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FINANCING A GLOBAL GREEN NEW DEAL

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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

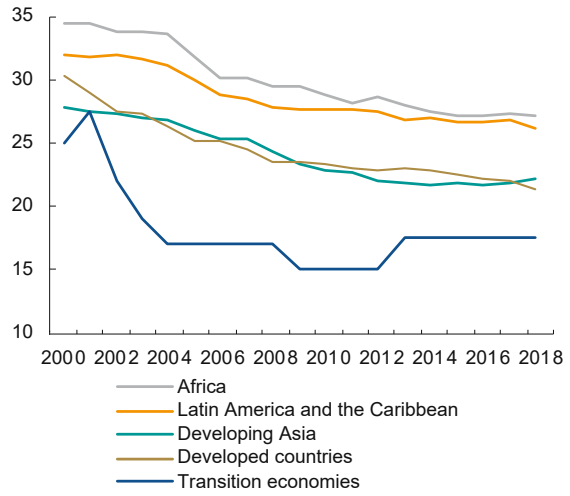
Launched in 2013, the OECD/G20-led Base Erosion and Profit Shifting (BEPS) project, which aims at taxing profits where profit-generating economic activities are performed and value is created, has issued a number of reports with policy recommendations in 15 action areas (OECD, 2013a, 2013b, 2015a). An 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

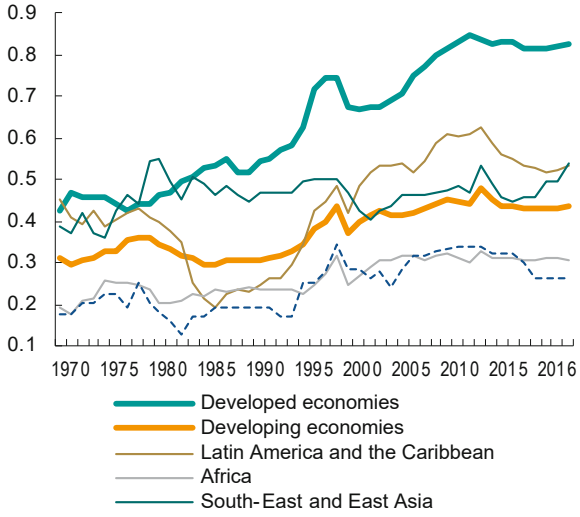
$1.1 billion for North Africa; $1.7 billion to $4.3 billion for Latin America and the Caribbean, of which $0.9 billion to $2.4 billion for Brazil and Mexico; $1.8 billion to $4.5 billion for South and South-East Asia excluding India; and $0.8 billion to $1.9 billion for the least developed countries.[30] 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



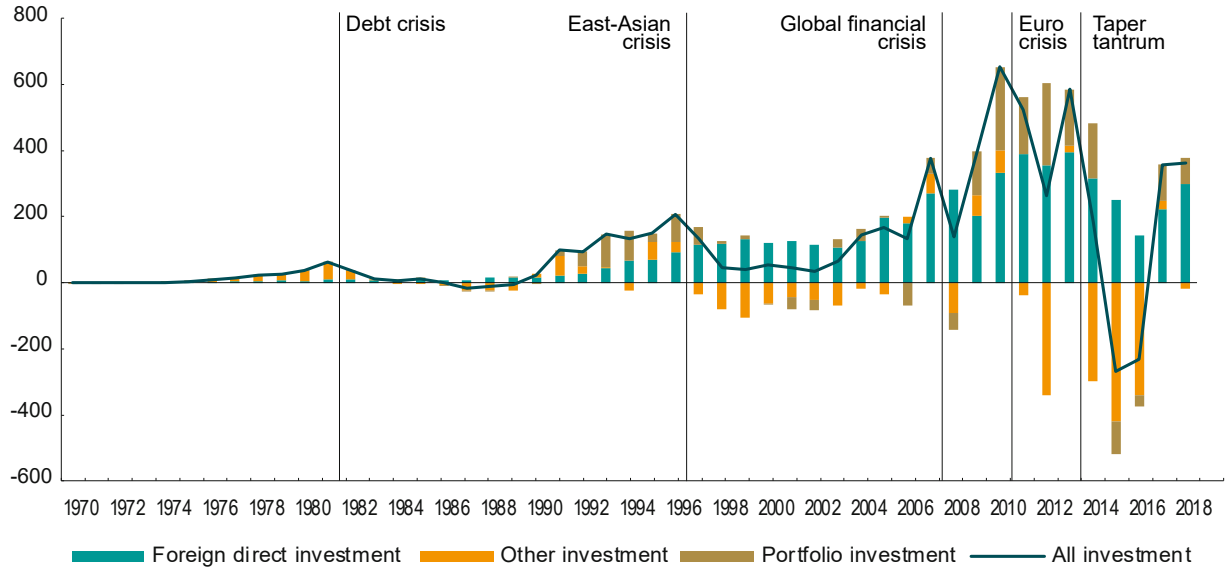
Source: UNCTAD secretariat calculations, based on Chinn and Ito, 2006, and subsequent data updates.

