Framework Paper: Development Financing for Recovery, Resilience and Growth

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1. Overview

This report presents a framework for the analysis of development finance in Viet Nam. There are few issues today of greater importance to economic growth and human development than access to sustainable, long-term finance. Realizing the Sustainable Development Goals (SDGSs) by 2030 will require large-scale investment in infrastructure, education and healthcare systems, renewable energy and transportation. Trillions of dollars of additional investment are needed to protect vulnerable regions and communities from the impact of climate change on coastlines, low-lying agricultural areas, storm-prone regions and towns and cities. Strategies drafted just a few years ago have been blown spectacularly off course by the coronavirus pandemic and its effects on production, trade, capital markets and public sector budgets.

The United Nations has organized three high-level global conferences to address the issue of sustainable development finance. The last conference was held in 2015 in anticipation of 2030 Agenda for Sustainable Development, adopted unanimously the General Assembly in September of that year. The Addis Ababa Action Agenda produced by the conference placed "cohesive, nationally owned sustainable development strategies supported by integrated national financing frameworks" at the center of its approach.¹

The Addis Ababa Action Agenda, like the Monterrey Consensus and Doha Declaration that preceded it, covers a broad range of topics including social assistance and social protection, agricultural productivity and trade, infrastructure, industrialization, employment, environmental protection and peacebuilding. Constructing a comprehensive national financing frameworks that addresses these issues among others is a complex task requiring close cooperation of government, the private sector, civil society, and international development partners. With so many actors involved, and such a diversity of issues to be considered, a necessary starting point is a shared understanding of basic principles of development finance and their application to specific national and subnational settings.

Unfortunately, discussion of financial issues is too often shrouded in ambiguity and confusion, reflecting profound disagreements among economists and policymakers over the proper role of government in financial markets and the implications of large-scale international capital flows. Faith in the efficiency and stability of liberalized financial markets reached a highwater mark in the 1990s, but after successive financial crises spanning three continents, even proponents of financial liberalization expressed reservations. The predominant view was that liberalization could succeed but only in a context of respect for the rule of law, low levels of corruption, and rigorous enforcement of contracts (Detragiache et al., 1998). When, with the Global Financial Crisis, the epicenter moved from the periphery to the core institutions of American and European finance, these caveats lost relevance. In sharp contrast with the aftermath of the East Asian crisis, American and European policymakers dropped their opposition to state involvement in the financial sector and approved bank bailouts on the order of \$3.5 trillion across 37 countries

¹ Addis Ababa Action Agenda of the Third International Conference on Financing For Development, endorsed by the General Assembly in Resolution 69/313 on July 27, 2015 (https://sustainabledevelopment.un.org/index.php?page=view&type=400&nr=2051&menu=35).

(Igan et al., 2019). The willingness of governments to mobilize public sector balance sheets to forestall the collapse of credit and payment systems was ultimately decisive averting descent into a global economic depression.² The scale of the crisis and the bailout inevitably led to calls for stricter regulation of banks and other financial institutions and safeguards against excessive leverage and risk-taking. The argument that some controls on the movement of capital are warranted is now widely accepted, even by previous opponents of capital controls like the International Monetary Fund. While it is still too early to talk about a post-crisis consensus, the textbook version still holds that financial liberalization is good for growth if the necessary institutional prerequisites are in place.³

This report aims to cut through some of the mystification surrounding development finance as a contribution to discussions on the formulation of Viet Nam's national financing framework. It emphasizes pragmatic lessons from successful countries to illustrate core concepts and clarify the alternatives available to Viet Nam. A series of short policy briefs accompanies this report to provide additional information on specific cases and issues addressed in the report.

A central contention of the report is that Viet Nam will need to invest a larger share of national income if it is to achieve the goals set out in the Ten-Year Development Strategy by 2030 and high-income status by the centennial year of 2045. Even before the coronavirus pandemic, the investment rate had fallen for several years. The decline in public investment is particularly concerning in light of the heightened need for infrastructure investment to cope with the impact of climate change. Government will need to play an active role in mobilizing resources and structuring incentives to lengthen time horizons, conserve scarce foreign exchange and encourage investment in socially desirable projects.

Three core principles of development finance

Three core principles of development finance form an appropriate starting point for the formulation of the national financing framework. First, and most crucially, the textbook notion that stocks of prior domestic savings place strict limits on the scale of investment is incorrect. While the relationship between saving and investment is complex, it would be more accurate to say that investment generates saving rather than the other way round. This principle has important policy implications. Domestic investment is not driven by frugal households and government, as in the textbook model, but instead by the identification and implementation of viable investment projects. From this perspective, development finance cannot be separated from the broader issue of industrial policy, encompassing trade, technology and training strategies.

² As Robert Lucas, a leading proponent of financial liberalization, quipped in 2009, "I guess everyone is a Keynesian in a foxhole" (Skidelsky, 2010).

³ The latest edition of the leading textbook on banking and finance concludes as follows: "The story so far suggests that a lending boom and crash are inevitable outcomes of financial liberalization and globalization in emerging market countries, but this is not the case. These events occur only when there is an institutional weakness that prevents the nation from successfully navigating the liberalization/globalization process (Mishkin, 2022).

Finance is properly understood as the provision of liquidity (cash) to investors to cover expenditures that cannot be financed out of profits. Far from loaning money that is already in their vaults, banks create money when they make loans. Their ability to do so is not limited by a pre-existing stock of savings, but by the existence of credit-worthy projects. Banks are naturally predisposed to favor short-term credits like working capital and consumer loans because their liabilities are mostly short-term. Financial markets help banks and other lenders bridge the gap between long-term capital requirements and short-term liabilities, but as we shall see, they do so imperfectly.

Investment is driven primarily by expectations of future profits. This presents problems for developing countries, which must compete with established producers of goods and services from the advanced countries that enjoy brand recognition, experience managing large-scale enterprises and access to advanced technologies. Government policies are needed to reduce investment risks and raise profit expectations. Traditionally this took the form of tariffs and subsidies, local content rules, R&D subsidies, and access to subsidized credit. Many of these methods, which were used to great effect by the successful East Asian industrializing countries, are no longer available to late industrializing countries under multilateral and bilateral trade and investment treaties. Nevertheless, developing countries must avail themselves of all remaining policy levers to increase the viability of domestic investment projects.

When the Republic of Korea embarked on its historic industrialization drive in the 1960s, domestic saving was non-existent: gross domestic saving was just 0.3% of GDP in 1960 and did not reach 20% until 1973. However, as the investment rate rose, saving increased in tandem. The main constraint on Korean investment was the availability of sufficient supplies of foreign exchange since Korea needed to import technology and capital goods. The government actively targeted credit and foreign exchange to export-oriented industries, which meant restricting access to credit for consumption and speculation. The Korean experience demonstrates the importance of situating development finance within a broader industrial development strategy.

The second principal that informs development finance policy is that banks never rely exclusively on price signals in making credit decisions. Credit is always rationed based on the judgement of lenders regarding the likely viability of projects and the capacity of the borrower to repay the loan. The interest rate that borrowers are willing to pay is a poor indicator of creditworthiness because willingness to pay higher rates may signal desperation (and impending bankruptcy) rather than profitability. Loans, in a word, are not a normal good.

Financial liberalization policies, which were aggressively promoted by the international financial institutions from the 1970s, were based on the belief that government intervention has "repressed" financial markets, reducing their capacity to intermediate between savers and investors. Holding interest rates below market clearing levels had suppressed saving and encouraged households to hold unproductive assets like gold. Low interest rates on loans allocated capital to less risky projects and starved more profitable ventures of capital.

The solution was to eliminate interest rate controls, liberalize the granting of bank licenses and open domestic capital markets to foreign participation.

However, the expected relationship between interest rates and saving did not materialize. Saving remained higher in fast-growing economies (largely in East Asia) that invested a larger share of national income. Liberalization sparked rapid growth of consumer borrowing, speculation in financial assets and connected lending and in many countries sparked unsustainable credit booms leading to banking and financial crises. Financial markets tend to instability because it is rational for individual banks to finance increasingly speculative assets even as systemic risks mount. Asset prices and interest rates are not an accurate guide to underlying asset values or investment risk.

The third core principle of development finance is the primacy of domestic sources of capital. More than 90% of fixed investment in developing countries is financed domestically, so the contribution of foreign savings is marginal in any case. Several authors have detected a *negative* relationship between the share of international capital flows in total investment and the growth of investment and output. Foreign capital inflows are strongly procyclical, flooding in when interest rates are low in the advanced countries and drying up when rates rise. Because of the impact of capital inflows on domestic credit, exchange rates and asset prices, developing countries cannot maintain an independent monetary policy even in the context of flexible exchange rates.

After the East Asian financial crisis, governments turned to foreign direct investment (FDI) as a safer source of foreign capital in place of portfolio flows. FDI was seen as more stable and less procyclical, and China's emergence as a manufacturing powerhouse showed that FDI in manufacturing could form part of a viable export-led growth strategy. However, the distinction between FDI and portfolio investment is often more apparent than real. Reinvested profits make up a substantial proportion of total FDI, and less than half of the FDI stock represents new equity and loans invested in developing countries. Moreover, foreign affiliates often borrow against their in-country assets, the proceeds from which are used to acquire other assets or simply repatriated. FDI is also expensive in comparison to other sources of financing, and profit remittances and debt repayments add up over time as the stock of FDI rises.

The effects of foreign direct investment on the balance of payments, economic growth and capital formation depend on a range of factors including the specific characteristics of the host country and sectors and industry receiving the investment, the trade orientation of FDI firms, and the type of financing involved. The breadth and depth of linkages to domestic firms, including the transfer of technology, knowledge and skills from foreign to domestic firms, are important factors over the long term.

Strategies to increase the supply of long-term finance

The main role of financial markets is to support the commitment of resources to long-term uses by making them sufficiently liquid to attract investors. Commercial banks are constrained in carrying out this function because their liabilities are mostly short-term. Late industrializing countries have pursued a variety of strategies to increase the supply of longterm credit, including capitalizing private banks, guaranteeing loans and injecting credit directly to new industries, purchasing commercial bank bonds and establishing state-owned National Development Banks (NDBs).

NDBs emerged as important financial institutions in the aftermath of World War II, when newly independent countries and countries rebuilding from the war set up public sector entities to mobilize capital for infrastructure and industrialization. The main business of NDBs is discounting and guaranteeing loans made by commercial and investment banks, although many NDBs are also engaged in direct lending. They again came to the fore after the GFC because they were among the few financing vehicles with the capacity to ramp up investment at a time when virtually all private financial institutions were cutting back on lending. In addition to counter-cyclical finance, NDBs also invest in new industries, supply credit to small and medium scale industries and finance public infrastructure and other public goods, notably climate change mitigation and adaptation. In 2015, NDBs mobilized \$5 trillion for investment, five times more than the multilateral development banks.

The four largest NDBs measured in terms of assets as a share of GDP are Germany's Kreditanstalt für Wiederaufbau (KfW), the China Development Bank, Brazil's BNDES, and the Korean Development Bank.. These four institutions are also among the most innovative, having adapted successfully to deep structural change in their national economies and the global financial system. They have applied various instruments to increase the supply of long-term financing for infrastructure and industry, using the government's access to capital markets to increase non-state credit through second-tier lending, loan guarantees and syndicated lending. Even in advanced countries like the US and Germany, public institutions are still needed to achieve specific policy goals, for example support for small businesses, home ownership and energy conservation.

Sovereign Wealth Funds (SWF) have emerged as an important vehicle in mobilizing capital for domestic investment. While most SWFs are funded from natural resource exports, recent years have seen an increase in the number of funds financed from trade surpluses and the privatization of state assets. These organization manage national reserves to achieve strategic objectives such as conserving the value of resource rents to protect the living standards of future generations, financing industrialization and investing countercyclically without causes large fiscal deficits. Because they have no short-term liabilities, they are free to finance long-term ventures unconstrained by liquidity concerns. The top 100 SWFs controlled \$8.6 trillion in 2020, assets, 85% of which is in developing countries.

Increasing the supply of long-term finance will not generate sustainable economic growth if these resources are used to speculate in financial assets and land. Asset bubbles are a missed opportunity because in two senses: they divert capital from socially productive investments; and they destabilize the financial system. And when the price bubble bursts, the government is left to clean up the mess, including expensive operations like recapitalizing banks and introducing emergency fiscal stimulus packages. The two main policy instruments to prevent the formation of asset bubbles are to restrict the ability of banks to lend into property and stock market booms and taxing capital gains to reduce the

attractiveness of speculation. Capital requirements for real estate lending must be high enough to discourage banks from over-lending, and maximum loan to value ratios should be established to prevent borrowers from taking unnecessary risks. Property taxes should also reflect rising land values and form the core of local government finance, giving local authorities an incentive to improve their capacity to assess properties and collect tax.

