*18.7*	*26.9*	*3.6*	*7.5*	*7.3*	*8.2*	*44.4*	*34.2*	*27.1*	*27.1*	*n.a.*	*1.1*	*1.6*	*0.6*	*40.5*	*43.9*	*46.1*	*37.3*
Transition economies																				
Kazakhstan	0.1	6.8	18.2	21.2	0.0	5.7	4.0	8.0	47.9	63.1	58.2	58.8	n.a.	0.8	0.1	0.0	52.0	23.5	19.5	11.9
Russian Federation	6.1	32.8	30.9	35.9	0.2	0.3	0.5	0.4	86.5	25.1	29.9	34.0	n.a.	0.1	0.3	0.4	7.3	41.7	38.4	29.3
Group average	*3.1*	*19.8*	*24.6*	*28.5*	*0.1*	*3.0*	*2.3*	*4.2*	*67.2*	*44.1*	*44.0*	*46.4*	*n.a.*	*0.4*	*0.2*	*0.2*	*29.6*	*32.6*	*28.9*	*20.6*
Developed countries																				
Germany	16.3	20.2	19.3	24.1	12.3	13.4	8.0	12.4	66.7	65.8	59.0	57.4	n.a.	n.a.	12.9	5.4	4.6	0.6	0.7	0.6
Japan	10.0	10.0	12.7	17.7	5.8	10.8	9.4	18.4	76.0	60.3	61.0	47.0	0.2	0.6	0.7	3.3	8.1	18.3	16.2	13.6
United Kingdom	12.3	14.9	12.6	14.8	14.4	11.1	8.2	15.5	72.1	58.0	48.1	49.9	n.a.	15.6	30.7	18.9	1.2	0.3	0.4	1.0
United States	*37.3*	*29.4*	*24.8*	*31.3*	*21.8*	*26.1*	*21.8*	*32.3*	*39.7*	*33.9*	*33.5*	*29.6*	*n.a.*	*10.3*	*19.4*	*6.4*	*1.2*	*0.3*	*0.6*	*0.4*
Group average	*19.0*	*18.6*	*17.3*	*22.0*	*13.6*	*15.3*	*11.8*	*19.6*	*63.6*	*54.5*	*50.4*	*46.0*	*n.a.*	*8.9*	*15.9*	*8.5*	*3.8*	*4.9*	*4.5*	*3.9*

Source: UNCTAD secretariat calculations, based on Lane and Milesi-Ferretti (2018) and International Monetary Fund International Investment Position (IIP) database.
Note: Data for 2017–2018 partly estimated. Debt refers to portfolio debt securities plus other investments (loans and deposits). Group averages are unweighted; using weighted averages affects the reported developments only marginally.

TABLE 5A.2 Composition of gross external liabilities, selected countries, 1996–2018
(Percentage of total)

	FDI				*Portfolio equity*				*Debt*				*Financial derivatives*			
	1996–1997	*2006–2007*	*2010–2011*	*2017–2018*	*1996–1997*	*2006–2007*	*2010–2011*	*2017–2018*	*1996–1997*	*2006–2007*	*2010–2011*	*2017–2018*	*1996–1997*	*2006–2007*	*2010–2011*	*2017–2018*
Developing countries																
Argentina	21.8	36.0	41.7	24.2	9.4	3.3	2.4	5.8	68.8	57.9	53.2	69.2	n.a.	2.8	2.6	0.8
Brazil	24.2	35.5	46.6	50.7	15.5	37.2	27.1	20.6	60.3	27.2	26.0	28.7	n.a.	0.1	0.3	0.0
Chile	50.7	59.8	60.5	63.4	10.0	5.7	7.8	6.9	39.2	33.5	29.6	28.5	n.a.	1.0	2.1	1.2
China	47.6	47.6	59.0	53.6	4.1	26.1	14.1	14.1	48.3	26.2	26.9	32.2	n.a.	n.a.	n.a.	0.1
Egypt	33.8	56.0	62.4	49.6	1.0	3.3	2.7	1.3	65.2	40.7	35.0	49.1	n.a.	n.a.	n.a.	n.a.
India	10.1	17.1	26.5	30.9	11.3	47.6	32.2	27.7	78.6	35.3	41.3	41.5	n.a.	n.a.	n.a.	n.a.
Indonesia	16.7	30.3	40.2	36.0	4.5	14.8	19.2	15.9	78.8	54.9	40.6	48.2	n.a.	n.a.	0.0	0.0
Malaysia	29.8	36.3	38.5	39.9	23.6	27.6	20.4	18.2	46.6	35.9	40.5	41.6	n.a.	0.3	0.5	0.4
Mexico	27.6	45.0	46.6	47.8	14.7	23.7	17.5	12.6	57.7	31.4	36.0	39.7	n.a.	n.a.	n.a.	n.a.
Morocco	19.8	61.8	57.8	54.9	3.3	4.9	4.4	2.9	76.9	33.3	37.8	42.2	n.a.	n.a.	n.a.	n.a.
Pakistan	12.4	30.4	23.8	32.1	3.3	4.5	3.1	4.1	84.3	65.1	73.1	63.8	n.a.	n.a.	0.1	0.0
Philippines	13.6	23.6	23.8	37.7	11.0	18.6	19.0	25.9	75.4	57.8	57.0	36.3	n.a.	n.a.	0.2	0.1
Republic of Korea	10.5	16.9	16.2	20.0	5.5	42.5	36.0	43.5	84.0	40.1	44.4	34.4	n.a.	0.5	3.4	2.2
South Africa	23.8	42.3	42.1	29.0	21.1	34.5	31.0	39.1	55.1	20.2	21.8	30.1	n.a.	3.0	5.1	1.8
Thailand	13.6	44.5	47.9	47.4	9.4	24.1	22.3	23.5	77.0	31.0	27.8	28.5	n.a.	0.4	2.0	0.6
Turkey	12.2	30.0	31.3	26.0	4.6	11.8	9.6	6.4	83.2	58.2	59.1	67.7	n.a.	n.a.	n.a.	n.a.
Group average	*23.0*	*38.3*	*41.5*	*40.2*	*9.5*	*20.6*	*16.8*	*16.8*	*67.5*	*40.5*	*40.6*	*42.6*	*n.a.*	*1.2*	*1.6*	*0.6*
Transition economies																
Kazakhstan	9.6	18.1	15.5	21.9	9.9	12.2	7.8	10.3	80.5	69.8	62.6	60.7	n.a.	n.a.	14.2	7.1
Russian Federation	16.1	37.6	42.0	50.4	4.8	25.6	18.1	15.4	79.1	36.7	39.5	33.7	n.a.	0.1	0.4	0.5
Group average	*12.8*	*27.8*	*28.7*	*36.1*	*7.4*	*18.9*	*12.9*	*12.9*	*79.8*	*53.3*	*51.0*	*47.2*	*n.a.*	*0.1*	*7.3*	*3.8*
Developed countries																
Germany	9.6	18.1	15.5	21.9	9.9	12.2	7.8	10.3	80.5	69.8	62.6	60.7	n.a.	n.a.	14.2	7.1
Japan	1.8	4.1	6.0	4.4	16.8	41.3	23.4	29.3	81.2	53.3	68.8	61.6	0.2	1.2	1.8	4.7
United Kingdom	8.8	10.7	9.0	14.7	14.1	11.0	8.2	13.3	77.1	62.7	53.0	54.0	n.a.	15.6	29.8	18.0
United States	*27.7*	*19.6*	*16.3*	*24.7*	*14.2*	*15.0*	*14.5*	*21.8*	*58.1*	*56.3*	*53.2*	*48.8*	*n.a.*	*9.1*	*16.0*	*4.7*
Group average	*11.9*	*13.1*	*11.7*	*16.4*	*13.8*	*19.9*	*13.5*	*18.7*	*74.2*	*60.5*	*59.4*	*56.3*	*n.a.*	*8.7*	*15.4*	*8.6*

Source: See annex table 5.A.1.
Note: See annex table 5.A.1.

TABLE 5A.3 Net foreign asset position and net international investment income, selected countries, 1995–2018
(Percentage of GDP)

	Net foreign assets				*Net international investment income*			
	1995–2007	*2008–2009*	*2010–2018*	*1995–2018*	*1995–2007*	*2008–2009*	*2010–2018*	*1995–2018*
Developing countries								
Argentina	-22.1	6.5	4.6	-9.7	-3.3	-2.8	-2.6	-3.0
Brazil	-33.8	-23.8	-31.8	-32.2	-2.6	-2.2	-2.3	-2.5
Chile	-33.2	-14.9	-16.8	-25.5	-5.6	-7.6	-4.3	-5.3
China	5.1	27.2	16.7	11.3	-1.0	0.1	-0.6	-0.7
Egypt	-11.4	-15.7	-36.6	-21.2	0.4	-0.1	-2.2	-0.6
India	-17.8	-20.7	-24.6	-20.6	-0.7	-0.5	-1.2	-0.9
Indonesia	-59.2	-32.1	-38.0	-49.0	-3.7	-2.6	-2.9	-3.3
Malaysia	-28.7	13.3	-0.1	-14.5	-4.8	-2.3	-2.7	-3.8
Mexico	-34.7	-34.9	-43.3	-37.9	-2.2	-1.6	-2.4	-2.2
Morocco	-31.9	-34.8	-59.6	-42.5	-1.9	-1.1	-1.9	-1.8
Pakistan	-34.3	-39.0	-32.7	-34.1	-2.5	-2.4	-1.7	-2.2
Philippines	-48.6	-20.0	-14.6	-33.5	-2.2	-1.9	-2.0	-2.1
Republic of Korea	-12.3	-9.0	4.8	-5.6	-0.7	-0.3	0.4	-0.2
South Africa	-18.1	-14.1	-3.7	-12.3	-2.1	-2.6	-2.6	-2.3
Thailand	-44.5	-4.1	-14.5	-29.9	-3.5	-3.5	-4.9	-4.0
Turkey	-33.2	-34.8	-48.3	-39.0	-1.4	-1.2	-1.0	-1.3
Average	*-28.7*	*-15.7*	*-21.2*	*-24.8*	*-2.4*	*-2.0*	*-2.2*	*-2.3*
Median	*-32.6*	*-17.9*	*-20.7*	*-27.7*	*-2.2*	*-2.1*	*-2.3*	*-2.2*
Transition economies								
Kazakhstan	-3.1	-2.9	-3.0	-3.0	-0.3	-0.9	-1.1	-0.7
Russian Federation	1.0	9.7	10.0	5.1	-2.2	-2.1	-2.6	-2.3
Average	*-1.0*	*3.4*	*3.5*	*1.0*	*-1.3*	*-1.5*	*-1.8*	*-1.5*
Median	*-1.0*	*3.4*	*3.5*	*1.0*	*-1.3*	*-1.5*	*-1.8*	*-1.5*
Developed countries								
Germany	5.1	18.5	23.9	13.3	-0.1	1.5	2.1	0.9
Japan	29.6	52.1	58.1	42.2	1.7	2.7	3.5	2.4
United Kingdom	-8.6	-2.2	-10.8	-8.9	0.5	-0.8	-1.4	-0.3
United States	*-14.3*	*-24.4*	*-35.9*	*-23.2*	*0.3*	*0.9*	*1.2*	*0.7*
Average	*2.9*	*11.0*	*8.8*	*5.8*	*0.6*	*1.1*	*1.4*	*0.9*
Median	*-1.8*	*8.1*	*6.6*	*2.2*	*0.4*	*1.2*	*1.7*	*0.8*

Source: See annex table 5.A.1.
Note: See annex table 5.A.1.

MAKING BANKS WORK BETTER FOR DEVELOPMENT

VI

A. Introduction

The transformation of banking has been at the heart of the financialized transition to a hyperglobalized world. The blending of retail and investment activities, the shift to packaging, repackaging and trading existing assets, the manufacture of new financial products and the drive to hide these activities from prying regulators have led to highly concentrated financial markets. These in turn are overseen by banks that indulge in speculative and often predatory practices and have grown in the process to become too big to fail. The global financial crisis revealed the extent of the waste and damage that financialized markets can generate, while previous chapters of this Report have noted that despite the proliferation of credit and the surge of cross-border capital flows, productive investment has suffered both in the private and public sectors. While some have argued that the reforms that have been implemented since the crisis have made the current system "safer, simpler and fairer" (FSB, 2017), this is debatable, with even those at the heart of the financial establishment still wary of the "lies of finance" (Carney, 2018).