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).

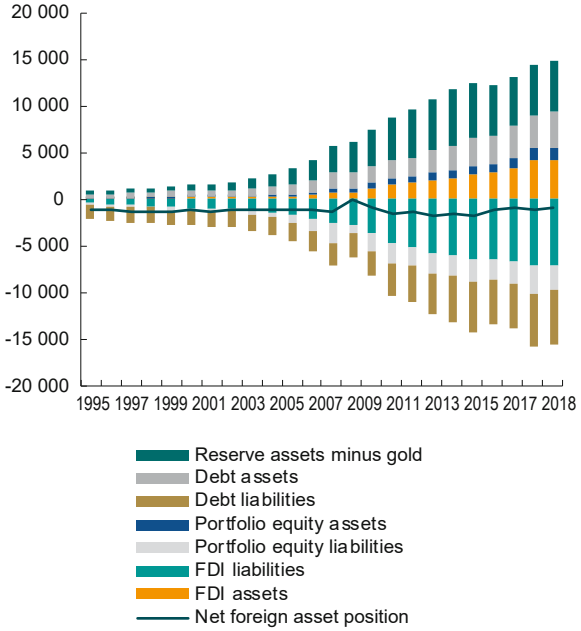
As a result of these processes, the debate on capital flows has increasingly moved from a focus on net capital flows towards an emphasis on stocks of gross external assets and liabilities.

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]

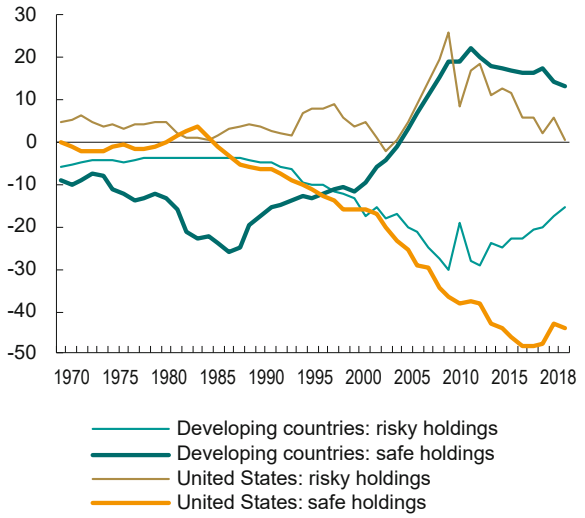
The composition of developing countries' gross external liabilities (annex table 5.A.2) also recorded a shift from debt to equity during the period 1996–2018, which was considerably larger and more widespread than that in gross external assets. This implied rising shares of both FDI and portfolio equity 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)

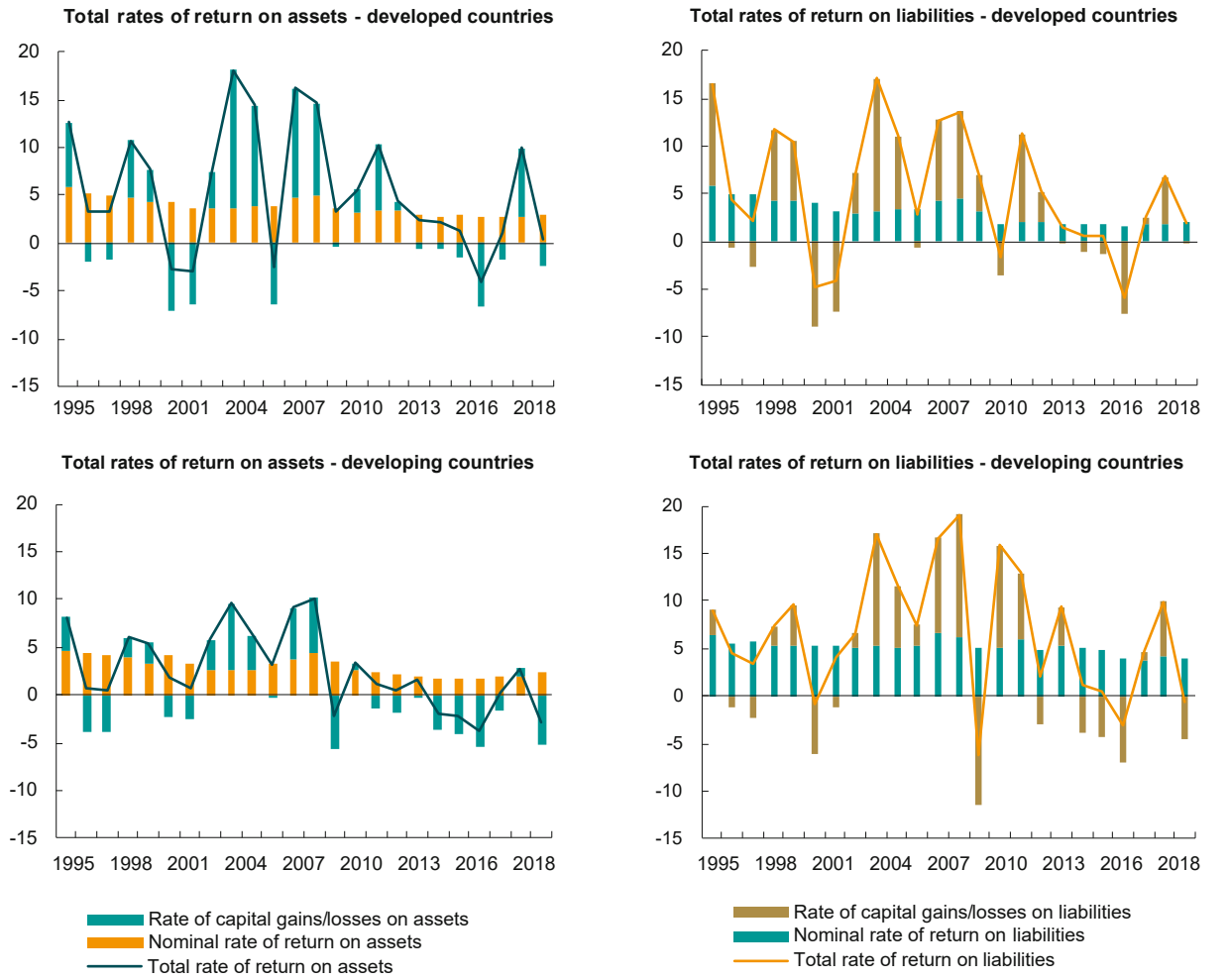
	Gross assets				*Gross liabilities*				*Memo item: Total return on gross assets minus total return on gross liabilities*			
	1995–2007	*2008–2009*	*2010–2018*	*1995–2018*	*1995–2007*	*2008–2009*	*2010–2018*	*1995–2018*	*1995–2007*	*2008–2009*	*2010–2018*	*1995–2018*
Developing countries												
Argentina	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.