As we emerge from the coronavirus pandemic, much of the burden of increasing the supply of long-term capital will fall on government. Economists often worry that government borrowing "crowds out" private investment, using up the nation's limited supply of domestic savings. These concerns stem from a fundamental misunderstanding of the relationship between saving and investment. Public investment generates incomes, a portion of which are saved. Government borrowing, far from draining savings from the private sector, creates private sector assets as long as government bonds are held by domestic businesses and households and not foreigners. No clear relationship exists between government borrowing, interest rates and private investment. If public investment provides essential public goods like transport infrastructure, irrigation and drainage, schools and hospitals, it will crowd in private investment by reducing production costs, opening up markets and upgrading the skills of the labor force. The evidence suggests that public investment is more likely to crowd in private investment in developing countries where returns to investment in infrastructure and other public goods are higher.

This does not mean that the government can borrow as much as it likes. If the economy is operating close to full capacity, larger deficits can result in short-run supply constraints for goods and labor, accelerating price inflation and exchange rate instability, forcing the monetary authorities to raise interest rates regain stability. Some government spending will leak out in the form of imports with negative implications for the balance of payments.

In many countries, including Viet Nam, discussion of the issue of public borrowing has centered on the size of the national debt. Rising foreign debt levels are risky because interest and principal payments must be made in foreign currency, earned through exports or borrowing. A sudden drop in the value of the domestic currency could force the government to impose spending cuts to free up money to service foreign debt. But when government debt is mainly denominated in the domestic currency, and held by nationals, these concerns do not arise. If the real rate of economic growth is higher than the real interest rate on public debt, the risk that government debt will spiral out of control is small.

This is not to say that government indebtedness is costless. Government borrowing can have a negative impact on the distribution of income because interest payments on public debt entail a transfer of income from taxpayers, many of whom are not well off, to owners of capital, including banks and insurance companies. To the extent that the government is financed by broad-based taxes like value added tax, these transfers are regressive.

Until recently, developing countries could not borrow internationally in their own currency because investors were unwilling to carry the foreign exchange risk associated with local currency bonds. However, since the early 2000s many developing country governments have discovered that they can sell bonds in the domestic currency without indexing or

variable rates. This is a positive development from the perspective of developing countries' exposure to exchange rate risk, but it renders these countries vulnerable to sudden shifts in bond prices should expected yields increase in the advanced countries. The "taper tantrum" of 2013, when US yields spiked on the Federal Reserve's announcement that it would begin phasing out purchases of Treasury bonds, is an example of the turbulence that can result from heavy reliance on international investors even if bonds are denominated in the domestic currency.

Conclusions and policy implications

Viet Nam needs to maintain an investment rate between 35 and 40% of GDP to realize the country's economic strategies and plans and achieve the SDGs by 2030. The rate of investment declined after the GFC and the country now relies heavily on foreign capital inflows to finance investment. Identifying sustainable domestic sources of development finance will be a top priority of the Government for the rest of this decade.

National Development Banks have played a significant role in many countries in financing infrastructure development and industrial transformation, and in extending credit to specific groups of borrowers like small businesses. NDBs sustained lending in the aftermath of the GFC, supporting aggregate demand at a time when commercial lenders were in retreat. The most successful NDBs work in tandem with private lenders and are profitable, which reduces their dependence on government support and therefore political interference in their operations.

In addition to increasing the flow of long-term finance, governments need to act to discourage speculation in financial assets and land. Land and buildings tax is an important source of funding for local government and helps discourage speculation in properties. Capital gains taxes also change the balance of incentives in favor of productive investment. Banking regulation should insist on high levels of collateral for property loans to reduce speculation and to limit the ability of the banks to lend into asset bubbles.

Foreign capital is a useful supplement to domestic finance, but the evidence suggests that countries that rely less foreign capital inflows grow faster and invest a larger share of national income than capital-importing countries. The procyclicality of foreign capital flows leaves countries that depend on them vulnerable to overheating during periods of rapid growth and deeper recessions during slowdowns. Capital controls on specific types of foreign liabilities and temporary limits on the volume of inflows during the boom phase of the business cycle can help restore some of the government's economic policy space. Regulatory limits on the ability of domestic banks to increase leverage are important instruments in the developing country context.

Foreign direct investment contributes to growth when it is export-oriented and opens access to foreign markets. At the early stages of development, FDI creates formal sector jobs for workers with relatively low skills, raising productivity and living standards for millions of people. However, policymakers should recognize that the difference between FDI and portfolio flows are often exaggerated. FDI is not necessarily less risky or more stable than loans, and excessive dependence on FDI creates liabilities that can weigh heavily on the balance of payments. Moreover, as a source of finance it is expensive, and much of is derived from profits rather than inflows of new capital.

In the long-term, the impact of FDI depends on whether it crowds in or crowds out domestic investment. FDI policy should target backward and forward linkages between foreign and domestic firm rather simply than the volume of FDI, exports or new jobs. The size and scope of linkage effects are product and context specific, so it is difficult to formulate simple rules to identify projects that are more likely to increase domestic investment and value added. Industrial policy is an important tool to improve quality and reduce production costs of domestic goods to help local firms gain access to the supply chains of export-oriented foreign companies.

The East Asian financial crisis and Global Financial Crisis were massive setbacks that have had a lasting impact on the world economy. We have less faith in flexible exchange rates and we are more wary of asset bubbles than we were before these crises hit. These lessons will stand us in good stead, but unfortunately the next financial crisis will probably spring from a different set of causes, and take different forms, from crises of the past. Global and domestic financial systems are constantly changing, with new opportunities and risks emerging all the time. The impact of the coronavirus global pandemic and "the unprecedented challenge" of climate change have significantly raised the stakes associated with increasing the supply of long-term financing while also maintaining financial stability.

There is no "one size fits all" solution to the problem of development finance. Each country needs a national financing framework suited to its particular conditions while also taking heed of international developments. Crucially, the national financial framework must be consistent with and supportive of national development strategies and plans. Financial, sectoral and regional policies must share a common vision of economic and social transformation, with clear priorities, approaches and benchmarks. Development finance should conform to, rather than dictate to, national development strategies and visions.

II. Introduction

The coronavirus pandemic is a human tragedy of historic proportions. Covid-19 was among the top three causes of death worldwide in 2020 and 2021, and millions more have suffered acute illness and, in some cases, long-term health effects. The world economy contracted by 3.5% in 2020, and even in Viet Nam, which performed better than most, 32 million workers either lost their jobs or had their working hours reduced at some time during the year (General Statistics Office, 2021). The resurgence of the virus in 2021, in Viet Nam and in other Asian countries, has dashed hopes for an immediate return to the pre-pandemic growth trajectory. Beyond, the short-term economic impact, the pandemic is a stark reminder of the interconnectedness of human society and the imperative of international cooperation to solve global problems. The development of effective vaccines was a scientific triumph, but even the best technology cannot defeat the virus in the absence of global collective action to ensure equal access in every corner of the world.

These lessons also apply to climate change, of global challenge on a scale that dwarfs even the coronavirus pandemic. Failure to limit global warming to 1.5°C above preindustrial levels—a more distant goal with each passing year—could result in the loss of as much as one-tenth of global economic output by 2050, and even more—upwards of 25 percent—in vulnerable regions like Southeast Asia (Swiss Re Institute, 2021). The burden of climate change will be distributed unequally: people living in low-lying coastal and delta regions, in regions vulnerable to storms, droughts, floods and other climate-related disasters, and farmers dependent on rain-fed agriculture, will be hit hardest (Islam & Winkel, 2017).

Grappling with the economic impact of the pandemic and climate change is complicated by the fact that even before the pandemic hit the global economy was underperforming. Even in 2019, the world had not yet recovered from the Global Financial Crisis (GFC) of 2008. Demand growth was sluggish and investment disappointing despite historically low interest rates. World trade volumes were below their pre-crisis highs and fell again in 2019. A decade of expansionary monetary policy after the crisis had fueled the accumulation of public and private debt on a massive scale. According to the Institute for International Finance, the global debt to GDP ratio reached an all-time high of 355% in 2020, from about 200% in 2000. Private borrowing in East Asia rose 15% per year from 2008 to 2019. Low interest rates inflated asset price bubbles in equity and property markets, which continued to break records despite plummeting corporate earnings.

Achieving a robust recovery and realizing the Sustainable Development Goals by 2030 will require a significant increase in public and private investment over the next decade. In an often-cited study published in 2019, the World Bank estimates that low and middle-income countries will need to invest \$2.1 trillion per year (measured in constant 2011 US dollars) to achieve the SDGs and build the infrastructure needed to convert from fossil fuels to renewable energy systems and to protect people and communities from the negative effects of climate change (Rozenberg & Fay, 2019). Financing this surge in investment in ways that do not generate inflation or impose an excessive debt burden on governments,

businesses and households is one of the most pressing problems facing the developing world.

Three major international conferences have been held in recent years to address the challenge of development finance. The International Conference on Financing for Development held in Monterrey, Mexico in 2002 focused on the role of overseas development assistance (ODA) in realizing the Millennium Development Goals (MDGs) by 2015. The Doha Declaration of 2008, issued as the GFC was unfolding, sought commitments from donor countries to sustain ODA flows during the global financial crisis. The Third International Conference on Financing for Development was held in Addis Ababa in 2015 in anticipation of the 2030 Action Agenda and the Sustainable Development Goals (SDGs).

The AAAA identifies the supply of long-term finance and access to foreign exchange as two key constraints facing developing countries. The final report takes a cautious approach to financial liberalization and globalization. This marks a significant change in tone from Monterrey and Doha, and from the prevailing consensus among development agencies. In the textbook version of development finance, financial liberalization—easing of government controls on banks, interest rates, international financial flows and exchange rates—provides a ready-made solution to saving and foreign exchange constraints. Market prices convey complete information on project viability and risk. Flexible exchange rates match the supply and demand for dollars, reduce the need for central banks to hold foreign currency reserves and impose discipline on profligate governments. Market-determined interest rates stimulate savings, reduce the cost of borrowing and redirect international capital flows to developing countries, where capital-labor ratios are lower and which therefore offer investors higher rates of return than in the advanced countries.

By the time of the Addis Ababa Conference, the bloom had come off the rose of financial liberalization. From Latin America to East Asia, the elimination of controls on interest rates, bank licensing and foreign capital flows had not produced the desired effects. Domestic saving and investment rates fell, exchange rate volatility increased, and financial crises occurred with alarming regularity. Worst of all, unquestioning faith in efficient financial markets had blinded policymakers to the gathering clouds of the Asian Financial Crisis and the GFC. In the wake of these disasters, even committed advocates of financial liberalization reversed course and welcomed regulatory limits on domestic credit growth and controls on cross-border capital flows (Gallagher & Tian, 2017).

Yet the failure of financial liberalization does not mean that we can simply reconstruct the financial systems of the pre-globalization era. Nor should we want to. Financial repression worked in some places, largely in East Asia, but not in others. If it was naïve to imagine that credit markets clear at equilibrium prices like normal goods, it is equally fanciful to expect that today's fractious, multipolar geopolitics will produce consensus on a new global financial architecture.⁴ When the IMF calls for a "New Bretton Woods," it is suggesting

⁴ See page 10. A consensus has not been achieved even within countries, let alone globally. Deep political divisions in the United States blocked domestic financial sector reforms after the GFC and have effectively

change at the margins—debt restructuring and concessional lending—not an overhaul of the current system of free capital movement and floating exchange rates (Georgieva, 2020). A consensus for fundamental change, or even for the need for change, does not exist among the dominant economic powers. A global solution to the problem of development financing is not in the offing, and so every country will need to find solutions appropriate to its level of development, specific industrial requirements and social and political objectives.⁵ Unfortunately, there is no one-size-fits-all solution: policies appropriate to small, resource-rich countries will not work in large middle-income countries that have trade deficits in most years. Governments need to devise sensible combinations of market incentives and regulatory safeguards to finance public and private investment while reducing the incidence and severity of financial crises. Moreover, governments need to take an active role in discouraging speculation in land and financial assets and encouraging socially desirable investments in productive activities.