However, while public policy has fallen short of the required response to the crisis, public banking is undergoing something of a renaissance. This is partly in response to concerns that private banking has failed to do enough for development, and partly in recognition of the positive role public banks have played in providing countercyclical finance. Many new public banks and funds have been established in the years following the global financial crisis, particularly in the developing world, while existing public banks are being strengthened and their roles expanded. Some new banks already dwarf the Bretton Woods institutions in their asset sizes, lending and spread. Can these banks become a locus for the big investment push required to meet the 2030 Agenda and a Global Green New Deal?

Clearly, such public institutions would be the most direct way to increase the availability of development finance, especially to the developing world. But the paradox today is that while there is broad consensus that far more long-term finance is required to meet infrastructure needs and the Sustainable Development Goals (SDGs), the lead shareholders of the major multilateral financial institutions show little appetite to strengthen them. Rather, as noted in chapter II, the intention is to try to induce a significant scaling-up of private sector financing for infrastructure investment.

There are four points to note in order to transcend this paradox. First, capital that is patient and catalytic tends to be public, not private. Second, while the type of credit created by these banks is important, the amount also matters; and too few public banks are sufficiently funded. Third, the "rediscovery" of public banking must not end up with them being diverted towards private and speculative needs rather than productive ones; this requires a clear mandate that values social returns more than strictly financial returns. Fourth, and perhaps most important, the mere existence of public banks in name does not mean they are automatically "public" or developmental in impact: for this to occur, banks need to be articulated with other financial institutions in an overall system that supports inclusive and sustainable development. Thus far, some of the most striking responses to current challenges have come from public banks and funds in the South. Southern-led initiatives include the concerted creation and expansion of regional development banks and infrastructure funds; national banks that lend to investors at regional as well as

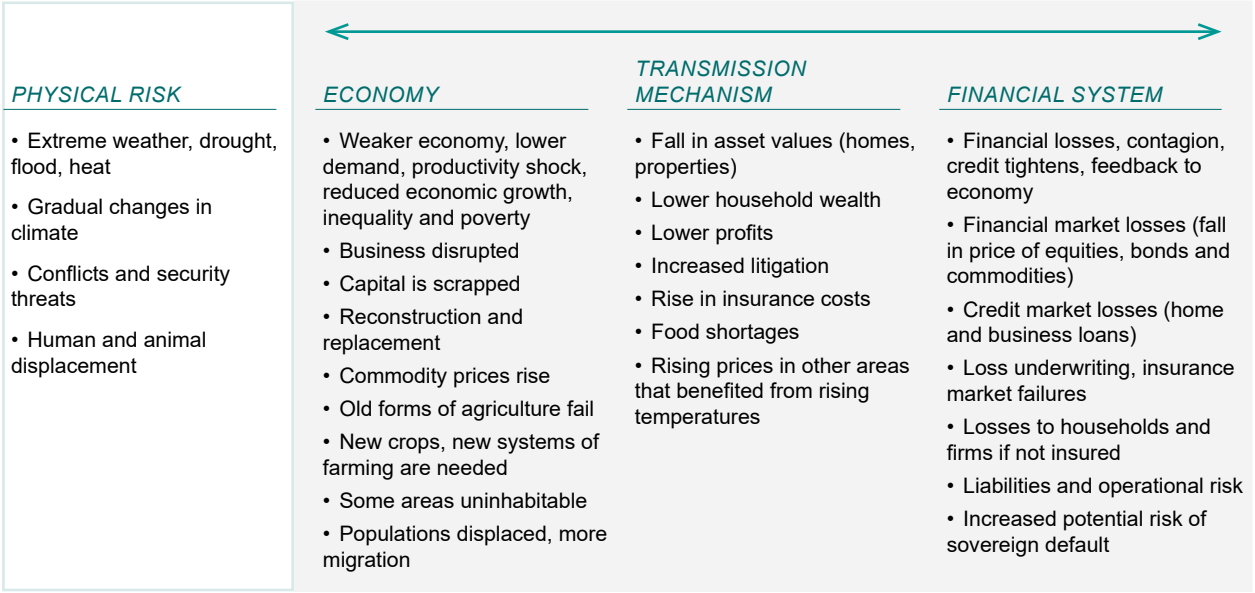
national levels; and the use of central banks to create, allocate and regulate credit to its most needed uses. Some Northern banks are also doing these, but much more is needed; and even the high-profile Southern initiatives need more support to live up to the high hopes held for them.

However, even as there is a growing chorus of voices in support of public banking, some countries are going in a different direction. In Brazil, for example, under the new federal government, the public development bank BNDES has recently come under pressure to pay back in advance the loans it has received from the national Treasury, which has been the bank's main source of funding. The bank's funding base could be further reduced under a new proposal to use national compulsory savings to support social security spending in Brazil. These measures would have an adverse impact on the ability of Brazil to finance long-term investments, since BNDES is currently responsible for financing over half of those over five-year long-term loans (Rossi, 2018). Meanwhile, in India, there are calls to privatize the state-owned banks.

Therefore, while for many the case for public banking is as strong as or stronger than it has ever been, efforts still need to be made to convince others of their benefits. This chapter aims to do that, highlighting some of the promising areas for public banking as an important source of finance for a Global Green New Deal. It begins with a brief mapping of the public banking system and a reminder that this has worked best when nested within a well-articulated and development-oriented system of financial institutions (section B). Some current threats to this are highlighted, including new versions of securitization. Section C considers the supportive financing roles that can be played by central banks, national public banks, regional banks and other vehicles such as sovereign wealth funds (SWFs). This discussion leads to the conclusion (section D) that even in the current global environment, it is possible for developing countries to make better use of these powerful resources effectively and relatively quickly.

The significance of this is evident from figures 6.1 and 6.2, which describe the links between climate change and the financial system, and show how public banking can play an important role in financing climate-change mitigation and structural transformation. It illustrates the need for coherence between policy efforts to reduce carbon emissions on the one hand and the world of finance and investment on the other. If financial portfolios are not aligned with climate policies, there could be a "climate Minsky moment" where a rapid system-wide adjustment to climate change threatened financial stability, in addition to wider impacts on productivity and growth (Scott et al., 2017: 104).

FIGURE 6.1 Climate change causes a negative feedback cycle between economic and financial risk



Source: UNCTAD secretariat, expanding on NGFS, 2019; Campiglio et al., 2017; 2018; Scott et al., 2017; and Tooze, 2019.

FIGURE 6.2 The transition to a green economy causes different financial stability risks

TRANSITION RISKS DRIVERS	ECONOMY	TRANSMISSION MECHANISM	FINANCIAL SYSTEM
• Climate policies from government • Consumers push for green economy • New technological developments to promote deep structural transformation	• Some winners and some losers • Former assets are stranded or unusable (vehicles, coal-powered electricity systems) • New opportunities are created from "creative destruction" – reinvest and replace • New forms of energy are invented; old forms are more expensive • Upgrade of infrastructure needed, towards clean renewable sources • New forms of farming to cut emissions	• Fall in value of old assets / rise in value of new ones • Loss of jobs in old economy / rise of new jobs in green economy • Migration and movement • Loss of old export markets / opening of new ones • Replanting forests, cleaning up polluted landscapes	• Financial market losses in some sectors (equities, bonds commodities) • Debt write-offs • Firms fail • Insurance markets fail • New sectors boom, financial market gains • Credit market losses (as old firms go bust, banks suffer loan defaults; new firms emerge, new loans are profitable)

ARTICULATED BANKING POLICY RESPONSES – WHAT BANKS CAN DO	
	• Central banks – revise models and approaches; create and guide credit towards new green activities and away from old, fossil-fuel dependent ones • National banks – support firms and investments in new green infrastructure, agriculture and other business activities; innovative R&D • Regional banks – support cross-cutting and cross-regional lending for greener activities • Other government ministries in a cycle of positive articulation – provide incomes support and social support to groups of society that lost jobs and livelihoods; support education into new greener technologies and R&D; pension funds and sovereign wealth funds to remove funding from fossil-fuel activities and rather support renewable energies

Source: see figure 6.1.

B. Public banking for development

1. *Mapping of the public banking system*

The World Bank estimated in 2012 that state-owned public banks accounted for a quarter of the total assets in banking systems around the world, rising to 30 per cent for the European Union, and higher still for many developing countries (de Luna-Martínez and Vicente, 2012: 2). Some more recent studies find similar results, identifying close to 700 public banks around the world (defined conservatively), controlling some $38 trillion worth of assets, equivalent to 48 per cent of global GDP and around 20 per cent of all bank assets (Marois, 2019: 155). These values would obviously be much larger if central banks, multilateral banks, pension funds and SWFs were also included.

Some of today's public banks have long histories[1] but a number are very new, reflecting the recent reassessment of the role of public banking after several decades when development banks in particular declined or were actively discouraged. As many as a quarter of the total number of public banks responding to the most recent World Bank survey were established since 2000.[2] Advanced economies are also re-emphasizing national development banks, showing that even in the deepest and broadest financial systems in the world there is still a need for government-supported public banking.[3] National public banks are therefore to be found in most countries in all regions of the world.[4]

Much has changed at the regional and international levels as well, with the New Development Bank set up by the BRICS countries (Brazil, the Russian Federation, India, China and South Africa), the Asian Infrastructure Investment Bank (AIIB) and the Banco del Sur. Meanwhile, long-standing international banks such as the Islamic Development Bank and the Latin American Corporación Andina de Fomento

(CAF) have significantly increased their scale and scope. These new and existing Southern-led regional banks have the potential to expand the scale of finance available to developing countries and dwarf the older multilateral development banks (table 6.1).[5]

A second striking feature of the last decade is the establishment of new non-bank public financial institutions to support long-term investment, often working along with banks. These include public investors like SWFs that are capitalized by government (often from royalties earned by exports of commodities, but also sometimes with loans from the central bank or grants from the treasury) and in some cases have an explicit developmental mandate (table 6.2).

There are other public financial institutions that are beyond the scope of this chapter, which play an important role in the public-banking landscape. These include export–import finance institutions, guarantee institutions and insurance companies, all of which can incorporate banking functions and may work closely with banks; as well as the many smaller, often community- or enterprise-based public banks and mutual associations that contribute significantly to the diversity of the public banking system (e.g. Steinfort, 2019).

Five features determine the extent to which these public institutions can be catalytic and transformational, and thereby support inclusive growth and the SDGs:[6]

- A clear mandate to deliver sustainable development outcomes, to help regions or peoples most in need, and to support the development plans of the government. Ideally, social and economic returns should be valued beyond financial returns.
- Reliable and sufficient sources of finance, which determine the scale at which institutions can operate, and their ability to fulfil their mandate. Ideally, a solid infusion of finance should come from the central bank or treasury, since institutions that are heavily dependent on depositors or private capital markets (and therefore on credit-rating agencies) are more constrained in their lending patterns.
- Close and consistent articulation with other financial institutions in a network with the central bank at the apex, aligned with a developmental plan and supported by other policies (such as capital account management, trade, industrial, environmental and incomes policies, etc.).
- Performance monitoring that links public financial support with outcomes. Financial returns from loans and investments should not be the only or the most important goal; achieving long-term social and economic goals should be identified and prioritized.
- The need for banks and finance institutions to be more transparent and accountable in their activities, as well as more aware of particular social contexts, including gender constructions of society, other forms of discrimination and exclusion and possible human rights abuses.

a) The contribution of public banking

Public banking is clearly different in nature and orientation from both government budgetary finance and private banking. Compared with private banking, there is, first, typically a focus on projects for which the social and/or developmental benefits exceed the purely commercial returns; on projects with long or uncertain lead times; on sectors or locations where private finance will not go; and on borrowers who may be small, new, lack collateral or a credit history. Second, the expectation is that loans are offered under more favourable conditions than private or commercial banks, reflecting the initial government seed funding and public mandate. Third, costs are usually recovered, but not necessarily or always to their full extent, and repayment may occur over a longer time period. Some banks are expected to make a profit and others are not; but compared to private banks, profit is never supposed to be the sole measure of success.

These expectations and pressures are why public banks need to have sufficiently large initial capitalization from government and reliable and stable sources of funds over time. Many have to engage in a difficult balancing act, making profits on some projects and accepting losses on others, so that on average, costs are sufficiently recovered and the banks can remain viable. The inability to cover basic operating costs can affect lending practices, especially if it leads to such banks subsequently targeting more profitable activities and hence competing with private banks, rather than offering something distinctively different.[7]

Along a broad continuum of public and private financial institutions, public finance (based on tax revenues) rather than public banking is appropriate when risks and uncertainty are high (for example, projects with very long lead times or unpredictable processes) coupled with a low chance of recovering

TABLE 6.1 Public development banks: Selected characteristics

		Assets / Outstanding loans (Billions of dollars)	*Distinctive features*
Regional development banks[a]		40.2	Southern regional banks are mostly owned by and directed towards the South, although some have minority Northern shareholders; loans are often concessional and non-conditional.
New Southern banks[b]		249.4	
Multilateral[c]	World Bank Group	300.0	Still dominantly controlled by major advanced countries, while loans are primarily to the South, and with conditions. Long-term loans including for infrastructure; new reforms for scaling-up include securitization (see box 6.1).
	African Development Bank; Asian Development Bank; Inter-American Development Bank	197.0	30–50% ownership by the global North; lending is regional.