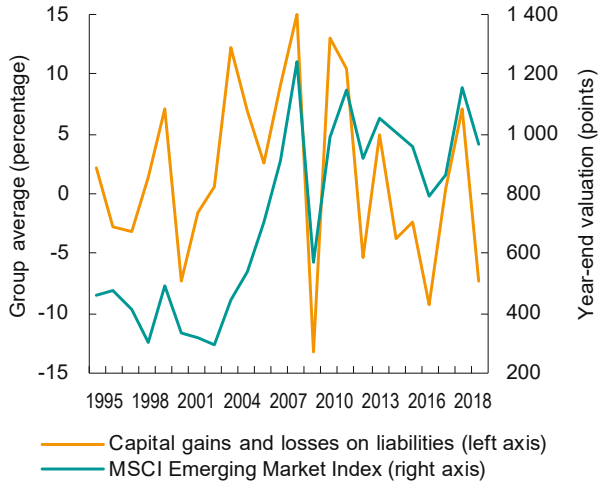
This has utmost damaging implications for the persistent belief that financial integration into global private capital markets is a vital and desirable strategy for developing countries to attract foreign savings so as to meet their development goals. Instead, it appears that on balance such integration 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.

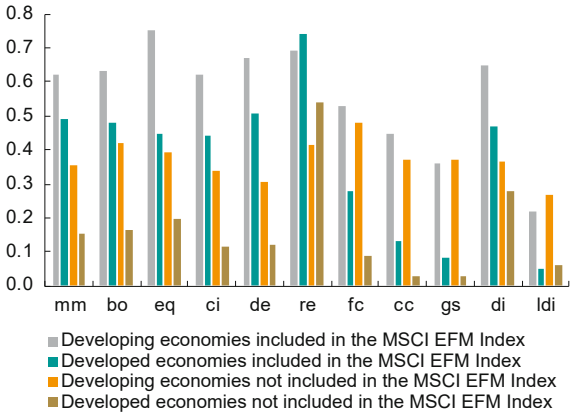
4. The use of capital controls to regulate international capital flows

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

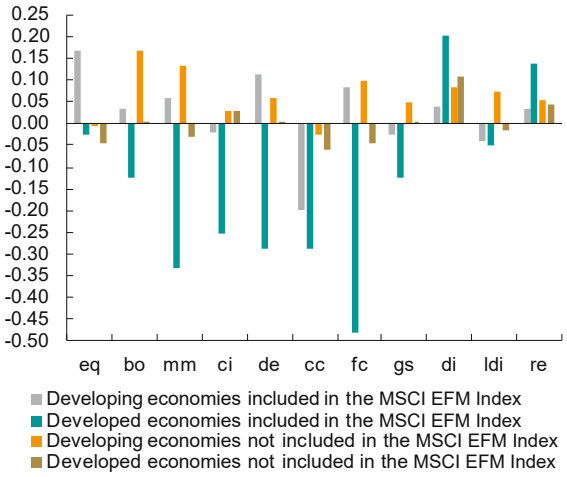
FIGURE 5.8 Proportion of observations with capital controls on inflows, by asset category and selected country groups, 1995–2016



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.