Viet Nam must invest a larger share of national income if it is to achieve the targets set out in the Ten-Year Development Strategy of achieving upper middle-income status by 2030 and high-income status by the centennial year of 2045, while also meeting the challenge of climate change. A reasonable target given the scale of the challenges that the country faces would be to sustain an investment rate of between thirty-five and forty percent of national output. Viet Nam achieved this benchmark for about a decade, from 2001 to 2011, after which investment has steadily fallen as a share of national income (Figure 1). There are many reasons for the decline in the investment rate, some of which stemmed from changes in the global economy after the GFC and were beyond the government's control. However, policy has also played a role, notably a decline in public investment are still high in Viet Nam as the level of public capital per person is still low, suggesting that a higher rate of public investment is justified on economic grounds.⁶

removed reform of the international financial institutions from the agenda. The advent of cryptocurrencies will make it increasingly difficult for governments to monitor and control international capital flows and to levy taxes on transactions, with vast implications for the capacity of governments to conduct fiscal and monetary policy.

⁵ In his writing on late development in Europe, Alexander Gershenkron stresses that industrialization is shaped in fundamental ways by economic and political context, specific to each country, and that the structures and institutions of finance are country-specific responses to these conditions (Gerschenkron, 1962). The same lessons still apply in today's lower and middle-income countries. ⁶ See page 50.



Figure 1. Public, private and foreign investment as % GDP, Viet Nam 1995-2019 (Source: GSO)

This paper makes the case that the solutions to Viet Nam's financing gap are to be found at home. Domestic resource mobilization is the key to increasing the supply of long-term finance for productive investment. Government must play a more active role mobilizing resources and structuring incentives to lengthen time horizons, conserve scarce foreign exchange and encourage investment in socially desirable projects.

The next section of the paper presents three core principles of sustainable development finance strategy. First, in contrast to the textbook model, finance is properly understood as the conversion of liquid assets into long-term investments and not the transmission of savings from households to businesses. This sounds like a technical point but has profound implications for development finance policy because it implies that investment generates saving rather than the other way round. Second, while markets are a useful mechanism for the allocation, financial markets are prone to overleveraging and hence inherently unstable. Third, most countries rely primarily on domestic capital markets even in the age of globalization, and this is especially true for developing countries.

Section III builds on these principles to address strategies available to developing countries to increase the supply of long-term finance for development. These include national development banking, public finance, sovereign wealth funds and policies to encourage productive investment and discourage speculation. The final section discusses policy implications and concludes.

This framework paper is accompanied by a series of short policy briefs on selected development finance topics, including summaries of issues presented below and their application to development finance in Viet Nam. Other policy briefs will present synopses of the experiences of successful industrializing countries in Europe and East Asia.

III. Three core principles of development finance

Finance has recently returned to the center stage of development policymaking after a long period in the shadows. The belief that financial markets are efficient—in the sense that prices convey complete information about the value of and risks associated with financial assets—led many economists and practitioners to conclude that the best policy was no policy at all. Government, in this view, was the main obstacle to increasing saving and investment. This view remained ascendent even after the East Asia Financial Crisis of 1997-98, which was blamed on "crony capitalists" and the region's misplaced faith in fixed exchange rates. But as the Global Financial Crisis of 2008-09 (GFC) unfolded, the idea that financial markets naturally find equilibrium become increasingly difficult to sustain. Hyman Minsky, a little-known American economist who had warned from the 1960s of the inherent instability of financial markets, topped the bestseller lists despite having published his last book in 1986 (Minsky died in 1996). The financial press branded the collapse of Lehman Brothers, the largest bankruptcy in US history, as a "Minsky Moment," signaling the movement of his financial instability hypothesis from the margins to the mainstream of economic theory.

A second reason for the resurgence of interest in development finance is climate change. Policymakers have woken up to the scale of investment required to develop renewable energy systems and protect vulnerable populations from sea level rise and extreme weather events. Yet efforts to scale up investment come at a time when public and private balance sheets are already overloaded with debt following two years of the coronavirus pandemic and a decade-long, lackluster recovery from the GFC.

The central theme of this paper is that development finance is essentially a national endeavor, and that government will play a crucial role in increasing access to long-term finance, both directly and through its efforts to shape market incentives to encourage productive investment and discourage speculation in fixed and financial assets. To understand why this is so, we must first consider some basic principles of finance from the developing country perspective. This section addresses three key issues: i) the relationship of investment to domestic saving; ii) the inherent instability of financial markets; and, iii) the risks associated with over-reliance on international capital flows. We then apply these principles to concrete development finance strategies in the following section.

Saving follows investment (not the other way round)

In the textbook version of the financial system, households save, and businesses invest. Households make consumption decisions based on their time preferences—jam today versus jam tomorrow—and interest rates. Income not consumed is saved in banks, which lend these balances to businesses for investment. Financial markets find their equilibrium at the real interest rate, which is the price at which the supply of "loanable funds" (household savings) is equal to the amount of capital that businesses require to finance their investment plans. Countries will invest a larger share of national income if people (and the government) are frugal, and less if they consume a larger share of income. The textbook story is modified slightly in a world of globally integrated financial markets. Countries that record trade surpluses export capital to deficit countries. China's current account surpluses are channeled into foreign exchange reserves, much of which are invested in US government securities. Aside from the United States, Capital importing countries are thought to include most developing countries that use inflows of foreign exchange to finance purchases of capital goods—machines and technology—for industrial development.

The textbook story hinges on two rather dubious assumptions. The first is that the supply of credit is limited by the stock of loanable funds, or the amount of money previously saved from income.⁷ Banks in this view play a passive role, receiving funds from households and transmitting them to investors. What the textbook version omits is the ability of banks to create money as part of the process of making loans. When banks make loans they create deposits, which businesses draw on to pay wages and other production costs. These expenditures generate incomes, a portion of which is saved. Thus, in a money economy it is more correct to say that investment creates savings, not the other way round. Saving and investment are not in equilibrium at the real interest rate; they are always equal in an *expost* accounting sense regardless of the prevailing rate of interest. Investment also alters the distribution of income, affecting both the demand for investment and the saving rate.

Finance is properly understood as the provision of liquidity (cash) to investors to cover expenditures that cannot be financed out of profits.⁸ Banks are limited in their ability to create money not by the volume of a pre-existing stock of savings, but by the existence of credit-worthy projects and by their need to meet their own financial obligations, including making cash available to depositors on demand (Kaldor, 1978, p. 179). Banks and firms (if they borrow or sell equity directly to the public) rely on financial markets to bridge the gap between their long-term capital requirements and the liquidity they need to cover immediate obligations. The secondary markets help banks close the gap between short-term liabilities and long-term assets. The fact that banks do not rely on previous saving to finance lending is most apparent during a speculative boom, when inflated asset prices embolden banks to create credit at rates that are destabilizing from the macroeconomic perspective.

The erroneous assumption that past savings fund current investment often leads economists and policy makers down conceptual blind alleys. In the early 1990s, economists worried that an aging population in Europe, North America and Japan would result in chronic *saving shortages* and therefore permanently high real interest rates (Baldassarri et al., 1993; Silk, 1992). Inconveniently, the pronouncement of the permanent saving shortage

⁷ In the economics literature this is referred to as the assumption that the money supply is exogenous or created outside of the banking system.

⁸ "Increased investment will always be accompanied by increased saving, but it can never be preceded by it. Dishoarding and credit expansion provides not an alternative to increased saving, but a necessary preparation for it. It is the parent, not the twin, of increased saving" (Keynes, 2013, p. 281).

was followed almost immediately by a decade-long decline in real interest rates and steady rise in the share of saving in global output.⁹

More recently, the growth slowdown in the decade following the GFC prompted economists to proclaim a global *savings glut*, chronic underconsumption and "secular stagnation" (Krugman, 2013; Summers, 2014). Demographic change is again the culprit, but this time aging societies save too much and invest too little (hence the savings surplus). It has also been argued that technological change is holding back investment because either: i) it has made capital spending so much more efficient so that we need less or it; or ii) information technology is not sufficiently productive to generate rapid economic growth. So the savings glut is caused by either the tremendous success of information technology or its complete failure. Either way, the result is too much saving.

Today's secular stagnation hypothesis is unlikely to fare much better than the saving shortage thesis of the 1990s. The world is not suffering from a glut of savings but rather from underinvestment due to insufficient demand. The pace of business investment in the advanced countries has slowed steadily since the 1970s (Figure 2). Many factors could be contributing to the dearth of investment demand, such as rising inequality, which suppresses demand for goods and services; changing incentives facing corporate leaders that prioritize short-term profits over long-term growth and hence generate "profits without prosperity" (Lazonick, 2014); and underinvestment in public goods like infrastructure and training, which lowers returns to private investment. Ugo Pagano argues that oligopolistic control over intellectual property rights, and increasingly inflexible application of Trade Related Intellectual Property rights provisions, restrict the flow of knowledge and acts as a brake on investment (Pagano, 2014). Some or all these factors may be slowing investment, creating the illusion of excess savings.



Figure 2. US Corporate fixed investment, average annual growth (Source: OECD)

⁹ Global saving rose from 22 to 27% of world GDP from 1991 to 2007 according to World Development Indicators.

This brings us to the second textbook assumption, which is that the economy operates at full employment at the equilibrium real interest rate. With this assumption in place, saving has no effect on aggregate demand: consumption forgone is automatically and instantaneously recycled as investment. But in the real world, aggregate demand does indeed expand and contract during the course of the business cycle, raising or lowering expected profits and the level of planned investment. When interest rates fall, businesses do not react by rushing to increase investment to take advantage of the lower cost of funds. They are more likely to put investment plans on hold as expectations of future sales and profits are recalibrated, taking shifts in demand into account (Taylor, 1983). Thus, more saving means less consumption but not necessarily more investment.¹⁰

The full employment assumption is misleading everywhere, but it is especially inappropriate in the context of surplus labor economies like Viet Nam, where a substantial segment of the workforce is engaged in low productivity activities in agriculture or traditional services. Underemployment holds down average wages and creates opportunities for foreign and domestic investors to earn profits producing exports goods like electronics, garments and footwear assembled using labor-intensive methods. Developing economies are demand constrained, as shown by the transformative effect of export demand on output and productivity growth. From this perspective, the main benefit of foreign direct investment is not necessarily the inflow of foreign capital but rather access to export markets that comes with producing for the big global brands.¹¹ Relocating labor from agriculture to export industries does not reduce output in the former precisely because labor is underutilized. Access to foreign demand for consumer goods mobilizes surplus labor, giving rise to the close relationship between the growth rate of manufactured exports and labor productivity growth that is an enduring feature of the development process (Nguyen Thang & Pincus, 2021). Relaxing the full employment assumption allows us to dispense with the textbook notion that investment is saving-constrained. Since investment generates both income and saving, a low domestic saving rate reflects a shortage of viable investment opportunities, not low interest rates. The investment rate responds to demand and profit expectations that are independent of the interest rate. Studies of a cross-section of countries confirm that saving is more appropriately seen an outcome of investment and productivity growth rather than their cause (Kumar et al., 2020).

The idea that saving follows investment, and that investment is primarily driven by expectations of future profits and not the prior existence of savings, has a long pedigree in development economics. The pioneers of the discipline recognized that late industrializing countries struggle to compete with incumbents possessing the advantages of advanced technologies, scale economies, and experience managing large, complex enterprises

¹⁰ "The absurd, though almost universal, idea that an act of individual saving is just as good for effective demand as an act of individual consumption, has been fostered by the fallacy, much more specious that the conclusion derived from it, that an increased desire to hold wealth, being much the same thing as an increased desire to hold investments, provide a stimulus to their production; so that current investment is promoted by individual saving to same extent as present consumption is diminished" (Keynes, 2013, p. 211).

¹¹ A large proportion of foreign direct investment is reinvested profits, meaning that like domestic investment FDI is mostly funded out of profits. See page 20 below.

(Hirschman, 1972; Kaldor, 1967). Government policies to reduce investment risks and raise profit expectations were needed, such as local content rules, selective protection, R&D subsidies, export incentives and access to subsidized credit (UNCTAD, 2016a). These methods and other were used to great effect by the successful East Asian industrializing countries, beginning with Japan in the early 20th century and including Korea, Taiwan, Singapore and China. Development finance strategy closely bound up with industrial policy and cannot be understood in isolation from the development of technological capabilities, export promotion and the growth of domestic firms.

The Korean experience illustrates the point. Korea began its rapid industrialization in the 1960s with extremely low saving rates: gross domestic saving was just 0.3% of GDP in 1960 and did not reach 20% until 1973 (Figure 3). However, as the investment rate rose through the 1970s, saving increased in tandem, topping 30% in 1978 and remaining above that level nearly every year until the present. Saving was the result, not the cause of growth (Shin & Chang, 2003, p. 7). The main constraint on investment was the availability of foreign exchange, since Korea needed to import technology and capital goods. Until 1984, Korea routinely recorded large trade deficits, averaging 8% of GDP from 1960 to 1983. The government actively targeted credit and foreign exchange to export-oriented industries, restricting access to credit for consumption and speculation.