Source: UNCTAD secretariat compilation.
Note:
a 2017 outstanding loans from the Trade and Development Bank, East African Development Bank, West African Development Bank, Central African States Development Bank, CAF, Caribbean Development Bank and Central American Bank for Economic Integration.
b Potential lending capacity of AIIB and New Development Bank based on banks' total equities and a loan-to-equity ratio of 5, plus China-backed investment funds, as reported in UNCTAD, 2018b.
c Bank's outstanding loans in 2016.

TABLE 6.2 Sovereign wealth funds: Selected characteristics

Region or Country group	*Number of institutions*	*Assets (Billions of dollars)*	*Distinctive features*
Africa	5	70.5	For the most part SWFs make portfolio choices similar to private investors, favouring investment in advanced economies and profitable sectors such as real estate, telecommunications and finance. A subset of funds invests in infrastructure, but many are disallowed from investing domestically, although this may be changing in some countries. A few significant exceptions have invested in regional infrastructure in developing countries. Patent-based SWFs are a new trend, with mixed potential.
Asia	15	3556.0	
Europe	2	81.6	
Latin America and the Caribbean	7	42.4	
Middle East	12	2612.8	
Total developing regions	41	6363.2	Most SWFs are funded through oil or commodity royalties, although a few were set up with export revenues or direct infusions from the national budget.
Developed economies	20	1532.1	Some of the first SWFs began in the United States in the 1800s, financed by oil revenues; however, many current funds are new, initiated after the 2008–2009 crisis.
Total	**61**	**7895.3**	

Source: UNCTAD secretariat, based on data from Sovereign Wealth Fund Institute, 2019. Includes SWFs with $1 billion or more of total assets under management.
Note: Sums may vary from the total due to rounding.

costs (for example, public goods). At the other end of the continuum, private finance and private banking typically engage more when risks are lower and the chances of recovering costs are higher (for example, when service users can be excluded if they do not pay). Public banking occupies the space in between, the boundaries of which can be fluid, changing over time and with circumstances (as projects mature, or as infant industries grow).[8]

Ideally, a national banking system will contain a large number of different banking institutions distributed across the continuum, each with a different mandate, source of finance, performance indicators and role, thereby offering a broad menu of possibilities to meet the specific needs of different borrowers. National systems vary greatly with respect to this, even within regions, reflecting regulatory frameworks and historical contexts. For example, Germany has a more diverse range of banking entities compared to its fellow members of the European Union, with different types of institutions, objectives and instruments. Consequently, it has avoided the general trend of concentration seen elsewhere.[9] In addition to the well-known KfW development bank, first created in 1948 to support post-Second World War reconstruction efforts and still very active, there are another 16 development banks and 1,200 cooperative banks.[10] Such diversity is also found in some late industrializers like the Republic of Korea. In addition to the ability to cater to different types of customers, this can add to the ability of public banks to form partnerships and co-financing with other public and private financing institutions that can also offer technical expertise and management skills.

2. Articulation challenges for public banking

Public banking is most effective when it is part of a closely integrated framework that can articulate relationships between central banks, governments and other financial institutions. The rapid industrializers of East Asia, who transformed their economies (thanks, in part, to their governments' ability to create, guide and allocate finance to new industries) had the central bank at the apex of their financial systems, following the model set by Germany. These central banks worked closely with governments to design and implement policy; they were not "independent" nor confined simply to controlling inflation.

A typical argument against such involvement of central banks today is that they may become "captured" by vested interests, with credit directed in wasteful or damaging ways compared to market-determined outcomes, thereby undermining trust in the wider financial system. Successful industrializers have had systems to ensure that bank support is aligned with the developmental plan, with mechanisms for monitoring and ensuring feedback while remaining flexible enough to adapt to changing circumstances in the financing and implementation of projects. Critically, support from government was predicated upon performance, and failures were addressed quickly.[11]

Central banks in such systems also closely regulated the financial sector as a whole, determining what was and what was not a bank, what banks could do, how much they could lend, and under what conditions. They therefore had the capacity to ration and direct credit, favouring sectors that were considered strategic or important for development and withdrawing the availability of credit (or making it more expensive) for activities that were not considered productive.

Today's policymakers operate in a very different, hyperglobalized and hyperfinancialized world. Hardly any government today would be able to pull off the record of countries such as the Republic of Korea, which in the 1970s could ensure that as much as 50 per cent of total credit available to investors was in the form of "policy-based" loans, subsidized and guided to support an agreed development strategy (UNCTAD, 2016; Cho and Kim, 1995). By contrast, it is more common today to find banking systems directed towards external capital and foreign investors rather than articulated with national development plans. Examples of this latter strategy (Thailand in Asia, and several Latin American countries, such as Mexico) did not manage to create the same process of domestic credit expansion linked to domestic industrialization (Epstein, 2015).

For public banks to play this kind of role today, a fundamental restructuring of the domestic financial architecture would be required in most countries, along with capital account regulation, as discussed in chapter V. Unfortunately, many countries have now opened their financial markets and locked such liberalization in through hundreds of trade and economic partnership agreements that restrict or exclude effective capital account management (Gallagher et al., 2019).

Some countries never liberalized to the same extent, including China, which now operates a new "consortia approach" to articulation (Gallagher, 2017). China continues to have a closely integrated national development strategy built around state-owned banks, but with increasing separation of roles for different actors. In the 1994 reforms of the Chinese banking system, three "policy banks" were established to "explicitly support the government's policy objectives" so that the pre-existing "Big Four" Chinese Banks (Bank of China, China Construction Bank, Agricultural Bank of China, and Industrial and Commercial Bank of China) could concentrate on commercial lending and thereby be judged on market performance rather than public-oriented goals (Brautigam, 2009: 79). The China Development Bank (CDB) has operated with greater levels of autonomy and taken loan decisions in response to both local and wider requirements. The bank's $1.6 trillion loans primarily support investments related to the Five-Year Plans of China and around three quarters of its new loans are directed to eight priority areas.[12] The China Export-Import Bank makes $422 billion worth of loans to facilitate the export and import of Chinese mechanical, electronic and high-tech products; to assist Chinese companies in offshore contracting and outward investment; and to promote international economic cooperation and trade (China Exim Bank, 2017).

On the funding side, a key feature of the banking system in China is the wholehearted support given to major public banks by the government, as reflected by the zero risk weight assigned to their bond issues by the regulator, similar to Treasury bonds. This allows them to access the markets at lower cost than would be the case otherwise, making it easier for them to provide finance to long-term projects (UNCTAD, 2016; Sanderson and Forsythe, 2013: 69–71). China has also created or co-created and contributed capital for two new multilateral development banks, the New Development Bank and the AIIB (see section C.3) as well as at least 13 additional bilateral and regional investment funds. This highly engaged stance is very different from that of most other countries, where public banking has adopted much narrower mandates, focusing closely on inflation and (with the notable exception of quantitative easing following the economic crisis) keeping mostly distant from government policy design and implementation (see section C.1).

The overall economic policy stance of government also matters: whether it is broadly expansionary and supportive of development or more focused on fiscal austerity. This impacts on public banking in many ways (see section C.5), including on banks' ability to raise capital.

A particularly broad and deep articulation will be needed if current proposals to create a specialist global green bank, such as a World Carbon Bank (Rogoff, 2019), are to be effective. Such focused financial institutions could build up technical expertise and knowledge about new technology and business models for the green economy and coordinate aid and technical transfer between countries. Operating globally would probably require a network of associate institutions, similarly specializing in green lending, all of which could coordinate among themselves and with their shareholder governments. Moreover, focusing solely on climate-related investments opens the door to these (and existing) institutions being potentially financed in part by green-related taxes (such as a carbon tax)[13] or other such revenue streams, which again requires close integration with member governments. Other global public-banking networks are already contributing to more globalized coordination in other ways, such as the newly founded Network for Greening the Financial System (NGFS), which is bringing together central banks and supervisors interested in research and advocacy activities to help scale up green finance. Many development banks are already part of broader associations at the regional or global level (the Global Network of Export–Import and Development Finance Institutions or G-NEXID and the Southern African Development Community-Development Finance Resource Centre or SADC-DFRC, among others) and there are further parallels whereby some Southern development banks, such as the Islamic Development Bank, are formally promoting links between member governments and their banks, in order to share technology and knowledge as well as finance.

3. The dead weight of securitization

This chapter does not focus much on the role of the World Bank, as there is a large literature on this already, and rather aims to focus attention on other new and emerging public players in developmental banking and public banking more generally. Nonetheless, the World Bank's efforts to leverage

private finance for infrastructure are extremely important, not only for their own sake but also because they provide a guideline for other multilateral financial institutions, and more broadly are seen as the route to achieve the SDGs.

A favoured strategy is the "cascade approach" (WBG, 2017a, 2017b). Its first step is to try to mobilize commercial finance by inducing "upstream" reforms to address so-called market failures and other impediments to private-sector investment in host countries. If this is not sufficient to attract private investors, the second step is to provide subsidies to the private sector, in the form of guarantees and other approaches, such as securitization, to attract other investors (see box 6.1). Only when the first two steps are exhausted as policy options is the third step taken, involving public and concessional finance, with an initial focus on infrastructure projects, followed by projects related to finance, education, health and agribusiness (WBG, 2017b). There are many concerns about this strategy, including its complexity, high transaction costs, the required upstream structural adjustments and, perhaps most significantly, the uneven distribution of benefits and costs. In short, as shown in box 6.1, securitization in particular is not a new story for banking, but its latest version is potentially very damaging. If the point of such procedures and instruments is to scale up capital for public banking, then it is worth noting that this can be done in other less risky ways, as explored in the next sections.

BOX 6.1 Risks of the march towards securitization

Securitization is being increasingly considered by multilateral development banks (MDBs) as a means to bring private investors into financing development. It involves pooling various types of contractual debt or other non-debt assets that generate returns and selling their associated cash flows to third-party investors. In the past, MDBs have directly sold loans from their balance sheets to private investors in order to free up capital to increase their loan operations. However, securitization can take different forms and a real concern is that MDBs are considering adopting some of its more complex forms, which can create both financial and reputational risks. In addition, securitization still involves a risk for the public sphere, if things go wrong. This can then hamper governments' efforts to enhance (or restore) their public spending capacity to support the SDGs.

More complex forms of securitization can involve what are termed "synthetic" transactions. The African Development Bank (AfDB) has recently announced such a transaction between itself, private and public investors and a public fund. The deal transfers the credit risk associated with $1 billion worth of AfDB non-sovereign infrastructure loans. It thereby reduces the amount of capital needed for the loans, and frees up $650 million in lending capacity. The transaction is "synthetic" because the loans are not technically removed from the balance sheet of the AfDB. Rather, the private/public investors (Mariner Investment Group and Africa50) take on $152.5 million of credit risk, while the European Commission's European Fund for Sustainable Development provides an added $100 million guarantee. In return, the investors and the European Commission Fund receive a fee for the risk they assume (AfDB, 2018; Hay, 2018; Allen, 2018).

Another elaborate form of securitization occurs when financial institutions remove loans from their balance sheets and put them into an external special purpose vehicle (SPV) that issues bonds that are sold to investors. This frees up further lending capacity of the bank, while the bond investors receive repayments from the original borrowers of the underlying loans. A key feature that can be found in that form of asset-backed securitization, which was at the heart of the global financial crisis of 2008–2009, involves the use of collateralized loan obligations (CLOs). These are financial instruments that enable loans to be sliced into tranches with different levels of seniority, thereby attracting investors with different risk profiles. As part of the menu of options to scale up finance for the SDGs, proposals have been made that securitization by MDBs could involve the use of CLOs (Arezki et al., 2016). One risk of this is that using this instrument to finance infrastructure projects could bring short-term capital to projects that are essentially long term, with attendant consequences.

Worryingly, the ongoing debate is not about weighing up the various risks involving different forms of securitization, but, instead, on how more complex forms of securitization by MDBs can attract private investors to projects in developing countries. The idea is to establish infrastructure firmly as an asset class for institutional investors seeking high risk-adjusted returns. Even the proponents of securitization by MDBs see an inherent ceiling to such transactions, as most MDBs extend loans to governments that are priced at subsidized rates. This makes it difficult to securitize since private investors use risk-based pricing (Humphrey, 2018b). To smooth the path to securitization, the G20, with the support of the OECD and the MDBs, has established a road map seeking to promote greater standardization in infrastructure loans through improved project development

(contractual and financial standardization, project preparation and data collection) and improved investment environment (financial engineering; risk allocation; mitigation, regulatory and capital market frameworks; and quality infrastructure projects) (OECD, 2018; G20 et al., 2018). These new project requirements introduce new layers of complexity and impose a further burden of high transaction costs on developing countries. They also draw on the limited administrative capacity that could probably be deployed more effectively in the real economy rather than in such financial engineering. Indeed, the required regulatory and capital market frameworks can even be inimical to the pursuit of autonomous development strategies (*TDR 2018*: chap. IV).

C. Patient and catalytic banking – the main institutions in the landscape of public banking

1. Central banks and a Global Green New Deal: A closer look

There is an extensive literature on the origins,[14] evolution and functions[15] of central banks. History suggests that in almost all successful development experiences, central banks have been significant in governments' efforts to foster structural transformation.

The Great Depression and the Second World War were watershed moments for central banks in the advanced world, as they extended their roles as guarantors of banking systems to financing war efforts and managing government debts accumulated during the war, rebuilding and restructuring national economies when the war ended and backstopping the fiscal commitment to full employment. These activities were closely articulated with national development goals and government macroeconomic policies. Central banks utilized a wide variety of techniques to guide credit to sectors and activities that the market would not have generated on its own. These included financing government debt at lower interest rates; reducing the flow of credit to less desired activities of the private sector; and promoting the allocation of resources to priority uses (Bezemer et al., 2018).

After the Second World War, in the postcolonial developing world, some central banks became agents of economic development (Epstein, 2006), often with "wide and flexible powers" (Bloomfield, 1957: 191). These included tools that had been used by Europe, Japan and the United States, such as selective credit controls, allowing special credit institutions catering to special needs, and influencing bank lending policies, with the aim "to re-channel real resources in desired directions, both within the public and private sector and within the private sector itself" (Bloomfield, 1957: 198).

A different approach to central banking emerged in the 1980s as part of the broader pro-market Washington Consensus. This involved breaking various links with government: central banks should be independent of the government and therefore no longer be required to finance government deficits and specific activities; they should narrow their focus to price stability, with inflation targets; and they should use indirect methods of monetary policy such as short-term interest rates rather than direct methods such as credit ceilings or other tools that had been used extensively before. As a result of this transformed approach, over the period 1970–2012, in more than 180 countries, at least 270 changes in central bank policy involved tightening and narrowing their mandates (Garriga, 2016 and with updated data provided by the author). This also reduced diversity: now most central banks are more or less the same, whereas before they had very different policy stances reflecting their different economic sizes and contexts. The majority have made the conduct of monetary policy their dominant role, with the specific goal of maintaining price stability as measured by an inflation target. When other macroeconomic objectives are included, whether by law or extra-statutory practice, these are usually subordinated to the goal of price stability.

However, even this role can be interpreted relatively widely, as became evident following the financial crisis of 2008–2009, when central banks showed they could adapt and change dramatically when times were tough and political will forthcoming. Even those that had adopted narrow mandates for inflation targeting once again linked monetary and financial

stability with the real economy and created new money on a vast scale in order to boost demand and promote recovery after the crisis.

In the wake of this new-found central bank activism, there has recently been a wave of calls for them to respond to the challenge of climate change. Therefore, the question now is not so much whether central banks should use their role to support government policies for a Global New Deal, but rather how.

(a) Policy space for central banking

Despite the shift to more narrow central banking mandates, the space for broader goals and practices has not completely disappeared. A survey of 45 central banks (BIS, 2009) differentiated between 19 central banks whose sole objective is price stability; another 24 with secondary macro objectives; and three with multiple objectives in no order of priority. Even when price stability is the primary objective, there is scope for considering other objectives.

Financial stability is the second most dominant objective for central banks. Ninety per cent of the banks surveyed by the Bank for International Settlements (BIS) said they have full or shared responsibility for financial stability policy and oversight of the financial system. This objective of financial stability can be a challenge, partly because "there is (no) generally agreed way of measuring financial stability, which makes it especially difficult to identify how much financial stability is intended and whether the appropriate amount has been achieved" (BIS, 2009: 33)(see also Levine and Lima, 2015). There are also many different views on how to achieve it, as evident in research confirming the links between inequality and financial instability, or climate change and financial instability (NGFS, 2019; Rudebusch, 2019; Marois, 2019; Scott et al., 2017; Campiglio et al., 2018, among others).

The most obvious examples of central banks discovering greater "space" with regard to their policymaking capacities were after the 2008–2009 financial crisis, when the major advanced economies introduced a series of innovative, structured monetary policy tools that were quite unlike anything they had done in the preceding decades. This suggests they do have the ability to make the changes that would be needed for a Global Green New Deal, if sufficient political will can be found. Even central banks that focus just on inflation targeting have opened up to new tools,[16] calling into question the so-called "independence" of central banks from government and reminding us of the benefits of the more engaged partnerships between banks and governments in the past.[17]

For some countries, the role of their central banks was never confined just to price stability or even financial stability alone, and the link with government policymaking never broken in the first place. As noted earlier, central banks actively and directly supported East Asian industrialization during the 1950s and 1960s (Amsden, 2001; UNCTAD, 2016) and more recent examples can be readily found in the developing and developed world – for example, the central bank in China has always aimed to consider government industrial policy objectives in a coordinated manner along with monetary ones.[18]

This reveals a very different view on central bank "independence" which is starting to be picked up elsewhere in the world as well (see for example Andersson and Claussen, 2017; Blanchard et al., 2013; Derviş, 2012; Epstein and Yeldan, 2008; Münchau, 2017; Rosengren, 2013). The main rationale for cutting the links between central banks and government was to keep central banks free from negative political interference, for example, by being pressured to set interest rates according to the electoral rather than the economic cycle. This focus on the negative synergies ignores the possibility of positive ones. Further, even in cases where the mandate of the central bank is restricted to just one goal and just one instrument, it is debatable whether the task can ever be purely technical. For one thing, much depends on the underlying models of the economy and how different elements are expected to respond. Changing one parameter or one data point can yield entirely different results, and such modelling is as much art as science. In any case, so-called technical decision-making has never been neutral, because different groups of people are always affected differently. Importers prefer highly valued currencies while exporters prefer lower values; savers expect high interest rates whereas property developers want them very low. Trading off or balancing these different interests therefore is not a technical decision but involves political decision-making and consideration of national goals, which means that elected officials need a voice alongside the appointed technocrats. At the very least, communication between the central bank and government can promote better coordination between monetary and fiscal policy, or at least give

rise to fewer contradictions. It also adds democratic legitimacy.

(b) Going green

With reference to a Global Green New Deal, central banks can play multidimensional roles, both directly and indirectly, acting in concert with other development financing institutions. In narrow terms, such a role would be defined as stabilizing: safeguarding the stability of the financial and economic system and smoothing out the economic and social upheavals caused by the "creative destruction" of a transformative shift to a greener economy. It could also be more ambitious and catalytic: working alongside government to create credit and guide the banking system to assist in the transformation of investment, production and consumption.

Some central banks already recognize that climate change could disrupt the effective functioning and stability of the financial system, including, as noted in the introduction, the Bank of England's warning of a possible "climate Minsky moment" (Scott et al., 2017: 104). Storm or flood damage brings extreme insurance risks; stranded assets such as fossil-fuel reserves that can no longer be used can have a powerful negative impact on balance sheets. Climate-induced financial risks "could ultimately justify the implementation of measures aimed at mitigating them across all central banking operations" (Campiglio et al., 2018: 466). Moreover, policy stances can be taken under this rationale without changing the mandate of many central banks, although it would involve quite fundamental changes to the technical models and assumptions used to guide bank analysis and forecasting.

Some central bankers have already started viewing this problem technically as a "tragedy of the horizon" (Carney, 2015, in a reference to Coase's famous "tragedy of the commons"). Most monetary stability policies have a two- to three-year time frame and financial stability policies have a ten-year time frame, but climate-change adaptation and transformation require many more years. The recent establishment of a central bankers' Network for Greening the Financial System reflects these concerns,[19] with some members already offering loans at below market rates to financial institutions to support green lending. Active policy changes are not confined to banks within the network: the Reserve Bank of India, Bangladesh Bank and Banque du Liban are among a number of central banks already using minimum quotas and other tools to promote green lending (see table 6.3).

Policies that can be taken up by central banks, even without broadening their mandates include the following:

- New analytical approaches to macroeconomic modelling, more accurately incorporating exposure to climate change risks. Even for countries with limited direct exposure to fossil-fuel production, the broader exposure to carbon-intensive sectors can be large enough to pose systemic risk, as found in a Dutch national bank study (Vermeulen et al., 2018). Bank stress tests also need to measure such exposure.
- Full disclosure of risks. Most companies and investors are unaware of how exposed their portfolios are, and hence have little incentive to change. The Financial Stability Board Task Force for Climate-Related Financial Disclosures shows how companies could voluntarily disclose this information to better inform investors, lenders and underwriters; in France, this is a legal requirement of the Energy Transition Law. Indeed, central banks themselves need to disclose their own exposure in their own asset portfolios.
- Financial regulations and instruments in some cases currently go in the wrong direction, in that low-carbon investments are seen as being more experimental and risky, with lower liquidity and long lead times (Campiglio et al., 2018: 464). Central banks in charge of banking regulation could remove this bias. Some authors have suggested that institutions with carbon-intensive assets should be required to hold higher levels of capital, on the grounds that they will face higher risks and higher costs of transition. This is essentially a backdoor way of getting central banks to support greener lending without altering their narrow mandate. However, the Basel capital framework, which is based on risk assessment for capital determination, already involves some confusion and complexity; therefore, some caution is warranted in using capital allocation as a tool for this purpose (*TDR 2015*: chap. IV). Alternatively, capital could be used as a tool to incentivize credit to green sectors, not because they are more or less "risky" but because that is the direction governments have decided structural transformation should take. Similarly, institutions with less desired assets could be required to hold

TABLE 6.3 Central banks: Supporting the green economy

Research and dissemination policy instruments	***Practical implementation***	***Some current examples***
Assess climate-related financial risks	Understanding the impact of climate change on financial and real economy Develop and apply methodologies to identify and measure climate-risks to financial institutions	Reviews of impact of climate change on banks, insurance companies and financial institutions; Bank of England; Dutch National Bank; European Systemic Risk Board; Network for Greening the Financial System (NGFS)
Analytics and macro models of transition to low carbon	Modelling tools to assess wider impact of transition	A major gap in the literature and debate; currently, only private sector and academia
Support to educational activities on green finance	Research on green finance and growth. Improve knowledge and cooperation Capacity-building and training (lack of expertise on environmental and sustainability risk is a major hurdle for the wider uptake of greener finance)	Bank of Bangladesh – banks are required to educate borrowers on environmental regulations G20 Green Finance Study Group. Bank of England and China bilateral collaboration on green finance Recommended by NGFS
Disclose climate-related financial risks	Enforce or encourage disclosure by firms and investors	Disclose investments in fossil fuels – California Department of Insurance FSB Task Force on Climate-related Financial Disclosures Disclose how portfolios align with climate targets – French Energy Transition Law (article 174, para. VI) Recommended by NGFS
Regulations and policy instruments to safeguard financial stability and promote structural transition to a lower carbon economy	***Practical implementation***	***Some current examples***
Environmentally aligned prudential and macroprudential regulations	Stress testing different financial instability scenarios, what would happen if there was a sudden re-pricing of carbon-intensive assets Include environmental concerns into prudential regulations	Bank of Brazil – requires commercial banks to stress test lending against environmental and social risks and hold additional capital against those risks
Active policies for credit allocation to green activities and sectors	Reduced reserve requirements on loans to environmentally friendly projects Placing caps on loan-to-value and loan-to-income for financing by commercial banks, depending on carbon-intensity of underlying activities Finer tuning by restricting lending by exposure to sector, location or counterparty Targeted lines offering refinance for commercial banks at subsidized rates for priority sectors Mandatory or minimum quotas requiring banks to allocate a particular share of their portfolio to green sectors Maximum quotas for lending to carbon-intensive sectors Central bank support for development banks, including buying their equity and bonds and creating markets for their bonds	China Banking Regulatory Commission issued guidelines seeking to repress credit to carbon-intensive industries and encourage lending to green projects Bank of Lebanon – 'greener' commercial banks are allowed to hold lower reserves. Verified by the Lebanese Centre for Energy Conservation Bangladesh Bank – commercial banks and non-bank financial institutions required to allocate 5% of total loans to green sectors: green refinancing subsidies to renewable energy and energy efficiency Banco do Brazil – restrictions on lending in environmentally sensitive areas People's Bank of China – preferential interest rates for green loans in particular regions. Reserve Bank of India – loans to renewable energy companies included in the bank's Priority Sector Loans scheme. Quota: 40% of net commercial bank credit must be to support priority sectors Bank of Korea – fiscal policy used to support subsidies for low-interest rate loans for energy efficiency and renewable energy European Union support to Bank of Lebanon to provide subsidized loans for energy efficient and renewably energy loans; also longer maturity
Eligibility criteria	Include green criteria in evaluation of overall risk of an asset purchased or accepted as collateral	DNB, Norges Bank (but only for own purchase)
Green Quantitative Easing	Purchase green assets as part of quantitative easing Green bonds	European Investment Bank dedicates minimum of 25% of its lending to climate action projects
Other green activities – green bonds; guidelines for green finance	Support to development finance institutions issuing bonds, capacity-building Guidelines for greener finance can be created or supported (e.g. environment and sustainability risk management); make these mandatory or voluntary	Banks of Indonesia, India and China issued voluntary green lending guidelines Central banks helping to support green bond initiatives, including in China, India and Republic of Korea. Green bonds in many countries; some involve global banks also, such as IFC anchor investor with Bank of India

Source: UNCTAD secretariat, based on Scott et al., 2017; van Lerven, 2017; NEF, 2017; Campiglio et al., 2017, 2018; MPAG, 2019; NGFS, 2019; and central banks annual reports and publications.

more equity relative to debt. If this rejigging of regulations leads to an increase in the cost of financing high-carbon activities, this would indirectly guide lending towards low-carbon activities.