Figure 3. Korea, gross domestic savings, gross capital formation and GDP growth, three year moving averages, 1963-1993 (Source: World Bank)

Domestic saving is closely associated with the level of income per capita and the rate of growth of economic output, as one would expect if investment generates saving rather than the other way round (Figure 4). As in the case of Korea, low-income countries have limited savings because the capital stock and rate of profit are small. As the pace of investment

quickens, profits increase and with it measured saving.¹² Saving and growth are both closely associated with the investment rate, and rise in tandem (Warman & Thirlwall, 1994). The life-cycle saving hypothesis also suggests that demography influences the saving rate in an inverted U-shaped pattern reflecting the tendency of mid-career workers to save for their families and for retirement (Modigliani, 1986). As we shall see below, there is no evidence that the rate of saving is linked in any way to the real interest rate.



Figure 4. Gross domestic saving, GDP per capita and GDP growth, 2015-2019, for 141 countries (Source: World Development Indicators)

NB: For this group of 141 countries over the period 2015-2019, an increase of per capita income of \$1,000 (purchasing power parity constant 2017 dollars) is associated with a 0.4% increase in gross domestic savings as a percentage of GDP. Controlling for the effects of per capita income, a one percent increase in GDP growth is associated with an increase in gross domestic saving of 1.6%.

Loans are not like pork chops

Since Joseph Schumpeter published his *Theory of Economic Development* in 1911, economists have examined the entrepreneurial function of financial institutions (Schumpeter, 1983). In contrast to the textbook model, Schumpeter emphasized the active role that bankers play in assessing the profitability of alternative investment projects and the likelihood that borrowers will be able to repay their loans.¹³ For Schumpeter, entrepreneurs finance investment mainly out of profits, but need credit to cover expenses incurred during the production process. It is the investor's need for liquidity, and uncertainty about the outcome of investment projects, that imparts to banks a strategic role in the development process. Investment decisions do not hinge on the real interest rate, but on the judgement of bankers.

¹² In very poor countries it is likely that measures of saving and investment are inaccurate because they take place outside of the monetary system and through barter transactions or maintaining physical stocks (for example, retaining grain to use as seed).

¹³ '[T]he banker must not only know what the transaction in which he is asked to finance and how it is likely to turn out, but he must also know the customer, his business, and even his private habits, and get, by frequently 'talking things over him', a clear picture of the situation (Schumpeter, 1939, p. 116).

Beginning in the 1960s, the idea that prices capture all relevant information about the value of financial assets gained traction among economists and policymakers. Combined with the loanable funds approach, the efficient market hypothesis provided the theoretical rationale for financial liberalization. "Financial repression" was the result of government intervention to hold interest rates at artificially low levels, discouraging saving and prompting households to hold unproductive assets like gold, land and foreign currency rather than bank deposits. Low interest rates reduced profits by misallocating capital to less risky projects (McKinnon, 1973; Shaw, 1973). These closed economy models were allied to a broader set of arguments in favor of capital account liberalization. Proponents of financial liberalization understood that the free flow of capital entails risks, but argued that the threat of capital flow reversals would impose discipline on developing country governments—a claim that was still being put forward by the international financial institutions on the eve of the East Asian Financial Crisis (Fischer, 1997).

The central claim of financial liberalization was that market pricing of financial assets increases domestic saving and investment. However, the expected link between interest rates and saving was never established. Maxwell Fry, the author of a leading textbook on financial development, and an enthusiastic supporter of financial liberalization, reluctantly concludes in his survey of the evidence that "the real interest rate has virtually no direct effect on the level of saving, but may exert an indirect effect by increasing the rate of economic growth" (Fry, 1995, p. 188). The saving rate before and after liberalization was more closely associated with the growth of income than the real interest rate. As shown in Figure 5, no relationship exists between the real interest rate and gross domestic saving among low- and middle-income countries over the past four decades. In fact, the loose relationship that does exist is negative. Saving increases in fast-growing economies that invest a larger share of income like China, Korea and Singapore. We have already noted how Korea used financial repression to direct credit and foreign exchange to export industries. In Viet Nam, savings were higher after 2000 despite a trend decline in the real rate of interest reflecting the country's higher income per capita and rapid growth.



Figure 5. Real interest rates and gross domestic savings as % GDP for low- and middle-income countries, 1980-2019 (Source: World Development Indicators)

NB: The figure shows decade averages of real interest rates and gross domestic savings as a share of GDP for low- and middle-income countries for which data are available.

If financial liberalization failed to lift the saving rate, did it at least improve the allocation of investment? Here the evidence is thin, consisting of studies with limited geographical coverage and over relatively short periods of time. Nevertheless, there is some indication that at least in the short term financial liberalization was associated with higher returns to capital measured in terms of capital-output ratios (Galindo et al., 2007). One would expect that a reduction in directed lending would free banks to allocate capital to more lucrative projects. However, liberalization was also associated with the rapid growth of profitable consumer lending, and also risky practices such as connected lending and speculation in financial assets (Bhaduri & Bhattacharya, 2018).

The reallocation of investment to higher-yielding projects needs to be balanced against the increased incidence of financial crisis that accompanied financial liberalization. Instability was not restricted to major global events like the GFC in 2008/09 and the East Asian Financial Crisis 1998/99, but was seen in a wave national banking crises affecting every corner of the world. Arestis and Stein review evidence from fifty-three countries for the years 1980 to 1995 (Arestis & Stein, 2005). The authors conclude that higher real interest rates and financial deregulation failed to generate an increase in domestic savings or investment but did spark rapid growth of consumer borrowing and speculation in fixed and financial assets. Excessive risk taking, and unsustainable credit booms are the dominant causes of banking and financial crises in emerging markets (Eichengreen & Arteta, 2002). Kaminsky and Reinhart find that banking crises are closely associated with currency crises following on from capital account liberalization (G. L. Kaminsky & Reinhart, 1999).

Why did greater reliance on price signals fail to produce the desired outcomes? The source of the problem can be traced back to the efficient market hypothesis and the assumption that credit markets behave like markets for normal goods. In his widely read critique of financial liberalization in Latin America, Carlos Diaz-Alejandro contrasted markets for meat and for credit to explain why price signals do not generate stable equilibria in capital markets.¹⁴ When we visit the local butcher, we exchange cash for a specific quantity of meat of an proven quality. Loans, bonds and equities, by way of contrast, represent a promise to surrender a return on investment at some future date. The ultimate value of the investment cannot be known in advance, and the probability that the borrower will default is greater than zero. Therefore, the bank—the buyer of the promise—must consider factors other than the price (the interest rate). Banks and other lenders ration credit based on subjective assessments of the creditworthiness of borrowers and the viability of their projects. Prices are a poor indicator of value because the riskiest borrowers are the most desperate for funding are willing to pay the highest interest rates (Stiglitz & Weiss, 1981). Lenders write numerous covenants into loan agreements to reduce the likelihood of default, for example the promise of collateral assets and the right to recall capital in the case of unforeseen events. But it is impossible to obtain complete information about their borrowers (asymmetric information) and borrowers have an incentive to take on more risk than they tell their lenders about (moral hazard). Credit markets are subject irreducible uncertainty because the future is unknown and cannot be predicted based on past events.

In responding to these criticisms, proponents of financial liberalization emphasized the importance of rigorous bank regulation and supervision, capital adequacy requirements and other safeguards to curb excessive risk taking and overlending. Some have argued that financial liberalization is more likely to succeed in the presence of certain preconditions, such as macroeconomic stability, a mature financial system and free trade (McKinnon, 1993). Yet recent experience, including the East Asia financial crisis and the GFC suggests that even with these preconditions in place liberalized financial markets, in developing and advanced countries alike, are subject to herd behavior and instability.

We have learned through bitter experience that financial market regulators are generally well-prepared for the last crisis but often powerless to prevent the next one. It is in the nature of financial innovation to devise new ways to increase leverage when asset prices are rising to satisfy growing demand for credit. Banks earn profits making loans, and as we have seen the amount of credit that they offer is not restricted by savings in their vaults. The main limitation on lending, other than the need to meet depositors' immediate cash requirements, is the supply of credible investment projects that are likely to generate profits to repay the loan and a return on capital. As asset prices rise, it is rational for individual

¹⁴ "The former," he writes, "is a spot transaction; the latter involves a promise to repay in the future which may or may not be sincere or wholly credible Enforcing the loan contract or liquidating collateral property will involve costs, and even with speedy enforcement the bank may be unable to get all of its money back. The bank will incur costs to explore the creditworthiness of borrowers; the butcher will not care much for the reputation of cash-carrying customers." Finance is trading in commitments about the future, and therefore always involves rationing based on the credibility of borrowers and access to liquidity (Diaz-Alejandro, 1985, p. 2)

banks to expand credit even as the macroeconomic effect is to create a destabilizing credit bubble (H. Minsky, 1992). The precise mechanisms change but the internal dynamics remain the same. Credit markets tend to fragility, not equilibrium.

Indonesia offers a cautionary tale. In 1996, two Harvard economists published a book extolling Indonesia's achievement in maintaining macroeconomic stability while carrying out a radical liberalization of the financial system. "The Indonesian experience with implementing policies for the banking sector," they write:

demonstrates that freeing up direct controls over prices, allocation and entry of new institutions need not lead to crises and chaos as it has in some countries, but instead can result in reasonably healthy growth, expanded services and improved efficiency (Cole & Slade, 1996, p. 140).

Within two years of the book's appearance the banking system had collapsed, the rupiah was in freefall and the country's military-backed government of thirty years had been forced from office. The economy contracted by 15% and the headcount poverty rate rose from 44 to 63% in one year.¹⁵ The ultimate cause of the crisis was the progressive hollowing out of corporate balance sheets as Indonesian conglomerates, many of which had opened their own banks under liberalization, engineered complex financial structures to retain control of their domestic assets while parking their cash overseas (Matsumoto, 2010). Many of these loans were unlawful, but even if they had been detected by the authorities there were plenty of domestic and foreign lenders ready to step in. In the lead up to the crisis, Indonesian corporations had successfully listed subsidiaries on global stock markets and issued international bonds, including Sinarmas Corporation's \$14 billion bond issue that would eventually gain notoriety as Asia's largest corporate default. The lesson from Indonesia and other countries hit hard by the East Asia financial crisis is that financial markets are prone to instability during periods of expansion; that financial innovation is not always socially beneficial; and that governments must step in to stop the creation of credit bubbles before they reach levels that can destabilize the financial system.

The limited, supporting role of foreign capital

The Lucas Paradox

Because the amount of capital per worker is lower in developing than in advanced countries, economists have long held the view that the rate of return on capital is higher in the former. International capital flows therefore accelerate growth and have the potential to narrow between-country inequality (Viner, 1947). Yet the expected flows from richer to poorer countries have never materialized, even after financial globalization took hold from the 1980s. Flows into the developing world were small throughout the 1990s and turned sharply negative in the first decade of the new millennium. (Figure 6).

¹⁵ Measured as population living on less than \$1.90 per day (2011 dollars) as published in the World Development Indicators.





In 1990 Robert Lucas articulated economists' disappointment that international capital flows had not fulfilled the transformative role predicted by theory (Lucas, 1990). Lucas and others put forth various explanations for the tendency for capital to flow between rich countries rather than from rich to poor: skills shortages that prevent developing countries from making productive use of capital; infrastructure gaps that discourage investment; scale economies in the advanced countries that boost profits in dynamic regional clusters (the Silicon Valley effect), and dysfunctional economic institutions such as weak property rights protection and corruption. These accounts of the Lucas Paradox point the finger at developing countries for not doing enough to win over foreign investors.

However, if we leave the idiosyncratic world of single-sector growth models, the absence of North-South capital flows is not terribly surprising. Countries that record current account surpluses by definition export capital in some form. Commodity exporters run large trade surpluses when prices are high, for example during the commodity boom in the early years of this century. The relocation of labor-intensive manufacturing to China and Southeast Asia produced trade surpluses in, and capital exports from, some of these countries.

Countries in developing Asia have recycled export surpluses into foreign exchange reserves, as shown in Figure 7, which presents capital flows for the thirty largest developing countries by population since 2000. Foreign exchange reserves account for a large proportion of net outflows, especially during the commodity boom. Repeated experience of financial crisis, beginning with the 1994 Mexican crisis and extending through the Global Financial Crisis in 2008, has persuaded these countries to accumulate reserves as self-insurance against capital market and exchange rate volatility. From just US\$223 billion in 1990, reserves rose to \$8.1 trillion in 2020. Reserves held by developing Asian countries increased from \$73 billion to \$4.8 trillion over the same period, with China alone holding \$3.2 trillion. The large



ASEAN countries (Indonesia, Malaysia, Philippines and Viet Nam) now control foreign exchange reserves equivalent to 25% of GDP.

Figure 7. Capital flows to the 30 largest developing countries as a share of GDP (Source: IMF)

Proponents of financial liberalization had predicted that the relaxation of capital controls in conjunction with the introduction of flexible exchange rates would reduce the need to hold foreign exchange reserves as exchange rates found their equilibrium level given prevailing patterns of trade and capital flows. However, countries learned from experience that flexible exchange rates, far from easing pressure on the balance of payments, had the perverse effect of fueling volatility and magnifying risk. Balance sheet effects, not considered in conventional macroeconomic models, are often destabilizing. As foreigners acquire domestic assets, the value of the national currency appreciates, which discourages foreign capital inflows used to acquire domestic financial assets. But as prices rise, domestic investors crowd in, driving up credit growth and inflating asset bubbles. Any attempt by the monetary authority to cool the market with higher interest rates only works to draw in more foreign capital. The system tends to overleverage rather than equilibrium. In the opposite scenario, the exchange rate depreciates as foreigners sell off domestic assets, which over the medium term should make domestic exports more competitive and reduce the current account deficit. But depreciation also increases the value of dollar liabilities (in domestic currency) on corporate and government balance sheets, increasing the risk of financial distress and limiting banks' capacity to increase lending. Again, balance sheet effects counteract the supposed equilibriating effects of cross-border financial flows.

Central banks in developing countries accumulate foreign exchange reserves on a large scale to guard against these risks and to discourage speculators from betting heavily against their

currencies. But self-insurance comes at a cost: trillions of dollars in reserves are held in safe assets like US treasuries that earn lower returns than those on offer at home. Moreover, countries like India and Indonesia that run trade deficits in most years finance reserve accumulation by acquiring expensive, risky liabilities like foreign direct investment and dollar bonds. This balance sheet mismatch increases exposure to foreign exchange risk for the countries concerned especially if these investments generate returns in the domestic currency (for example FDI oriented to domestic services) (UNCTAD, 2020b).

Another problem with the Lucas Paradox is the lack of credible evidence linking capital inflows to economic growth. Across the developing world more than 90% of fixed investment is financed domestically, and for this reason alone we would expect the impact of capital inflows to be marginal. But it is also important to bear in mind that capital flows into developing countries for a variety of reasons: to finance natural resource exploitation and manufacturing for export, to sell products and services in the domestic market, to acquire domestic assets like properties and financial securities, and for consumption. The absence of a consistent empirical relationship between capital flows as a share of GDP and the rate of economic growth is therefore not surprising (Figure 8).



Figure 8. GDP per capita growth and net capital inflows as % GDP, 2000-2019 (Source: IMF)

Several authors have detected a *negative* relationship between international capital flows and growth. Prasad, Rajan and Subramian find a robust negative relationship between the ratio of capital inflows to GDP and growth of income per capita after controlling for initial level of income and dependency ratios.¹⁶ They find that countries that grow fastest maintain a *rate of investment* higher than the median of all countries and also *rely less on imported capital* than the median country. One of the explanations they offer for the negative effect of foreign capital is that capital inflows are associated with overvaluation of the domestic currency, which discourages exports (Prasad et al., 2007). Similarly, Aizenman and coauthors find that "countries with higher self-financing ratios grew significantly faster than countries with low self-financing ratios" (Aizenman et al., 2007, p. 684). In other words, the less countries depend on foreign capital the faster they grow on average.

One of the reasons that a reliance on foreign capital could be associated with slower economic growth is that capital flows are strongly procyclical, meaning that the appetite for risk rises during the boom and falls when asset prices decline. Thus, developing countries that have easy and relatively cheap access to foreign financing when interest rates are low in advanced countries often experience a rapid reversal of flows when rates begin to rise.

Financial globalization interacts with financial liberalization through a global financial cycle that is aligned to conditions in the advanced countries but are strongly procyclical—feeding booms and deepening troughs—in emerging markets. The impact of capital inflows on domestic credit, exchange rates and asset prices means that developing countries cannot maintain an independent monetary policy even in the context of flexible exchange rates (Rey, 2015).¹⁷ Viet Nam had direct experience of these effects in 2007, when a rush of portfolio capital inflows sparked a frenzy of speculation in domestic asset markets, a sharp rise in credit growth and a large deficit on the current account. Viet Nam's partially closed capital account allows the monetary authorities to target the exchange rate and interest rates most of the time, but loose controls on capital inflows can rapidly lead to a situation in which domestic credit growth cannot be contained.

External borrowing

Many developing countries have opened their local currency government bond markets to foreign investors. Foreign traders have developed an appetite for domestic currency government bonds but not corporate bonds, which are still denominated in US dollars. Low interest rates in the advanced countries have made local currency bonds more attractive, shifting the exchange rate risk from the government to investors. However, as discussed in the next section, foreign participation in domestic government bond markets does not come without costs (see page 41). Borrowing in the private sector has seen a shift from bank lending to bonds (Akyüz, 2017, p. 79), a trend that is not yet apparent in Viet Nam where the international bond issues by domestic corporations are rare (Figure 9).

¹⁶ Initial level of income bears a negative relationship to the rate of growth because richer countries tend to grow more slowly. The share of working age adults to total population (the dependency ratio minus one) is positively related to growth because a higher proportion of the population is economically active.

¹⁷ Conventional macroeconomic theory holds that countries face a "trilemma" in which they must choose between an independent monetary policy (targeting interest rates) or a fixed exchange rate but cannot target both in the presence of free capital flows. Rey agrues that synchronization of global capital flows and their impact on domestic credit growth have reduced the scope for an independent monetary policy even when exchange rates are flexible.



Figure 9. Foreign borrowing, Viet Nam 2000-2020 (Source: Joint External Debt Hub). NB: Data for bilateral loans not report for 2019 and 2020.

However, international bank borrowing by corporations, including banks, has grown by 17% per year since 2000, The rate of growth was exceptionally high leading up to and after the GFC, reaching 29% per year from 2000 to 2013, and falling back below 10% for the rest of the decade. In 2010 roughly half of this foreign borrowing was by banks, but that ratio had fallen to 25% by 2020.

Foreign Direct Investment

After the East Asian financial crisis, governments discouraged short-term international borrowing which they saw as contributing to the crisis, and turned to foreign direct investment (FDI) as a safer sources of foreign capital. It was thought that direct investment implied a longer time commitment and was less procyclical than portfolio flows. Because FDI assets are comprised of factories, equipment and buildings, and the parent company assumes at least some of the investment risk, FDI was seen as more stable. China showed that FDI in manufacturing could form part of a viable export-led growth strategy, integrating domestic industry into global supply chains, in the process creating steady, formal sector jobs for relatively low-skilled workers. Technology "spillovers" from foreign to domestic firms would accelerate growth and stimulate domestic private investment. With these benefits in mind, host governments loosened investment rules and offered tax and other incentives to attract FDI.

However, the distinction between FDI and portfolio investment is often more apparent than real. FDI is defined as investment made by a resident of one country to establish a "lasting interest" in an enterprise in another country. In the official statistics, a lasting interest is said to be in evidence when the investor controls ten percent of a foreign establishment; below that level the investment is categorized as a portfolio flow like buying shares on the stock market. Once the initial investment has been made, all subsequent transactions, including loans, are recorded as direct investment. Retained earnings are first recorded as an outflow of investment income on the current account and then as FDI inflows on the financial

account. Reinvested profits make up a substantial proportion of total FDI, estimated by UNCTAD at about fifty perfect of the total stock of invested capital, and probably more in developing countries (UNCTAD, 2020a, p. 4). But even this may be an underestimate of the contribution of retained earnings to FDI. Statistics published by the US Department of Commerce show that retained earnings comprised 79% of total US outward FDI for the decade 2010 to 2019 (Figure 10).¹⁸ Less than half of the stock of FDI represents new equity and loans invested in developing countries, and instead consists of profits earned in these countries and reclassified as FDI.



Figure 10. Retained earnings and other equity, US outward FDI, 2000-2019 (Source Bureau of Economic Analysis, US Department of Commerce)

There are other problems with the usual distinction between FDI and portfolio investments. The presumption that FDI assets are more difficult to liquidate than portfolio investments does not hold up in practice. It is common for foreign affiliates to borrow against their incountry assets, the proceeds from which can be used to acquire other assets or simply repatriated. The foreign investor can also just as easily accelerate profit remittances or pay down liabilities to the parent company (Bird & Rajan, 2002). Combined with the fact that the bulk of these liabilities have accrued over time from profits on domestic operations, it becomes increasingly difficult to detect a meaningful difference between short-term portfolio flows and long-term FDI.

In some ways portfolio flows may be superior to FDI. Foreign investors expect higher returns from direct investments because they assume at least part of the risk. Figure 11 shows average returns for FDI investments and 10-year government bonds for four Southeast Asian countries: Indonesia, Malaysia, Thailand and the Philippines (data for Viet Nam are

¹⁸ The negative figure for retained earnings in 2018 was a reaction to a provision of the US Tax Cut and Jobs Act of 2017 that levied a one-time tax on undistributed foreign earnings in the fourth quarter of 2017. US multinationals were able to repatriate cash held in overseas affiliates in 2018 without additional taxes.

not available). Over the fifteen-year period 2005-2019 the average rate of return on FDI was twice the level of bond yields (12 vs 6%). Even this wide difference probably underestimates the returns to FDI, as most international companies will not undertake a project that does not yield more than 20% per annum and offers relatively short capital recoupment periods (Kregel, 2014, p. 67). The difference narrowed in recent years as the commodity boom came to an end and as growth of global trade in manufactured goods has slowed. FDI firms also boost profits through transfer pricing mechanisms (over-invoicing of imports and under-invoicing of exports), which also reduces tax liabilities in the host country.



Figure 11. Rate of Return of FDI compared to 10-year government bond, Indonesia, Malaysia, Philippines and Thailand, 2005-2019 (UNCTAD and IMF, for bond yields investing.com)

Profit remittances and debt repayments add up over time as the stock of FDI rises. Figure 12 presents two sides of the FDI coin in Viet Nam. As the country has integrated into global supply chains, the trade balance has moved decisively into positive territory, achieving a consistent surplus from 2014 that by 2019 was nearly USD 20 billion. However, the outflow of payments also increased to USD 19 billion in the same year. The situation is even less favorable when FDI industries are inward oriented and do not generate the foreign exchange needed to cover profit remittances and other income payments. For example, because Indonesia runs persistent trade deficits, outgoing income payments related to FDI must be covered by ever-larger inflows of portfolio capital flows. In Indonesia's case, these flows consist of government bonds and corporate bonds and bank loans. As liabilities accumulate, Indonesia's macroeconomic policy space has narrowed as holders of Indonesian assets demand higher rates of return on bonds and loans and an overvalued exchange rate relative to the US dollar. This is a vicious circle, as the overvalued exchange rate and high interest rates make exports less competitive and suppress the domestic rate of investment (Akyüz, 2017, p. 184).



Figure 12. Net primary income and trade balance, USD billions, Viet Nam (Source: State Bank of Viet Nam)

Among the ASEAN countries, Malaysia and Viet Nam have relied most heavily on FDI as a share of total investment (Figure 13). Viet Nam also enjoyed the most rapid growth of manufacturing employment, nearly quadrupling manufacturing employment in the three decades after 1990. By 2019, 22% of the labor force was employed in manufacturing, a much greater share than in the other large ASEAN countries (14%) (Figure 14). For labor surplus economies like Viet Nam, FDI in manufacturing delivers rapid productivity growth as workers move from low-productivity activities in agriculture and traditional services into formal sector industries using more modern technology to produce higher value-added goods, usually for export.



Figure 13. Net FDI as share of gross capital formation, ASEAN Countries (source: UNCTAD)





Figure 14. Share of the labor force employed in manufacturing (Source: ILO)

Studies examining the relationship between FDI and economic growth have produced ambiguous results. Put succinctly, no universal relationship has been found that would lead us to conclude that FDI is unambiguously good or bad for growth (Lipsey, 2004). Various authors have tried to identify the conditions under which FDI is associated with more rapid growth: some report that the relationship is strong only in richer countries (de Vita & Kyaw, 2009); or in countries with developed financial markets (C.-C. Lee & Chang, 2009); or countries posting higher than average levels of educational attainment (Li & Liu, 2005); that pursue a liberal trading regime (Zhang, 2001); or are better able to control corruption (Okada & Samreth, 2014). Others find no stable relationship at al between FDI and growth (Carkovic & Levine, 2005) and some even find a negative relationship (Herzer, 2012).