Some countries are already undertaking some of these measures. The central bank of Lebanon, Banque du Liban, differentiates reserve requirement ratios (the required ratio of central bank reserves held by private banks relative to their stock of deposits) according to the amount of bank lending that is directed to renewable energy and energy efficiency projects (Ministry of the Environment, Lebanon, 2014). The central bank of Brazil requires commercial banks to incorporate environmental risk factors into their governance framework and show how these risks are evaluated when calculating their capital needs (NEF, 2017). The People's Bank of China offers firms support for green financing (MPAG, 2019: 39). Similarly, in advanced economies, the European Union High-Level Expert Group on Sustainable Finance has suggested introducing "brown penalizing" or "green supporting" capital requirements, depending on the sustainability risks of borrowing sectors (European Commission, 2018; Thomä and Hilke, 2018). More generally, the European Commission proposed that the European Supervisory Agencies integrate environmental, societal and governance criteria into their general operations. This would enable them to understand and monitor how financial institutions identify, report and address the risks that climate change and the transition process poses to financial stability (European Commission, 2017). However, support for such measures requires compelling evidence that the exposure of the financial sector to these risks is sufficiently large – going back to the need for new analytical models and more climate stress testing and macro modelling, to show the financial risks associated with climate change.

(c) Green quantitative easing

Corporate bond purchases by central banks may currently favour large carbon-intensive companies, reflecting the fact they have relatively strong credit ratings and that low-carbon firms tend to be too small to issue corporate bonds (Campiglio et al., 2018). This process becomes self-reinforcing, because the market sees them as being less risky than other, less liquid bonds. To avoid "carbon lock-in" of the economic system, central banks could reduce or stop buying carbon-intensive financial assets and buy low-carbon ones instead. Or they could introduce a parallel programme of purchasing new low-carbon financial assets, to help create liquidity for companies interested in shifting to clean green forms of production. The potential values are high – overall purchases by the European Central Bank in 2017 amounted to €730 billion, while the total additional annual investment needed to achieve European Union energy and climate targets is estimated to be one quarter of that (European Commission, 2018; Anderson, 2015). Central banks could also expand their purchases of green bonds, which represent a relatively new but expanding market, estimated to be worth some $167 billion in 2018. The cumulated value of green bonds issued since 2007 is estimated to be just over $520 billion, with most issued by the United States, followed by China and France (Climate Bonds Initiative, 2018).[20] While this is an encouraging start, more generally central banks could have a much bolder role and more fully support green bond issuing and green finance by public banks and governments (Tooze, 2019). Returning to the crucial role of a positive articulation between banks and government policy goals discussed in section B.2, the long-term nature of climate-change-related investments coupled with today's combination of low aggregate demand, historically low interest rates and the likely continuation of quantitative easing in many countries, make a case for funding a large part of this decarbonization drive through the issuance of long-term debt. It is not the business of central banks to issue such loans – the debts should be issued by public investment banks or directly by national governments. But it should be the job of central banks to support this push by acting as a buyer of last resort for those long-term debts.

One argument against this kind of strategy is that central banks have been using quantitative easing as a temporary, countercyclical stimulus, rather than the more strategic and long-term approach that a Global Green New Deal would require. However, quantitative easing does not look like ending any time soon. Another argument is that it would divert banks' attention from their main task of maintaining financial stability – although figures 6.1 and 6.2 argue it can be countered that green quantitative easing is precisely related to this. A third argument is that new "green bonds" would not meet the existing financial risk standards for being included in the list of eligible assets for central banks to purchase, which mostly includes investment-grade bonds with perceived low default risk. Purchasing green assets

could be riskier, especially if central banks lack the technical expertise to judge the relative merits of the technologies in question. Moreover, while the growth in green bonds may provide additional finance for the transformative investments needed, the trend is also for them to offer ever shorter maturities – the majority of the latest issuances are for five years and less, with only a small proportion offering the 10 years or more that is needed (Climate Bonds Initiative, 2018: 16). For these and other reasons, the idea of a green programme of quantitative easing has been rejected until now. However, something like this is already happening through the purchase of bonds issued by public-sector entities that finance low-carbon activities. While these particular policies may not be feasible for developing countries that are unable to follow quantitative-easing policies without risking exchange-rate and balance-of-payment crises, it is possible for green quantitative-easing policies in advanced countries to be used to support green investments in developing countries.

(d) Eligibility criteria and collateral frameworks

The list of assets considered eligible for purchase by central banks as part of their standard portfolio management is usually publicly available. Central banks could send a strong signal to the rest of the market as well as a practical financial boost, if they include assets that are more environmentally oriented or directed to a public investment push that is part of a Green New Deal. Some banks are already doing this, such as using green criteria for their own-account investments, having ethical criteria to decide foreign equity purchases or excluding coal-based firms from the government's pension fund portfolio (including the Dutch, Norwegian and Swiss national banks).

The same principle can be extended to central banks' collateral frameworks. Sometimes described as "the open secret of central banks" (Nyborg, 2017), the framework determines which assets financial institutions can pledge as collateral when they borrow from the central bank as well as the amount of money they can borrow against those assets. The criteria used to establish whether assets are eligible to be used as collateral or not, and then the difference between such assets' market value and their value as collateral, determines their attractiveness and thus their market price. In France, a change in central bank eligibility criteria led to an increase in the supply of credit to small and medium-sized firms that had previously been considered ineligible, at a time when credit to other firms actually fell (Mésonnier et al., 2017).

2. Potential for national public banks

If central banks are the command centre of a country's banking system, then national public banks are the engine room – intimately involved in the heavy lifting. They can be distinctively different from private banks when they have developmental and/or socially oriented mandates, with related credit strategies. While they do need to ensure a sustainable business model, they usually have more leeway to target projects that generate positive externalities, to loan at submarket interest rates and to extend coverage to underserved areas and categories of borrowers. In addition, they can act countercyclically in times of crises when credit from private financial institutions becomes scarce. This countercyclical power is often more pronounced among public commercial banks than development banks, given the former's larger scale of operations in most countries where they exist.

National development banks (NDBs) are, in most instances, publicly owned and therefore are a subset of public banks. Although differences between them and other public banks are not always clear cut, they can be singled out by a few key characteristics: their more narrowly defined mandate to support socio-developmental projects, their equity participation in riskier and uncertain businesses but with potentially vast payoffs in the very long term, their in-house expertise and specialized knowledge, their track record of risk assessment and management of large and complex projects, and their special ability to finance long-term projects and bring in finance from other institutions.

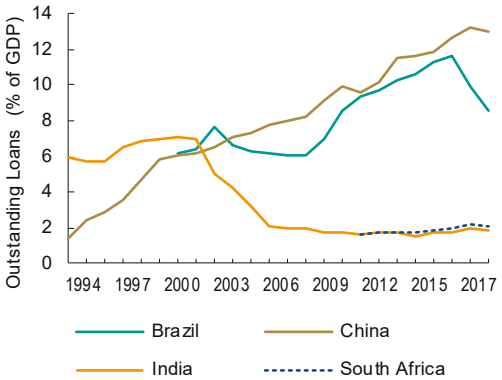
In principle, NDBs are potent policy instruments, as they operate in market segments at the core of the process of structural transformation. Their main function is to address imperfect capital markets that are unwilling to bear the risks associated with extending finance to large-scale capital-intensive projects (or new sectors, products) characterized by high degrees of uncertainty, and long gestation and learning periods. As private investors cannot capture the positive externalities often generated from such projects, the result is underinvestment in these areas. NDBs can institutionally bridge asset–liability mismatches between long-term investment in infrastructure

projects and short-term deposits in the banking system. NDBs can also play a proactive role by utilizing their accumulation of research, technical support and institutional capabilities to shape and create markets, and acting as an investor of "first-resort" in anticipation of demand and in coordination of domestic supply responses (UNCTAD, 2016; Macfarlane and Mazzucato, 2018).

In practice, the effectiveness of some NDBs as a policy tool has been uneven and their role contested. With the rise of the Washington Consensus, NDBs became subjected to a more critical analysis. By the 2008–2009 financial crisis, however, as lending from private-sector banks dried up, NDBs regained prominence as key sources of long-term and countercyclical finance for investment in infrastructure, public facilities and strategic sectors. The crisis underscored the enduring importance of development finance, as policymakers began rethinking the role of NDBs in structural transformation and how to effectively wield them (Kozul-Wright and Poon, 2018).

Figure 6.3 shows how experiences with development finance at the national level can vary widely. In Brazil and China, the outstanding loans of NDBs increased significantly as a share of GDP. By contrast, NDB loans in India stagnated at low levels over the past decade, having fallen dramatically from early 2000 levels. While data availability is more limited in the case of South Africa, the role of its NDBs has been steadily rising at least since 2010, but remains at a relatively low level.

FIGURE 6.3 Role of national development banks, selected emerging countries, 1994–2017



Source: UNCTAD secretariat calculations, based on annual and financial reports of BNDES, CDB, IDC and DBSA (various years); Reserve Bank of India Handbook of Statistics on Indian Economy (various years); and International Monetary Fund International Financial Statistics.

Note: Brazil includes BNDES; China includes CDB; India includes ICICI, Industrial Development Bank of India, IFCI, National Bank for Agricultural and Rural Development, National Housing Bank, state finance corporations, Small industries Development Bank of India and India EXIM; South Africa includes Industrial Development Corp. (IDC) and Development Bank of Southern Africa (DBSA).

Unlike most deposit-taking institutions, NDBs typically rely on broad-based and long-term funding, such as national treasury resources, debt securities and, in some instances, what might be termed "forced" or "compulsory" savings, for example when linked with workers' savings programmes as in the case of Brazil.[21] It is this funding base that gives them the ability to provide support to long-term, risky, innovative and complex projects that are essential for structural transformation. Their origins go back to late development efforts in continental Europe, where weak or non-existent capital markets constrained industrial and infrastructural development and monitoring mechanisms were missing for firms looking to borrow (Chandrasekhar, 2016; UNCTAD, 2016). These early examples provided the institutional template for countries mobilizing industrial finance for reconstruction and industrialization in the immediate post-Second World War period, such as the German KfW[22] and the Japan Development Bank.[23]

These experiences would shape state-led policy paradigms and practices in the early post-war period, as decolonization identified industrial development and infrastructure provision as key to structural transformation. For instance, the Korean Development Bank (KDB), established in 1954, initially used aid from the United States as its main source of funding, and extended credit to basic industries such as those producing fertilizer, cement and electricity, which were destroyed during the Korean War (Lee, 2017). BNDES, created in Brazil in 1952 with a different funding model, focused on financing infrastructure sectors like transportation and electricity generation, before switching to other sectors such as non-ferrous metals, chemicals, petrochemicals, paper, machinery and other industries in the 1960s and 1970s (UNCTAD, 2016).