One reason for the confusion is that foreign investment comes in many different forms. Albert O. Hirschman's observation that the intensity of forward and backward linkages varies among specific industries and settings remains valid even in our world of globalized, decentralized production (Hirschman, 1972). Most foreign investment in the developing world is directed to natural resource exploitation, which generates export earnings and tax revenues, but creates relatively few jobs and production linkages (Morris et al., 2012). Companies that mainly produce consumer goods and services for the domestic market create jobs but their impact on the balance of trade depends on the import-intensity of production and the extent to which domestic production by foreign companies substitutes for imports or for goods produced by domestic firms. Thus, the impact of firms on the growth rate of the domestic economy depends on the characteristics of foreign firms and their relationship to the broader economy.

Export-oriented manufacturing creates jobs and earns foreign exchange. Among Asian countries, Wang finds that FDI was growth-enhancing in manufacturing but not in other sectors for the decade prior to the East Asian financial crisis (Wang, 2009). The productivity-enhancing effects of labor-intensive manufacturing are particularly great in surplus labor economies. However, it is the growth of manufacturing output rather than foreign ownership that is the crucial factor. As a simple exercise to illustrate the point, we divide low- and middle-income countries into four groups: those for which FDI was on average greater or less than five percent of GDP, and those recording growth of manufacturing value added of more or less than five percent per annum for two ten-year periods (2000-2009 and 2010-2019) (Table 1). In the first period, countries receiving more FDI did grow faster, but this outcome is mostly due to more rapid growth of manufacturing in these countries. In the second period, the growth rates of low- and high-FDI countries are identical, but countries enjoying more rapid growth of manufacturing still grew faster on average.

2000-2009	Growth of MV	A < 5%	Growth of	MVA > 5%	Total	
	PC GDP		PC GDP		PC GDP	
	growth	Count	growth	Count	growth	Count
FDI < 5% GDP	1.8%	51	4.6%	18	2.5%	69
FDI > 5% GDP	2.2%	13	5.2%	16	3.9%	29
Total	1.9%	64	4.9%	34	2.9%	98
2010-2019						
	PC GDP		PC GDP		PC GDP	
	growth	Count	growth	Count	growth	Count
FDI < 5% GDP	1.9%	54	3.8%	21	2.4%	75
FDI > 5% GDP	1.8%	17	3.2%	14	2.4%	31

Table 1. Foreign direct investment, manufacturing and GDP Growth: low- and middle-income countries 2000-2019 (Source: World Development Indicators)
The contribution of export-oriented foreign firms to the balance of payments depends on the import intensity of production. Trade agreements limit the scope of governments to incentivize FDI firms to purchase inputs from local suppliers, for example through local content rules or tariffs. Without these policies, foreign companies develop few backward linkages to domestic firms, especially in the garment and electronics industries (Sanchez-Martin et al., 2015; Winkler, 2013). Although results vary across industries, researchers have found that the presence of FDI firms in the domestic economy is no more likely to promote the transfer of technology than normal trading relationships (Newman et al., 2018).

Over the long period, the impact of FDI on capital formation depends on whether it crowds in or crowds out domestic private investment. Market-seeking FDI is likely to crowd out domestic private investment if foreign firms use the latest technology and have more experience managing large-scale operations. Amighini and colleagues find that even when FDI increases the overall rate of investment, it displaces domestic investment in specific industries. Displacement effects are largest in trade-related industries, and FDI in manufacturing is more likely to result in an increase in total domestic investment than foreign investment in other sectors (Amighini et al., 2017).

Morrissey and Udomkerdmongkol find that FDI crowds out domestic private investment, and the effect is strongest in politically stable countries. They hypothesize that foreign investors reduce exposure to countries with unstable governments, reducing competition for domestic private businesses (Morrissey & Udomkerdmongkol, 2012). Jude and Levieuge argue that this effect disappears in the long run as foreign investors enter subsectors in which there are no domestic incumbents (Jude & Levieuge, 2017, p. 5). In China, FDI is associated with an increase in private investment when it enters as part of a joint venture operation, but crowds out private investment when it takes the form of a stand-alone, foreign enterprise (G. S. Chen et al., 2017).

Most studies on the impact of FDI on domestic investment do not differentiate between new investments and mergers and acquisitions, mostly because it is assumed that the acquisition of assets in the host country releases capital that can be invested elsewhere. But this is not necessariliy the case, as the proceeds from asset sales can be consumed, invested in fixed assets (gold and property), remain in cash or leave the country. Several studies conclude that the impact of greenfield foreign investment on economic growth in a large cross-section of countries is positive, while that of M&A is negative (Harms & Méon, 2018; Nanda, 2009). However, if the sample is limited to developing economies, the difference between greenfield and M&A investments disappears, as neither contribute to productivity growth in these countries (Ashraf et al., 2016).

The effects of foreign direct investment—on the balance of payments, economic growth and capital formation—depend on a range of factors including the specific characteristics of the host country and sectors and industry receiving the investment, the trade orientation of FDI firms, and the type of financing involved. The breadth and depth of linkages to domestic firms, including the transfer of technology, knowledge and skills from foreign to domestic firms, are important factors over the long term. FDI policy should therefore play close attention to the impact of foreign investment projects on balance of payments, the potential to develop foreign and backward linkages to domestic firms, and the scope for technology transfer rather than simply focus on short term factors like the volume of investment or number of jobs created.

IV. Strategies to increase the supply of long-term development finance

"The essential contribution of financial markets to the process of development," writes Jan Kregel, "is...to render long-term financing commitments sufficiently liquid to validate the commitment of resources to long-term uses without requiring individual investors to make long-term financing commitments (Kregel, 2014, p. 11). Simply put, investment projects especially large-scale, slow-gestating projects—need long-term financing but investors prefer assets that can be readily converted into cash. The role of the financial markets is to bridge the gap between the supply and demand for long-term credit.

Commercial banks, whose liabilities are mostly short-term (deposits), are constrained in their ability to carry out this function. Dense and liquid secondary markets help banks transform short-term liabilities to long-term assets. Stock markets give companies access to long-term capital through a mechanism that allows investors to cash out whenever they want. But in the early stages of development, these markets and institutions are too small and shallow to create liquidity on a scale and for the duration required by industry to carry out slow-gestating, capital-intensive projects. Late industrializing countries have pursued a variety of strategies to overcome these constraints (Gerschenkron, 1962). European countries capitalized private development banks, guaranteed loans and injected credit directly to new industries from the mid-19th century. The pre-war Japanese government purchased commercial bank bonds to create long-term liabilities to the banking system. State-owned national development banks emerged as an instrument to promote industrialization in newly independent countries after the Second World War (Amsden, 2001).

Viet Nam is like many other late industrializing countries in its heavy reliance on bank credit (Table 2). Asia outperforms other middle-income countries in mobilizing credit (with the exception of Indonesia and the Philippines). Equity and corporate bond markets play a larger role in Malaysia and Thailand but not decisively so: Asia follows the general pattern of bank-dominated financial systems during the industrialization process. As in Europe, bank-based industrial business groups in Japan, Korea and Taiwan had sufficiently long time horizons to invest in industries in which it would take time to achieve competitiveness (Khanna & Yafeh, 2007). Governments offered inducements to steer conglomerates toward manufacturing and exports, even as they provided protection from imports, particularly for upstream industries. Finance was an important instrument to increase the profitability of industrial investment to achieve structural transformation (Di John, 2020).

	Private credit by deposit money banks to GDP (%)	Corporate bond issuance volume to GDP (%)	Stock market capitalization to GDP (%)	Total
Vietnam	121%	0%	44%	165%
China	151%	4%	65%	220%
India	47%	1%	75%	123%
Indonesia	37%	1%	47%	85%
Malaysia	116%	4%	128%	249%
Philippines	44%	1%	82%	127%
Thailand	113%	4%	110%	226%
Lower middle-income countries	35%	1%	36%	72%
Upper middle-income countries	48%	2%	60%	110%

Table 2. Sources of investment capital as % GDP, 2017 (Source: World Bank Financial Development Database)

NB: Viet Corporate bond figure for 2016; Thailand bank credit for 2016.

Even in advanced countries with competitive manufacturing firms and well-developed capital markets, governments find it necessary to step in to increase the availability of long-term financing. The United States government created two quasi-private entities, Fannie Mae and Freddie Mac, to purchase mortgages below a threshold value from banks and finance companies.¹⁹ Fannie and Freddie then hold these mortgages on their books or securitize and sell them to institutional investors.²⁰ The Small Business Administration (SBA) is another prominent example. The agency was in the news recently when it was tasked with managing the US government's \$349 billion paycheck protection program to support wage employees during the Covid-19 pandemic. Before this highly visible role, the organization has led a less glamorous existence as capital market intermediary for small businesses. Established in 1953, SBA has grown into one of the largest lending and loan guarantee agencies in the world, with assets of over \$100 billion (Orzechowski, 2020).²¹

Thus even the US, the country with the largest capital markets in the world, relies on government programs to direct long-term lending to specific classes of borrowers. These are just two examples: other programs include loans and loan guarantees for farmers, university

¹⁹ Formally known as the Federal National Mortgage Association and the Federal Home Loan Mortgage Corporation, respectively.

²⁰ These companies famously collapsed and were bailed out by the US Treasury in 2008 as housing prices plummeted as the GFC unfolded. However the cause of their collapse had more to do with their participation in the non-agency mortgage backed securities market (securities bought from investment banks) than a failure of the core funding model (Frame et al., 2015).

²¹ SBA's main lending vehicles are the 7(a) and 504 Loan Programs, which provide loan guarantees or discount bank loans for qualifying small businesses. Guarantees under program 7(a) range from 50% to 90% to give participating banks an incentive to maintain credit quality. The 504 Loan Program offers direct fixed-rate loans to small businesses for the purchase of real estate or long-term fixed assets up to 40% of the value of the asset. Banks can cover up to 40% of the remaining cost. SBA also maintains a network of Small Business Investment Corporations, which are privately or publicly owned (local government) investment funds that make equity investments in small businesses. SBICs, which are licensed by SBA, can borrow up to \$30 million with an SBA guarantee. Studies have found a positive relationship between the presence of SBA activities and the performance of local economies, although it may not be possible to attribute these benefits solely to SBA lending and guarantees (Craig et al., 2009).

students and for infrastructure projects. According to a recent estimate, the US government extended six trillion dollars in loans and loan guarantees from 1992 to 2012. And this figure does not even include the billions in emergency lending to banks, insurance companies and the automobile industry in the wake of the GFC, or the vast, state-financed venture capital funds distributed through agencies like NASA, DARPA and university research programs (Elliott, 2011; Mazzucato, 2015). These institutions and programs effectively use the government's balance sheet to provide liquidity and alter businesses' profitability calculations to mobilize resources for long-term investment.

National Development Banking

Multilateral development banks (MDB) like the World Bank and Asian Development Bank borrow on international capital markets at preferred rates and use these funds to finance projects in developing countries. There are now around thirty institutions in operation including sub-regional banks. The creation of new multilateral development banks in recent years suggests that the model is still relevant. New entrants include the European Bank for Reconstruction and Development (1991), the New Development Bank (2014) established by Brazil, China, India, Russia and South Africa (the BRIC Bank), the OPEC Fund for international Development (2014), and China's Asia Infrastructure Investment Bank (2015). MDBs have diversified their portfolios over the years, adding new instruments such as loan guarantees, equity investment and political risk insurance.

National Development Banks (NDB) operate in an analogous manner, using the government's capacity to borrow at relatively low interest rates to channel credit to priority investment projects, classes of borrows and institutions and to achieve policy goals.²² NDBs emerged as important financial institutions in the aftermath of World War II, when newly independent countries and countries rebuilding from the war set up public sector entities to mobilize capital for infrastructure and industrialization. Two hundred fifty NDBs are now in operation including more than seventy in Asia (Nehru, 2019). In 2015, NDBs mobilized \$5 trillion for investment, five times more than the multilateral development banks (Griffith-Jones et al., 2018, p. 36). The main business of NDBs is discounting and guaranteeing loans made by commercial and investment banks, although many NDBs are also engaged in direct lending. One of the main advantages of NDBs over multilateral institutions is that they lend in domestic currency, reducing borrowers' foreign exchange risk. Most are profitable and maintain higher equity to asset ratios than the commercial sector. The state owns a majority share of nearly all NDBs, although one-fourth have some form of private participation.