One of the more significant risks of not relying on NDBs that can provide long-term finance for risky and long-term but socially desired projects, is that their functions get taken over by more problematic sources of finance, such as shadow banks (as described in box 6.2).

BOX 6.2 Shadow banking in China and India

Shadow banks, or financial institutions not considered to be primary depository institutions like banks subject to regulation but undertaking bank-like activities, are a significant presence in economies that have liberalized their financial sectors. They have in part become risk-burdened and fragile alternatives to public banks and development finance institutions, as the roles of the latter are reduced or done away with as part of liberalization. Not being subject to oversight and strict prudential regulation, these institutions tend to lend to and invest in areas banks either cannot enter because of restrictions or choose not to enter. As borrowed funds, often obtained using past acquisitions as collateral, are the main sources of funds for shadow banks, they transmit the risk inherent in their assets to the rest of the financial system. Shadow-banking activities tend to grow rapidly in environments in which, encouraged by financial liberalization and looking for higher return, banks have become important providers of finance to these institutions.

Two emerging markets where such growth has been marked are China and India. In China this was partly the result of the nature and sequencing of liberalization. On the one hand, even as policymakers were experimenting with liberalization, the core of the banking system remained regulated: for example, controls were maintained on loan volume and allocation; State-Owned Commercial Banks (SOCBs) preferred lending to State-Owned Enterprises (SOEs) instead of new and smaller private firms; and bank depositors had limited options, while bank deposit-rate ceilings and loan-rate floors were only liberalized in 2015 and 2013, respectively. Moreover, faced with a surge in local government borrowing, in 1994 the central government imposed a ban on budget deficits and bond sales at the local government level (UNCTAD, 2016: 29; Tobin and Volz, 2018: 11, 21). But the freedom to establish new non-banking financial institutions was exploited by local governments to set up local government financing vehicles that used borrowed funds to finance infrastructural and capital-intensive projects. Banks supported this "off-budget" borrowing, partly under pressure from local government leaders. Over time, on occasions when the central government found the need to "stimulate" the economy, it found these institutions to be convenient instruments to kick-start credit-financed spending, making them an important presence in the financial landscape.

In India, financial liberalization or "reform" led more directly to the growth of large shadow-banking institutions. With public spending limited by fiscal reform, the government chose to rely on public–private partnerships and private investment in crucial infrastructural areas. With the private sector unwilling to risk too much of its own capital in these ventures, they needed to be backed with credit. Coincidentally, this was a period when as a part of reform, Indian policymakers decided to wind down the activities of the specialized development financing institutions that had been established in the years of planned development. Two of the most important such institutions were transformed into conventional commercial banks. One way in which this absence of financing sources for large projects was addressed was the creation, with public bank investments in equity, of institutions that were to be run on commercial lines but with a development financing mandate. An example was the infrastructure financier Infrastructure Leasing and Financial Services (IL&FS) (Chandrasekhar and Ghosh, 2019), which sourced capital using short-term instruments such as commercial paper to fund long-term investments. This maturity mismatch did not prove to be a problem at first, because of the presumption that being a government-sponsored entity it enjoyed a sovereign guarantee. One third owned by state-owned financial entities, IL&FS was one of the largest issuers of commercial paper and enjoyed a triple-A credit rating. However, by late August 2018, the company suffered a series of bond defaults by group entities, leading to a change in management, legal proceedings and a painful restructuring of the company, which is still under way.

In the 1980s and 1990s, policymakers shifted their attention to external sources of finance, with a greater emphasis on private capital flows and private foreign and domestic enterprises, along with conditional aid from donor governments and MDBs. With financial liberalization as part of structural adjustment programmes, and changes in the role of central banks as described above, many national public banks in developing countries were scaled down or retasked, privatized or simply shut down. Today, the public banks that remain are generally more commercially oriented than has historically been the case.

An analysis of 13 national public commercial and development banks from nine countries – Brazil, China, India, Malaysia, Mexico, the Republic of Korea, the Russian Federation, South Africa and Turkey – shows a diverse group of banks in terms of degree of public ownership, funding sources and loan patterns. It emerges that patterns of ownership and funding affect the nature of lending. The three largest such lenders – CDB in China, KDB in the Republic of Korea and BNDES in Brazil – are wholly state owned and their funding is mostly based on long-term liabilities. Consequently, it appears from

information in banks' annual reports, that as much as 83 –100 per cent of their total loans goes to productive sectors and a significant share goes to infrastructure: at least 70 per cent of CDB loans and 38 per cent of BNDES loans do so.

At the same time, banks that mainly rely on customer deposits have a lower focus on infrastructure projects, even if they have a relatively high proportion of loans to productive sectors. They tend to have a higher share of loans with medium-term maturities

TABLE 6.4 Selected developing country public banks: Loans and institutional features. 2017

	National Development Bank (NDB)	*Country*	*Oustanding loans (net $ millions)*	Outstanding loans (% of GDP)	*Distribution of loans to productive sectors (% of total loans)*[b]	*Loans as instrument (% of total assets)*	*Primary source of funding (% of total liabilities and equity)*	*State Ownership (%)*
1	China Development Bank (CDB)	China	1.634.820	13.4	100.0	66.7	Debt securities (52.9%)	Wholly
2	Korean Development Bank (KDB)	Korea	159.999[a]	10.5	90.1	54.3	Debt securities (30.3%)	Wholly
3	Brazilian Development Bank (BNDES)	Brazil	190.287[a]	9.3	83.4	63.3[c]	National treasury (43.8%)	Wholly
4	Halkbank	Turkey	54.379	6.4	84.6	65.8	Customer deposits (61.9%)	Majority (51.1%)
5	Vakıfbank	Turkey	49.825	5.9	58.5	67.4	Customer deposits (53.0%)	Majority (58.5%)
6	Export-Import Bank of China	China	421.884	3.4	n/a	75.4	Debt securities (67.9%)	Wholly
7	Bank of Development and Foreign Economic Affairs (Vnesheconombank)	Russia	30.972	2.0	53.0	52.8	Debt securities (31.8%)	Wholly
8	Development Bank of Southern Africa (DBSA)	South Africa	6.383[a]	1.8	89.1	85.5	Debt securities (44.7%)	Wholly
9	Bank Pembangunan Malaysia Berhad (BPMB)	Malaysia	4.863	1.5	90.3	73.1	Customer deposits (30.2%)	Wholly
10	Industrial Development Bank of India (IDBI)	India	37.809[a]	1.4	77.3	52.7	Customer deposits (74.2%)	Majority (74%)
11	Industrial Development Corp. (IDC)	South Africa	3.796[a]	1.1	82.3	20.5	Equity (67.3%)	Wholly
12	National Bank for Agriculture and Rural Development (NABARD)	India	28.244	1.1	100.0	80.3	Customer deposits (61.8%)	Wholly
13	National Financial (NAFIN)	Mexico	11.190	1.0	30.0	42.9	Customer deposits and securities (47.8%)	Wholly

Source: UNCTAD secretariat calculations, based on banks' annual and financial reports.

Note:

a Figures include equity investments in associates. The figure for DBSA also includes development bonds.

b Loans to all agriculture. industry (including infrastructure). and services (sub)sectors. except for: financial and insurance institutions; real estate; tourism; accommodation. dining and catering services; housing; personal service activities; and consumer loans and credit cards.

c Includes bank loans and on-lending operations.

(as opposed to long-term maturities) possibly due to their generally short-term funding. The majority state-owned commercial Halkbank in Turkey relies on customer deposits with a maturity of less than one year and its infrastructure-related lending is only 24 per cent of its total exposure. Likewise, Vakıfbank, another majority state-owned commercial bank from Turkey that relies on short-term deposits, provides only 21 per cent of its total loans to infrastructure sectors.[24]

A further consequence of the financial liberalization-cum-privatization reforms of the 1990s was descaling and a loss in focus of banks that were previously designed for development lending. The Industrial Development Bank of India (IDBI) is a case in point. Created in 1964, IDBI was until the 1990s a leading financial institution, providing finance to all major industries and playing a catalytic role in the industrial and infrastructure development of India. As an apex institution, it supported the creation of other development finance institutions and helped to coordinate their activities. However, in the early 1990s it was commercialized and part of its ownership was sold to the private sector; and since the 2000s it has transformed into a universal bank, which includes retail lending. As a result, IDBI currently does not do development lending and also has a drastically reduced loan and equity portfolio, equivalent to just 1.4 per cent of the GDP of India, compared with BNDES' portfolio corresponding to 9.3 per cent of the GDP of Brazil (see table 6.4).

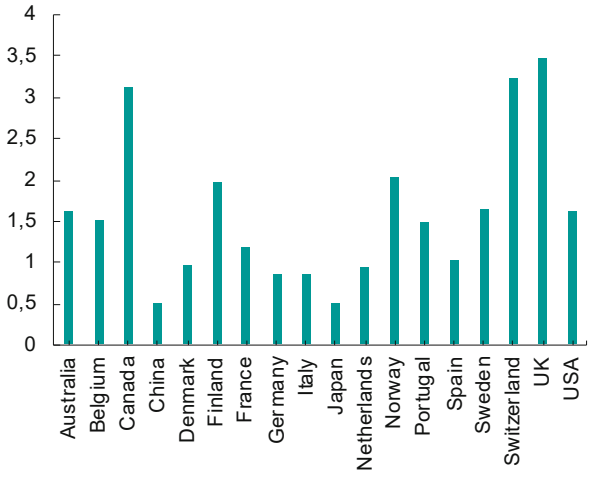
Challenges facing public banks and how to support them

In order for national public banks to distinguish themselves from other banks by lending mostly to productive and socially valued sectors, they must have both the mandate and the financial support that can enable them to take on longer term and riskier projects. Therefore, it is essential to protect and expand their long-term funding sources, as only long-term liabilities can put banks on a solid footing to finance long-term projects. Diversity of the funding base is also important. BNDES, in Brazil, has a relatively high reliance on the national treasury, which can make the bank vulnerable to sudden changes in domestic political priorities (Macfarlane and Mazzucato, 2018: 53). But BNDES funding also draws on institutional savings in the form of FAT (Workers' Assistance Fund) and PIS/PASEP (Social Integration Programme / Civil Servants' Savings Programme) funds. Other funding sources are shareholders' equity and foreign bond issues. This diversified funding base protects the bank against risks and gives it a more sustainable funding profile.

Financial regulation, particularly the Basel Capital Accords, can affect the ability of public banks to finance long-term, risky or complex projects. Some Basel norms and rules have an in-built bias against such projects and clearly discourage both long-term and riskier lending by banks. These include the liquidity and funding requirements under Basel III, which are intended to shorten maturities; the high risk-weights attached to exposures to equity investments, especially those considered speculative in nature, which may be about taking risks in desirable blue sky projects; and restrictions on the large exposures such as large-scale infrastructure projects.

An important challenge for the future, given the financing needs of structural transformation and the 2030 Agenda, is the need for scaling-up. Public banks should be strongly capitalized so that they can expand their loans; while those that went into decline should be assisted to recover and grow. In countries such as China, Germany and Japan, where development and other public banks have an important footprint in their national financial systems, this is already the case. But in the absence of such a strategy, a large proportion of total credit goes to households and other

FIGURE 6.4 Ratio of household loans to business loans in selected countries, average 2014–2016



Source: UNCTAD secretariat, derived from data from Jordà et al., 2017, and People's Bank of China (monetary policy reports, various years).

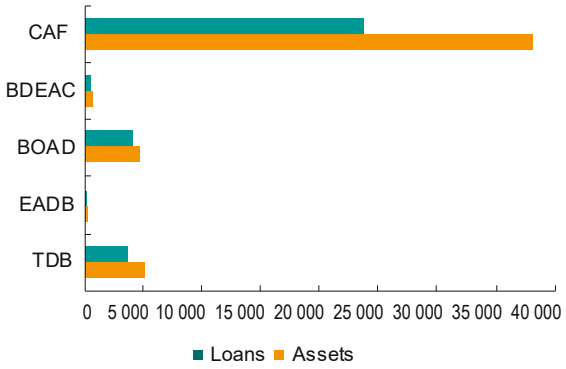
non-productive sectors (see figure 6.4). Scaling up or rescaling public banks is also important for the countercyclical role they play, as the bigger they are, the larger the macroeconomic impacts of countercyclical lending will be.