NDBs came to the fore after the GFC because they were among the few financing vehicles with the capacity to ramp up investment at a time when virtually all private financial institutions were cutting back on lending (Luna-Martinez & Vicente, 2012, p. 8). Countercyclical finance—increasing lending during recessions and reducing it during periods

²² Development finance institutions, including National Development Banks, are generally defined as legally independent, government supported financial institutions that have an explicit mandate to achieve public policy goals in a region, sector or for specific population groups. They are usually wholly or partially state owned, but there are examples of privately-owned development banks, including France's pioneering Credit Mobilier, established in 1848 (Di John, 2020).

of rapid private credit growth—is a vital instrument of fiscal policy. Stefanie Griffith-Jones identifies four other roles performed by NDBs: i) financing innovation and structural transformation through investment in new industries; ii) financial inclusion and increasing the supply of credit to SMEs; iii) infrastructure and other large-scale projects; and iv) financing other public goods, notably climate change mitigation and adaptation (Griffith-Jones et al., 2018).

To get a sense of the potential of these institutions it is useful to focus on four of the largest measured in terms of assets as a share of GDP. These are: Germany's Kreditanstalt für Wiederaufbau (KfW) (14.5%); China Development Bank (12.2%); The Brazilian Development Bank (BNDES) (11.7%); and the Korean Development Bank (KDB) (6.7%). These four institutions are not only the largest and also some of the most innovative, having adapted successfully to deep structural change in their national economies and the global financial system.

KfW was established in 1949 to manage US Marshall Plan funding after the war. New functions were added after reconstruction, including lending to SMEs and new ventures, housing, education and renewable energy. KfW maintains divisions to support German exporters and international development projects and played a prominent role in financing reunification in the 1990s. The bank is 80% owned by the federal government and 20% by the states, and funds itself on the capital markets through federally guaranteed bonds. Assets total more than 500 billion euros, and most loans are provided through domestic financial institutions. Borrowers typically apply through their local bank, which forwards the loan to KfW for refinancing at favorable rates and longer maturities. Liability is shared between KfW and originating bank to maintain the relationship between the borrower and the local institution. KfW also lends directly for education, export financing and large-scale infrastructure projects.

The bank's capacity to deliver financing on a large scale and closely monitor results was pivotal to the German government's post-GFC stimulus program. KfW disbursed more than seven billion euros in 2009 in direct lending and through commercial bank guarantees. By the conclusion of the program, loans had reached eleven thousand enterprises, 94 percent of which were SMEs. Owing to KfW's central role in implementation, Germany's stimulus program performed better and sustained demand more effectively than stimulus programs in other countries that relied solely on commercial and investment banks (Moslener et al., 2018, p. 112).

China has three development banks: the Export-Import Bank of China, the Agriculture Development Bank of China and the China Development Bank (CDB). CDB was established in 1994 with the aim of creating a clear separation between policy banks and commercial banking. With the enactment of the Commercial Banking Law of 1995, commercial banks were relieved of the burden of directed credit and began to operate autonomously. CDB, however, inherited a portfolio of mostly non-viable projects about which it knew very little. When the East Asia Financial Crisis arrived in 1997, CDB was effectively bankrupt. The central government rescued the fledgling bank in 1999, establishing an asset management company that took over the bulk of its non-performing loans. With the acquisition of the China Investment Bank, CDB established a branch network and internalized responsibility for loan supervision. Governance systems were restructured to separate loan evaluation and approvals from loan officers and branches, which helped to shield the bank from pressure to finance projects favored by the central government (Xu, 2018, p. 82).

With \$2.5 trillion in assets at the end of 2020, CDB is now the largest development bank in the world. About 20 percent of its assets consist of international development projects including loans connected to China's One Belt One Road (OBOR) initiative. The bank has opened ten representative offices in Asia, Africa, Europe and Australia in addition to a branch office in Hong Kong. About two-thirds of funds are raised through bond issues guaranteed by the central government and which therefore carry relatively low interest rates (M. Chen, 2020).

Fiscal reforms in the 1990s banned local governments from issuing loan guarantees, restricting their ability to raise finance from commercial banks. In response, cities established local government financing vehicles (LGFV), which received land and infrastructure assets to use as collateral to raise funds without the need for an explicit guarantee. Local investment projects were the principal vehicle of the government's countercyclical fiscal policy in 2009, when CDB lending increased by 88 percent in one year. CDB actively participated in infrastructure lending based on this model until a new budget law in 2015 once again allowed local governments to issue bonds directly.

Brazilian development is a story of alternating periods of inflation and stagnation (Figure 15). The boom years of the 1970s were followed by two decades of hyperinflation, rising indebtedness, inequality and deepening poverty. The history of BNDES is closely bound up with the ebb and flow of public and private investment. The bank participated actively in financing domestic industry under the import-substitution policies of the 1970s, including investments in petrochemicals, capital goods and information technology. In that decade BNDES was responsible for eleven percent of all investment in the manufacturing sector (Griffith-Jones et al., 2018). As the only major provider of long-term finance in Brazil, BNDES played a central role in the privatization of large state-owned industries in the 1990s (Macedo, 2000). From the turn of the millennium until 2015, BNDES has concentrated on the closing the nation's infrastructure gap. The Growth Acceleration Program (PAC) launched by the Lula da Silva administration in 2007, included major investments in infrastructure, and also became the flagship program of the government's countercyclical fiscal policy with the arrival of the GFC. The program was continued under the Rousseff administration (PAC-2), supplemented by a separate Logistics Investment Program (PIL) from 2012 specifically for highway and railroad construction. Disbursements increased fourfold from 2007 to 2013, making BNDES one of the five largest development banks in the world (Studart & Ramos, 2018).



Figure 15. Average annual growth of gross capital formation and GDP, Brazil (Source: World Development Indicators)

BNDES' indirect lending programs enable public and private banks to extend loan maturities and its guarantees attract private capital into infrastructure investments under PAC and PIL. However, the government's decision to keep tariffs (fees and tolls) low forced BNDES to provide financing below its established rates, which forced the bank to rely more heavily on the national treasury for injections of capital. Renewed dependence on government support exposed the bank to shifts in the political winds, and when the new government implemented an austerity program in 2016 BNDES was forced to reduce its activities (Studart & Ramos, 2018).

Likw KfW, the origins of the Korean Development Bank (KDB) can be traced back to the distribution of US development assistance for war reconstruction. Founded in 1954, the bank originally distributed American funds and issued its own bonds to raise funding for long-term investments. When government policy shifted to export promotion in the 1960s, KDB provided direct financing to manufacturing firms and also guaranteed foreign loans for imported capital goods (K. Lee, 2017, p. 5). By the 1970s the focus of the government had moved on to the development of heavy industries such as chemicals, shipbuilding, steel, machinery and electronics. These capital and technology intensive industries required imports of capital goods and therefore access to abundant supplies of foreign exchange. The National Investment Fund was created to channel capital through KDB to the new industries. KDB also borrowed from institutions like the World Bank and floated international bonds to raise additional financing. Lending volume increased ten-fold during the 1970s, but slowed in the 1980s as the focus again shifted, this time to high-technology industries. KDB established the Korea Technology Financing Corporation to stimulate venture capital investment in new industries and provided financing directly for R&D investments.

The role of KDB has continued to evolve, including forays into international investment banking, countercyclical fiscal policy and corporate restructuring following the East Asian

financial crisis. At the same time, the bank has continued to carry out its core function as a source of long-term finance for industrial development and infrastructure (UNCTAD, 2016b).

The experience of these institutions demonstrates the instruments used by NDBs to increase the supply of long-term finance for infrastructure and industry. In a developing country setting, secondary markets are not sufficiently liquid or dense to bridge the gap between the demand for long-term funding and the preference for liquid assets. NDBs take advantage of the government's access to capital markets to expand the supply of non-state credit through second-tier lending, loan guarantees, syndicated lending and other instruments. We have seen that even in advanced countries like the US and Germany, public institutions are still needed to achieve specific policy goals, for example support for small businesses and energy conservation. Another common theme is the capacity of NDBs to act countercyclically to support investment and aggregate demand during periods of recession of crisis, for example during the East Asian financial crisis and the GFC.

Not all NDBs have succeeded, and there are plenty of examples of national development banks in Asia that have underperformed because of managerial or technical constraints or have succumbed to scandal. The Viet Nam Development Bank (VDB), which handles ODA financing and also raises capital on the domestic capital markets, still operates as a traditional policy bank much like the China Development Bank prior to reforms in the 1990s. Accounting irregularities are common and the bank is not run on a commercial basis (Duc Tho, 2021). Annual reports do not appear regularly and even the State Bank of Viet Nam does not report on its operations. As in other countries in Asia, in the absence of an appropriate regulatory framework and oversight, "NDBs can become prey to powerful political forces that can undermine their effectiveness" (Nehru, 2019, p. 262).

Requiring private co-financing of NDB loans and loan guarantees has proven to be an effective check on political capture of development bank operations. Private involvement increases the effectiveness of monitoring and supervision. Even with a minority stake, the government can retain control over strategic assets through golden shares and other mechanisms (Musacchio Farias & Lazzarini, 2014). Asian NDBs have demanded substantial collateral from private firms receiving NDB credits to incentive private business groups to use loans for productive purposes (Xu, 2018).

Sovereign Wealth Funds

Countries that regularly record trade surpluses have established sovereign wealth funds (SWF) to mobilize foreign exchange reserves for domestic purposes. These organization manage national reserves to achieve strategic objectives such as conserving the value of resource rents to protect the living standards of future generations, to finance industrialization or to invest in a countercyclical manner without the need for large fiscal deficits. Because they have no short-term liabilities, they are free to finance long-term ventures unconstrained by liquidity concerns. They operate separately from the central bank, ministry of finance and other authorities to shield them from political influence. The top 100 SWFs controlled \$8.6 trillion in 2020, assets, 85% of which is in developing countries

(Table 3).²³ Fifty-two new SWFs were established in the years 2000-2015, including forty in the developing world.

Country	Name	Assets (USD billions)
Norway	Government Pension Fund Global	1,289.5
China	China Investment Corporation	1,045.7
Kuwait	Kuwait Investment Authority	692.9
Abu Dhabi	Abu Dhabi Investment Authority	649.2
Hong Kong	Hong Kong Monetary Authority Investment Portfolio	580.5
Singapore	Temasek Holdings	484.4
Singapore	GIC Private Limited	453.2
Saudi Arabia	Public Investment Fund	430.0
China	National Council for Social Security Fund	372.1
Dubai	Investment Corporation of Dubai	302.3
Total		6,299.8

Table 3. Ten largest Sovereign Wealth Funds, 2020 (Source: SWF Institute)

While a majority of SWF are funded from natural resource exports, recent years have seen an increase in the number of funds financed from other sources. Asian countries that have accumulated vast foreign exchange reserves from trade surpluses have begun to question the wisdom of holding large volumes of low-yielding, dollar-denominated assets. Elsewhere proceeds from the privatization of state assets, including shares in privatized companies, have been channeled into SWFs. Changes in the source of capital has been accompanied by a shift in the funds' objectives from intergenerational equity to national development and countercyclical investment policy. In the past, SWFs were motivated by a desire to conserve national wealth by retaining a portion of resource rents acquired through exploitation of oil, gas and minerals in the form of international investments. Thus, future generations of Norwegians would benefit from the country's oil wealth long after the last well had run dry. The Asian SWFs, however, in additional managing national wealth, also seek to contribute to national economic stability and transformation of the domestic economy.

These aims need not be mutually exclusive. SWFs have a long history of investing in infrastructure, hospitals and schools while at the same time acquiring a diversified portfolio of international assets. However, if one of the goals of the fund is to moderate the impact of the business cycle on domestic demand, care must be taken to ensure that disbursement of funds for national projects are timed to coincide with periods of slower domestic credit growth.

A common principle of SWFs is that they restrict themselves to commercially viable investments, earning a rate of return that preserves the value of capital in real terms. Projects that have a positive social rate of return but are not financially feasible should form part of the government's public investment plan, where adequate provision can be made

²³ See <u>www.swfinstitute.org</u>.

for subsidization and operations and maintenance costs. Limiting SWFs to minority stakes in investments ensures that only viable projects are taken on and enables SWFs to avail themselves of external expertise (Gelb et al., 2014, p. 11).