3. Scaling up regional development banks: New trends and opportunities

The expansion of regional public banking by Southern-led and Southern-oriented banks (such as the New Development Bank, the AIIB, etc.) is one of the most significant trends in the provision of long-term public finance in recent years. Both the additional finance they have created and the clear developmental mandate have the potential to offer qualitative differences in governance and lending decisions compared to older multilateral banks. Just a handful of the regional development banks from the South have significantly increased the amount of long-term lending available globally. These regional banks also tend to offer loans quickly, with no conditionality other than the condition of being repaid, and give developing countries a voice in governance more commensurate with their economic weight (Barrowclough and Gottschalk, 2018: 10). They have relied on partnerships and co-financing with other banks and firms, offering not only finance but also technical expertise and experience sharing. However, not all regions have been equally well served and important gaps remain. Most importantly, the funds available are still too small relative to needs, which ultimately reflects their narrow capital base.

The situation of regional development banks in Africa is particularly difficult, but indicative of the wider challenge. Four of Africa's main regional banks – the East African Development Bank (EADB), the West African Development Bank (BOAD), the Central African States Development Bank (BDEAC) and the Trade and Development Bank (TDB) – have existed for more than 35 years, supporting development projects in their borrowing countries. They are currently in solid financial positions, have achieved investment grades in credit rating, have strong shareholders and are well embedded in the regional economic communities they serve.[25] They also complement other financial institutions, with a significant amount of co-financing and on-lending. However, their lending capacity is very limited. Even after a significant increase in lending from 2016 to 2017, the amounts loaned are still extremely low, especially in light of what is needed. Despite recent expansion, the total portfolios of loans and assets are in the $4 billion to $5 billion range in the cases of BOAD and TDB and in the $200 million to $700 million range in the cases of EADB and BDEAC, figures that are considerably smaller compared with those of the Latin American development bank CAF (see figure 6.5).

FIGURE 6.5 Regional banks' total assets and outstanding loans, 2017
(Millions of dollars)



Source: UNCTAD secretariat, based on banks' annual reports.

The biggest binding constraint to their ability to provide loans, and other forms of finance, is their total equity.[26] Equally important, though, is to consider banks' reliance on borrowed funds, or their own loan-to-equity ratios, also known as gearing ratios. At end of 2017, these were at 3.1 for BDEAC, 3.1 for BOAD, 0.73 for EADB and 3.7 for TDB (compared to 3.5 on average for the World Bank and 5.4 for EIB) (UNCTAD, 2018b).

It has been argued that one of the problems EADB faces is the low credit quality of the bank's shareholders, which constrains its credit rating (Moody's, 2018: 5). To compensate for this weakness, EADB has aimed for a low gearing ratio, resulting in low levels of outstanding loans. This strategy apparently helped the bank to be awarded an investment grade by Moody's. That said, the other banks, including BOAD, all have been awarded investment grades as well, despite their higher gearing ratios. All these development banks look to financial markets, including at the international level, as funding sources. As discussed in section C.5, high investment-grade ratings from credit-rating agencies allow them to raise long-term finance in these markets at lower costs, which then permits them to provide loans and finance for development projects on reasonable terms. This funding model, thus, explains why their behaviour is influenced by rating agencies and reiterates the

point that banks' ownership structure and sources of finance matter a great deal.

One route to expanding the lending capacity of these banks is to increase their gearing ratios. Another route is to expand the capital base, possibly through an injection from the region's SWFs (section C.4(c)); foreign reserves (some of which are held by the Central Bank of France); or even adding new shareholders, including from outside the region. The CAF bank in Latin America did this, including Spain and Portugal as shareholders; similarly, the AIIB has a long list of Northern shareholders. Calculations by UNCTAD based on current capital ownership structure show that core shareholders – African member governments – could let non-African states and institutions contribute additional capital while retaining control over the banks.[27] Currently, African member states and institutions hold 90 per cent or more of total shares of these banks, so African member states could let other states and institutions contribute additional capital while maintaining full control over the banks.

4. Alternative sources of long-term finance

(a) Can regional capital markets provide the required funds? The case of the Asian Bond Markets Initiative

Regional capital markets are sometimes seen as an important complement to development banks, and the Asian region has been particularly keen on exploring this possibility. The Asian Bond Markets Initiative (ABMI) was created in 2002 by ASEAN+3, with the broad aims of developing local currency bond markets and promoting regional financial cooperation and integration. Along with the Chiang Mai Initiative, it was very much a reaction to the East Asian crisis, when East Asian emerging market economies that had liberalized their capital accounts were buffeted by a sudden massive withdrawal of foreign capital from the region. ABMI was designed to help Asian countries move away from their overreliance on international banks' provision of short-term finance and in this way reduce currency and maturity mismatches of borrowing in the Asian region. Some also saw it an initial stepping stone towards a possible larger, concerted effort towards loosening the grip of Western finance over East Asia (Park and Bae, 2002).

Under some yardsticks, ABMI has been very successful. Local currency bonds in the region grew from about $1.1 trillion in 2002 to $10.2 trillion in December 2016, and such bond markets grew in every emerging East Asian country absolutely and as share of GDP (ADB, 2017). However, as these economies maintained financial openness to external capital, the ABMI resulted in the rapid growth of holdings of sovereign debt securities by international investors. This further exposed Asian economies to unpredictable and rapidly changing international capital flows and even exacerbated market volatility, as currency risk was transferred to international investors, who since then have become more risk sensitive (ADB, 2017). Despite ABMI, intraregional investment did not pick up and the region maintained high reliance on external capital despite high domestic saving rates (Lim and Lim, 2012). Bond financing for infrastructure projects is still limited in the region (ADB, 2017: 6), and is likely to remain so, as the promotion of a regionally integrated market presupposes complete capital account liberalization among participating countries. For many now well-known reasons, this would be a risky strategy with uncertain benefits. It therefore appears that this strategy of encouraging capital markets has not done away with the risks and concerns of external capital market integration for developing countries.

(b) Creating a network of green, public banks

A proposal long discussed in Europe and currently being mooted in the United States is to create a network of green, public banks, radiating from a similarly green-oriented central bank. This harks back to the public institution mandated to finance the original Roosevelt New Deal, the Reconstruction Finance Corporation (RFC). By the time the RFC was officially dissolved in 1957, it was described as "among the largest and undoubtedly the most complex of all Federal lending agencies" (Secretary of the Treasury, 1959: v); it grew from small beginnings (a capital of just $500 million paid in by the Treasury and the right to leverage up to three times its equity) to create tens of billions of dollars of lending for the Depression Era reconstruction programmes. It first issued bonds of $1.5 billion, using the borrowed moneys to pay for roads, bridges, dams, universities and much more. In subsequent years it created loans for the United States war effort and eventually for American business. Proceeds from the loans repaid the bonds, and by the time the RFC was wound up decades later, it had borrowed a total of $54 billion

and made a net profit for its government owner, as well as repaying most of the initial capitalization and generating income.

The network of public banks that could be at the heart of a Global Green New Deal has been described as a decentralized version of the RFC (Brown, 2019). Today's United States version of this concept envisages a combination of the Federal Reserve and a new system of regional and specialized public banks, which could include banks owned by cities and states. The public banks would help pay for a Global Green New Deal by making low-interest loans for building and upgrading infrastructure, deploying clean energy resources and so on; and the federal government would help by capitalizing the public banks, setting environmental standards for loan programmes, and tying tax incentives to participating in public bank loans.

In the European Union context, creating such a network of banks also addresses the challenge of scaling up for a whole region in an economic union of individual countries that does not have a system of fiscal federalism. In one proposal, the European Investment Bank would issue "green investment bonds" using a network of public banks spread across the various member states, to on-lend these funds to investors in a broad range of activities that aim to tackle environmental mitigation, create jobs and transform the economy. It is argued that European Investment Bank bond issues could be in order of 3–5 per cent of European GDP (see for example the policies recommended by the political movement DiEM25, 2019; Taylor and Neslen, 2019). Such a network can be established without changing any existing treaties or arrangements; it would not need continent-wide fiscal support because the bonds would be paid back through the revenues earned on the loans; and it would not add to the national debt of the individual European Union member states. An important part of one proposal is that the European Central Bank should also stand ready to buy back the bonds, should their price fall below a certain yield, essentially underwriting the project and guaranteeing that bond purchasers do not make a loss.

Other sources of finance suggested to support the public banks include a financial transactions tax or stamp duty proportional to the size of corporate balance sheets; redirecting central bank seigniorage profits to be used to strengthen the equity in development banks; charging a dividend on shares from corporate initial public offerings and capital increases; or adopting the carbon taxes mentioned in section B.2. Of course, for many countries, control of illicit financial flows (see chapter V) could be one of the most important sources of finance to boost governments' fiscal capacities, which could be used to capitalize their banks. If this also had the effect of keeping private capital within national borders, it could further serve to increase the resources potentially available to the banking sector.

(c) Public assets such as sovereign wealth funds

Another source of capital that could be used to scale up public banking could come from SWFs. These are not banks, but publicly owned assets. Some of them, although not many, are mandated with broadly similar purposes as development banks and could potentially be called upon to support a Global Green New Deal. Some SWFs are really pension and life insurance funds, with a long-term mandate to provide a stream of revenues into the future with which governments can fund their social obligations. These large reserves of publicly owned assets have long been a part of international capital flows and they could be applied in ways that offer more direct, public support for the needs of developing countries.

There has been rapid growth in their number and financial firepower: many new funds were established in recent years, and total SWF assets are currently worth at least $7.9 trillion (see table 6.2). The interest in SWFs to support development banks stems in part from their very size – especially in Asia or the Middle Eastern region, where the SWFs are measured in trillions of dollars and far exceed the size of the development banks. In sub-Saharan Africa, some nine funds currently hold assets worth around $12 billion. While this is less than the size of its regional development banks and those national development banks investing outside their own national borders, such funds could be a helpful source of additional capital for development banks (section C.2). The SWFs could provide equity capital for the banks and act as partners in projects with high risk but the potential for big returns. Using examples from biotechnology, the Internet and renewable energy in China and the United States, among other countries, Mazzucato (2011) and others argue that the public sector should engage as an equity partner rather than giving grant finance when it comes to R&D, as in this

way the benefits of future revenue streams would pass to the public as well as the private sector.

Another indirect benefit of SWFs is that their presence can help provide extra liquidity for regional and local debt and equity markets, which would help address some of the challenges described above. However, only a few funds currently have the legal right to invest in their own countries and most use their vast resources to buy debt or equities in advanced economies abroad. If they invest conservatively, they may be unlikely to choose green or innovative new firms and investments. Even so, some SWFs do hint at what can be achieved, as they are using such investments to promote climate-change adaptation (Norway), regional growth and development (Singapore) or to support struggling domestic economies (France, Ireland).

For funds to be directed to public needs, a clear publicly oriented mandate is needed even for those institutions required to operate under commercial terms and especially when it comes to less commercial operations. Khazanah in Malaysia, for example, divides its SWF into a commercial fund and a "strategic investment fund" which also favours economic developmental impacts. However, even the strategic fund is expected to be self-sustaining and must generate at least the same yield as the government's ten-year securities and deliver a financial return in addition to its economic impact outcomes.

5. Making banking work better for development: The role of credit-ratings agencies

For public banks to scale up in ways that do not undermine their developmental mandate, it is essential to revisit the role of credit-rating agencies (CRAs). Since banks have a fixed capital base, the scale of their lending activities and their perceived risk is limited by the way the market views their solvency – which is determined to a large extent by the ratings given them by the CRAs. This affects the scale of additional funds that banks can borrow on the market, and their cost. The World Bank and all the major regional MDBs have always been rated AAA with all the three largest rating agencies.[28] Many banks' shareholders require this; for one bank it is explicitly spelled out that they must get AAA with all top three agencies; for others, it is simply designated AAA without specifying which agencies (Humphrey, 2018a). These requirements put banks in a position where they must balance the twin goals of AAA ratings and meeting their developmental goals, which are by definition supposed to include the kinds of projects that are of ambiguous or even high risk. Indeed, paragraph 110 of the Addis Ababa Action Agenda describes mechanistic reliance on credit ratings, including problems of conflict of interest, as a systemic issue impacting finance for development.[29]

Standard & Poor's (S&P) describes this tension as a conundrum, because G20 leaders have called on banks to increase their lending, but without committing additional capitalization (S&P Global Ratings, 2017: 2). Their action plan, rather, calls on banks to investigate different ways of unlocking capital to optimize their balance sheets. A consequence of this tension is that banks are being excessively cautious, even according to the CRAs. Looking at 19 MDBs in 2016, S&P showed that these banks could collectively expand their lending by about $1 trillion without damaging their credit ratings, a massive step change of more than 70 per cent of the banks' lending and roughly the equivalent of doubling the loan portfolio of the World Bank. Banks could also opt for a lower rating, say AA+ rating rather than AAA. Several development banks such as the Latin American bank CAF already operate successfully at this level (Humphrey, 2018a). Research suggests that if the seven major MDBs "broke the triple-A taboo" and instead targeted ratings of AA+, this would increase their lending headroom by a further $1 trillion (Settimo, 2017).

Another move would be for governments to stop diverting income from their banks. The World Bank's shareholders have transferred over $23 billion of income out of the Bank through 2017 (Humphrey, 2018a: 25) an amount nearly two times bigger than the Bank's latest round of capital increase. With stronger support from government shareholders, MDBs could also potentially be able to use their callable capital (the portion of capital that is not yet paid in by the bank's shareholders).

Part of the problem is that the methods used by CRAs to arrive at their ratings are opaque and the individual elements can be highly debatable (Munir and Gallagher, 2018). Moreover, as noted by *TDR 2015*, CRAs' assessment shows a systematic favouring of countries that use conservative Washington Consensus–type policies, despite the evidence

that these simply made matters worse during the global financial crisis. More generally, the CRAs are criticized for giving a large weight to banks that hold liquid reserves rather than loans, which in turn encourages the banks to hold more cash reserves than they might otherwise; and for undervaluing the benefits of Preferred Creditor Treatment and callable capital.

D. What developing countries can do now

Public banking can be a positive force for development, especially if it is catalytic and market-shaping and not restricted to the minor role of reacting to so-called "market failure" or filling gaps. An important new opportunity exists to use public banking to achieve a Global Green New Deal, but this will not happen automatically and policy support will be essential. Some important policy suggestions emanating from this discussion are as follows:

- Development banks and long-term finance institutions can make a significant contribution to a Global Green New Deal, but they will be much more effective when they are part of a pro-development articulation with the central bank at the apex of the system, supported by a diverse mixture of financial institutions with differentiated and distinctive roles, and positively integrated with broader government policy and national development goals.
- Central banks can free themselves from recent years' narrow focus on price stability/inflation targeting and once again include critical developmental concerns. There may be more policy space for this than usually imagined. The wave of public support for a new approach to deal with climate change offers an encouraging opportunity that can be expanded to the global commons and a Global Green New Deal more generally.
- Central banks should have a much bolder role and fully support green bond issuing and green finance by public banks and governments; including by acting as buyer of last resort.
- Governments need to be careful not to give away the space they have – through international trade or investment treaties that limit central banks' capacities to use macroprudential measures such as capital-account management, for example. Where possible these rights should be taken back.
- Development banks need to be better supported so they can scale up finance for development. This requires enabling them to lend more with their current capital levels as well as expanding their capital base.
- At the same time, banks need to have incentives aligned so that they can lend to projects that are truly development-oriented. Concerns for financial sustainability should not undermine their ability to lend to projects or areas where the development returns are high, even when financial returns may be low.
- Governments need to signal their support for development banks, including their mandate to be developmental. Since capital markets assess who owns the banks and whether they will support them if things go wrong, banks are undermined when there is a sense that some governments are unwilling to fully support them.
- Government shareholders may also reduce the revenues they are receiving from their banks and, rather, reinvest their profits back into the banks.
- Sovereign wealth funds offer potential firepower that could be better directed towards developmental needs, including supporting development banks.
- Better performance metrics and reporting systems that appropriately value the social and economic contributions of development finance institutions, rather than just financial viability, can help to address the tension that exists between financial sustainability and perceived economic effectiveness. This remains an important gap in research, in funding and in the wider political debate.
- Support for development finance institutions to act collectively to share experiences, technology and learnings as well as finance, in particular South–South interchanges may be particularly effective.
- Developing countries need to ensure that regulatory framework for banks takes into due consideration the specific features of public and especially development banks. The Basel Capital Accords do not provide a clear distinction between banks of different character.

At the national level, country regulators have the discretion to adapt Basel rules as necessary and therefore could either leave development banks outside of the Basel framework as some countries do already, or, alternatively, give them special treatment, in recognition of their specific funding features and their developmental mandates.

- The constraints posed by credit-rating requirements need to be reconsidered. Governments could review their requirements for banks to achieve consistently high credit ratings and challenge the "triple-A taboo". A review of the costs and benefits of banks trying to achieve AAA status is needed, with particular focus on the trade-offs taking place as banks try to balance the competing goals of AAA status and developmental mandates.
- An external review of the capital adequacy of development finance institutions needs to be conducted by a credible external agency with specialist knowledge of development finance institutions as compared to "ordinary" banks. BIS, for example, could give appropriate analysis and weight to their special financial situation and mandate in a way that CRAs – which are required to assess a very broad spectrum of institutions and firms – cannot be expected to.
- At the international level, the critical issue is the grip that international CRAs have over MDBs. Such agencies follow closely Basel rules for capital determination when assessing how much capital such banks should hold for different categories of assets, but their assessment could be modified in recognition of banks' developmental mandates and the fact they are owned by governments.
- Some green credit creation and guidance mechanisms, such as quantitative easing, may not be feasible for developing countries that risk provoking exchange-rate and balance-of-payment crises. However green quantitative-easing policies by banks in advanced countries could be used to support green investments in developing countries.
- New analytical approaches to macroeconomic modelling on the part of central banks are long overdue – including those that more accurately incorporate exposure to climate-change risks. It should also be compulsory to disclose these.
- It is equally essential to revisit the analytical modelling relating to the effect of economic austerity policies, in particular their negative effects in terms of inequality, deflation and depressed effective demand. ■

Notes

1 For example, the Bank of North Dakota (BND) was formed in 1919 to provide low-price credit for farmers, and now provides student loans and credit for local small and medium-sized enterprises, as well as funding local government by purchasing municipal bonds. The Norwegian Kommunalbanken was established in 1926. The Ziraat Bank was formed in Turkey in 1888 to support agricultural development.

2 Some public banks created recently include the SME Development Bank of Thailand (2002); the Agencia Financiera de Desarrollo (AFD) in Paraguay (2005); the Banco de Desarrollo Productivo (BDP) in Bolivia (2007); Belarus Development Bank; Tanzania Agricultural Development Bank (2012); Malawi Export Development Fund (2012); BanEcuador BP (2015); Nepal Infrastructure Bank (2019); and Uzbekistan Development Bank (2019).

3 Some examples are the Green Investment Bank in the United Kingdom (2012); the new Canadian export credit agency, FinDev Canada (2017); Bpifrance (2012).

4 UNCTAD secretariat estimations suggest that public banks with sociodevelopmental orientation currently number 80 in developing Asia, 75 in Africa, 70 in Latin America and the Caribbean, 20 in the Middle East and 8 in the Pacific.

5 For more detailed surveys, see for example Barrowclough and Gottschalk, 2018; Eurodad, 2017; Grabel, 2017; Griffith-Jones and Ocampo, 2018; Studart and Gallagher, 2016; UNCTAD, 2016, 2018a, 2018b; World Bank, 2018b; Xu et al., 2019; among others.

6 See Eurodad, 2017, for another, related, description.

7 To avoid such potential for cherry-picking or crowding out, the Production Development Corporation (CORFO) in Chile, which is an agency financed by the Treasury rather than a bank, switched to offering grants for the most needy cases rather than subsidized loans (Griffith-Jones et al., 2018), meaning they targeted a different kind of borrower.

8 In the case of SWFs, most tend to operate more in the same profit-oriented territory as private firms and investors. However, there are some notable exceptions where funds invest domestically or in the region

in strategic and developmental activities, including the Singaporean Temasek infrastructure investments in the region, the Khazanah fund in Malaysia, which invests in national infrastructure and other areas with developmental impact, and French and Italian funds set up following the 2008–2009 crisis to invest in domestic firms and enterprises.

9 Table 11 in ECB, 2017.

10 OECD, 2010. Note: this annual series ceased in 2010.

11 See Amsden, 2001, UNCTAD, 2016, and Barrowclough and Kozul-Wright, 2018, on the "reciprocal control" mechanism.

12 Electric power, road and railway construction, agriculture and related industries, public infrastructure, petroleum and petrochemicals, coal, post and telecoms (CDB, 2017).

13 In Canada, where carbon taxes were adopted in 2019, revenue estimates for that year are almost C$3 billion but projected to rise quickly to C$6 billion by 2023/24 (Parliamentary Budget Officer, 2019). The tax revenues received are to be paid back to the provinces or territories in which they were generated but they could, potentially, be used instead to inject capital into a development bank dedicated to climate lending if there was political will.

14 Some country central banks evolved from private banks and became "public" only gradually after several centuries of mixing private and public objectives. Most, however, were established in the mid-1900s. Out of 176 central banks existing today, 159 were founded from 1900 onward. Historical exceptions include the creation of the Bank of Sweden in 1668, the Bank of England in 1694, the Bank of France 1800, the National Bank of Belgium 1850, and the Reichsbank 1876. The United States Federal Reserve was created in 1913.

15 The list of activities that central banks are supposed to engage in tends to include the following: issuing and unifying the country's payment system; acting as the government's bank; acting as the commercial banks' bank; serving as lender of last resort to the banking system and even the financial system as a whole; conducting monetary policy to stabilize both prices and the exchange rate; and conducting monetary policy to manage the overall level of economic activity. Some writers insist that "lender of last resort" is the true function of central banking (Capie, 1994, 1999), while others are equally adamant that it is the provision of liquidity (Goodhart, 1988, 2011).

16 The European Central Bank (ECB) introduced a Targeted Long-term Refinancing Operation (TLTRO) in 2014, whereby the ECB offers long-term loans to banks, in exchange for collateral, on special terms. There have been a couple of programmes since the eurozone crisis and the interest rate on these loans falls in proportion to the lending undertaken by the banks, to encourage more lending to the actual economy. If banks lend enough, the rate the ECB charges them is negative. The Bank of England launched the Funding for Lending Scheme (FLS) in 2012 and the Bank of Japan introduced a Lending Support Plan (LSP), to help improve monetary policy transmission from the financial sector to the real economy.

17 In Japan, the United Kingdom and the United States, the institutional structure meant that the specific form taken by loose monetary policies required consultation between the central bank, the Treasury or finance ministry and the Financial Services Authority.

18 In the last quarter of 2018 alone, the Monetary Policy Analysis Group of the People's Bank noted a slew of monetary and financial activities designed to support government policy goals. These included offering financial support for structural reforms in industry, agriculture and poverty reduction as well as a series of policies to create credit and to direct it, at preferential rates, where it was considered to be lacking (MPAG, 2019: 2).

19 Established in July 2018, the Network brings together 16 central banks including some of the world's largest, as well as five multilateral financial institutions as observers.

20 Many developing countries are already doing this. China dominates, accounting for 70 per cent of the green bonds issued by emerging and developing countries but others include Brazil (six issues over the years 2012–2018), India (eight), Indonesia (one), Poland (two), the Republic of Korea (four); Climate Bonds Initiative, 2018: 14.

21 These are not voluntary savings, but mandated through legislation. FAT (Workers' Assistance Fund) and PIS/PASEP (Social Integration Programme / Civil Servants' Savings Programme) of Brazil, mentioned later, are such examples where funds originating from firms' contributions aimed at supporting workers' welfare and socioeconomic integration and development.

22 See: https://www.kfw.de/KfW-Group/Newsroom/Press-Material/Themen-kompakt/Marshallplan/ (accessed 19 July 2019).

23 See: https://www.dbj.jp/en/co/info/history/index.html (accessed 19 July 2019) and Stiglitz and Uy, 1996.

24 Based on data from banks' 2017 annual/financial reports.

25 See BDEAC, 2017; BOAD, 2017; EADB, 2015; and TDB, 2017.

26 In 2017, TDB's total equity was $1.02 billion (against $857 million the year before). In the same year, equity reached $261.4 million for EADB (against $251.2 million in 2016), $1,315 million for BOAD, and $191.3 million for BDEAC (end of period values).

27 EADB, created in 1967, is a key institution of the

East African Community (EAC). BOAD, created in 1973, but becoming operational in 1976, has its origins in the West African Monetary Union (WAMU). BDEAC, created in 1975, and entering into operation in 1977, serves the countries of the Central African Economic and Monetary Community (CEMAC). Finally, TDB, established later, in 1985, has its origins in the Common Market for the Eastern and Southern African States (COMESA). Membership has then expanded to include countries from across EAC and the Southern African Development Community (SADC).

28 The one exception to that time was when the African Development Bank was downgraded to AA+ during the years 1995–2003, due to a sovereign debt problem in some countries in Africa.

29 Some (like Standard & Poor's) use a methodology that is more quantitative and mechanical compared with the other big agencies and is therefore more transparent, but even this has been criticized for being overly conservative in ways that impact on MDB lending patterns.

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