Discouraging Speculation

It is one thing to generate more investible resources; it is quite another to invest them wisely. The GFC and other financial crises can trace their origins back to the formation of asset bubbles, usually in property markets. In every financial era, bankers and other financiers conceive of innovative means of increasing leverage within the confines (and sometimes outside of) prevailing laws and regulations. From margin trading before the Great Depression, junk bonds in the lead up the US savings and loan crisis, to Collateralized Debt Obligations of the GFC, financial innovation fuels the asset bubbles that eventually burst, with catastrophic consequences for the real economy (H. P. Minsky, 2008, p. 199).

From the perspective of the national economy, asset bubbles are a missed opportunity in two senses. First and most obviously, they inevitably burst, leaving financial destruction in their wake. They also represent a diversion of capital away from socially productive investment in into risky speculative assets. In the United States, private non-residential investment has not yet recovered from the GFC, but house prices have already surpassed the levels they recorded in 2007 and the S&P 500 is trading at *three times* pre-crisis levels. Policies are needed to change the incentive structures facing firms and individuals, making it more difficult to make money speculating in risky assets and more profitable invest in projects that create jobs, increase productivity and generate export revenues.

Like Korea, Japan used a form of financial repression to redirect credit from short to longterm uses, especially in export industries. However, from the early 1980s restrictions on lending to the property sector were relaxed and as prices soared nonfinancial corporations crowded into the sector. Real estate prices more than doubled in the latter half of the decade. When the bubble burst, Japanese corporations sold off assets in falling markets, destroying trillions of yen in assets. Despite decades of expansionary fiscal and monetary policy, domestic investment remained subdued and the entered into a recession from which it has never really emerged (Koo, 2009).

Once asset bubbles form it is politically difficult to unwind them; too many powerful people have their wealth tied up in houses, office buildings and equities. The aim must be to prevent bubbles from forming in the first place. There are two main instruments to achieve this: restricting the ability of banks to lend into property and stock market booms; and taxing capital gains to reduce its attractiveness of speculating in land and equities. Capital requirements for real estate lending must be high enough to discourage banks from overlending, and maximum loan to value ratios should be established to prevent borrowers from taking unnecessary risks. Capital gains taxes should not exempt family homes and mortgages should not receive tax relief. Property taxes should reflect rising land values and form the core of local government finance, giving local authorities an incentive to improve capacity to assess properties and collect the tax (Turner, 2017, p. 183). These measures may be politically unpopular, especially with the emerging middle classes, but they are necessary

to prevent asset price inflation and the diversion of investment capital from productive purposes to speculation.

Public finance to "crowd in" private investment

Conventional macroeconomic models emphasize the crowding out effects of increases in government expenditure. In the "twin deficits" approach, government borrowing generates inflation and a rise in interest rates, making exports less competitive drawing in foreign capital. Private investment falls as savings are redirected to financing the government's growing deficit. The main policy implication is that the government should aim for a a neutral fiscal stance (balanced budget) over the over the business cycle.

Another way to look at the problem is through the lens of the flow of funds accounts, which has the advantage of broadening the discussion from financial flows to include stocks of financial assets. Each sector (government, private and foreign) receives income and makes expenditures, and the difference between income and expenditure represents the net acquisition (disposal) of financial assets. Because every liability is matched by an asset, the government's net borrowing (the fiscal deficit), the current account balance (foreigner's net borrowing) and private net borrowing sum to zero. The flow of funds account does not presuppose a theory of causality, which must be derived from analysis of the sources and leakages of financial flows.

For example, immediately prior to the GFC in 2008, the Vietnamese private sector was accumulating net liabilities at an alarming rate propelled by a sudden inrush of foreign capital (Figure 16). Capital inflows financed a surge in imports, generating large current account deficits (net lending by the foreign sector). As asset prices were bid up, the domestic private sector increased borrowing to acquire speculative assets (land and equities). The fiscal deficit played no role in the widening of the current account deficit in these years. Over-borrowing by the private sector created a massive debt overhand, which was reduced during an extended period of deleveraging (2012-2015) during which the investment rate fell sharply. The government ran large deficits (net borrowing) that were financed by the sale of financial assets to the private sector (net lending) and the current account recorded large surpluses. Again, there was no sign of "twin deficits" as the country recovered from the home-grown crisis of overborrowing and the global crisis, the effects of which were largely seen in falling exports. Meanwhile, the government gradually reduced its deficit (2015-2018) because of fears (largely unwarranted) about the national debt. The decrease in net borrowing by the government was a drain on aggregate demand, and retrospect, a larger fiscal deficit 2015-18) would have sustained the rate of investment and economic growth during this period.



Figure 16. The flow of funds, net portfolio flows and the investment rate, Viet Nam 2000-2020 (Source: IMF)

In Viet Nam, no clear relationship emerges between either government borrowing and private investment or government borrowing and lending rates. This does not imply that the government can borrow an unlimited amount of money: higher deficits can give rise to short-run supply constraints for goods and labor, generating price inflation. However, there is no evidence that moderate government deficits crowd out private investment or contribute to current account deficits.

Taxes policy and development

Taxes keep the government running and finance investment in infrastructure and the provision of other essential public goods. Developing countries collect a smaller share of national income in tax than advanced countries because informal (unenumerated) economic activities account for a significant fraction of output. Many household or micro-enterprises would not generate much revenue even if they could be taxed, and the effort required to register them for taxation purposes is not costless. However, the informal sector also includes many medium to large scale firms that avoid registration to evade taxes and laws and regulations protecting workers and the environment. Registering these enterprises therefore achieves multiple aims.

The last few decades have seen remarkable stability in the revenue-GDP ratio in both developing and advanced countries, including rapidly growing East Asian economies (Figure 17). This is a matter of concern because the urgent need to increase investment in infrastructure, education and health, including climate change adaptation and mitigation. The burden on government budgets will increase in developing Asia as the ratio of pensioners to workers rises over the next fifteen years. Overseas development assistance (ODA) is no longer a significant factor in large Southeast Asian countries (Figure 18). Aid was still three percent of GDP in Viet Nam until 2015 but has since fallen back to the regional norm of less than one percent since the recovery from the East Asian financial crisis at the turn of the millennium.



Figure 17. Revenue except for grants as % GDP (Source: IMF) NB: Viet Nam data 2000-2013; Indonesia data only for 2001-2007;



Figure 18. Official development assistance (ODA) as % GDP, grant equivalent (Source: OECD)That woul

Some economists and politicians argue that lower tax rates are good for growth because private-sector spending is governed by market incentives, and therefore efficient, while public spending is not. The evidence does not support this proposition. Regardless of country, region, level of development or time period, the size of government relative to national output is unrelated to the rate of economic growth. For the OECD countries, higher levels of social spending are associated with faster, not slower growth. Nor has globalization produced as race to the bottom, forcing governments to reduce taxes and social protection coverage: social spending is in fact *higher* in countries in more open economies (Lindert, 2004, p. 30).

Although the share of GDP collected in taxes has stayed remarkably stable, the structure of taxation has changed over the years (Table 5Table 4). Trade liberalization has reduced revenue from customs, import and export taxes, which has shifted the burden to corporate and personal income taxes, or value added tax in the case of Malaysia. Globalization, at least in this small sample, does not appear to have forced governments to reduce corporation tax to attract investment. Payroll and social security taxes are related to the level of income and the share of the labor force in formal employment. Oil, gas and mineral exporters like Indonesia and Malaysia earn a large proportion of revenue from royalties, which adds a strongly procyclical dimension to fiscal policy.

Economists generally favor broad-based taxes like value added tax and payroll taxes because they raise the most money at the lowest rates and do not discourage private investment (Bahl & Bird, 2008). The figures in Table 4 suggest that there is still plenty of scope to increase revenue through value added taxes and excises. Although consumption taxes are regarded as regressive, it is preferable to address the distributional impact of value added tax through direct transfers rather reducing the coverage of consumption taxes. The practice of exempting broad categories of goods that the poor consume from value added tax—like food, books and clothing—only succeeds in reducing the tax take, leaving less to redistribute through the social protection system. Better to have few or no exemptions, and deal with inequality through transfers.

Revenue	Year	Indonesia	Korea	Malaysia	Philippines	Thailand
Corporate	1997		10%	37%	21%	20%
	2018	34%	16%	48%	22%	24%
Personal	1997		16%	12%	13%	12%
income	2018	9%	18%	18%	12%	10%
social	1997		14%	0%	8%	4%
security	2018	4%	25%	2%	14%	6%
property	1997		13%	0%	1%	2%
	2018	0%	12%	0%	3%	3%
value added	1997		19%	0%	11%	23%
	2018	29%	15%	11%	11%	22%
trade	1997		6%	14%	21%	12%
	2018	3%	2%	3%	19%	3%
excises	1997		14%	11%	14%	24%
	2018	9%	7%	6%	9%	23%
other	1997		8%	27%	10%	3%
	2018	13%	5%	12%	10%	9%

Table 4. Structure of taxation, 1997 and 2018 (Source: OECD, 2020)

NB: Figures for Thailand are for the years 2000 and 2018. No figures available for Indonesia before 2007. Comparable data for Viet Nam not available.

Tax concessions extended to specific projects should be avoided because they reduce revenue and introduce perverse incentives, for example moving facilities to provinces that do not have the necessary infrastructure to obtain tax breaks. As discussed in the previous section, foreign direct investment is an expensive source of financing even without tax incentives. While tax incentives appear influence investment decisions, especially the choice among competing, equivalent sites, they have no impact on the investment rate or economic growth (Klemm et al., 2009). If they give preferences to foreign investors, tax incentives may induce mergers and acquisitions rather than greenfield investments or could reduce foreign companies' costs below those of domestic incumbents, driving the latter out of business. Depending how incentives are structured, they are also subject to abuse: it is not unusual for companies that have been given access to land and other benefits to change their plans once the favors have been granted.²⁴

Except for Korea, none of the countries shown in the table have made progress increasing revenues from property and capital gains. Property taxes are a potentially important source of revenue for local government and a means of reducing the dependence of provinces and cities on central government transfers. Because they do not reduce the profitability of productive investment, property taxes do not act as a brake on economic growth (Johansson et al., 2008). As mentioned in the previous section, property and capital gains taxes can be levied as a disincentive to speculation in real estate and stock markets, increasing investment in productive activities and raising the rate of productivity growth (Guvenen et al., 2019).

Public Borrowing

The conventional view is that because saving is prior to investment public borrowing crowds out private investment. But as we have seen, savings are not an exogenously determined stock of loanable funds to be apportioned among competing investments. Saving rises and falls with income and are more appropriately viewed as an outcome of an investment than a cause. Government expenditure is received by the public as wages and payment for goods and services purchased by the government, and the income from this spending finances the purchase of government liabilities (bonds). To the extent that budget deficits move the economy closer to full employment, government borrowing crowds in rather than crowds out private investment.

In many countries, including Viet Nam, public discussion on the issue of public borrowing centers on the size of the national debt. A high level of foreign debt is risky because interest and principal payments must be made in foreign currency, which must be earned through exports or borrowed. A sudden drop in the value of the domestic currency could potentially force the government into severe spending cuts to free up money to service foreign debt.

²⁴ And not just in developing countries: in 2017 the Taiwanese manufacturer Foxconn received tax, infrastructure and other benefits in exchange for an agreement to invest \$10 billion to build a factory producing flat panel displays in the US State of Wisconsin, but plans have been scaled back or may be abandoned.

But when government debt is mainly denominated in the domestic currency, and held by nationals, these concerns do not arise.

Aside from exchange rate concerns, the risk of government debt spiraling out of control is small. If the real rate of economic growth is higher than the real interest rate on public debt, the size of the government debt will tend to stabilize. This is equally true of a public debt at 90% of GDP and at 10% of GDP. If government bonds are sold to domestic private entities (households or firms), every government liability is matched by a private sector asset, and interest payments are private sector income. Fears that government bonds somehow soak up a finite supply of savings, or reduce income by discouraging consumption, are unwarranted.

This is not to say that government indebtedness is costless. Government borrowing can have a negative impact on the distribution of income because interest payments on public debt entail a transfer of income from taxpayers, many of whom are not well off, to owners of capital, including banks and insurance companies. To the extent that the government is financed by broad-based taxes like value added tax, these transfers are regressive.

Attempts to uncover evidence of growth-inhibiting effects of public debt have not been successful. The most well-known study was carried out by Reinhart and Rogoff, two prominent American economists, who claimed to have identified a debt threshold of ninety percent of GDP, above which higher interest rates and slower investment constrain growth (Reinhart & Rogoff, 2011). However, soon after publication it was discovered that the authors' calculations included a series of spreadsheet errors and data glitches, and once these were corrected the supposed relationship between public debt and slower growth disappeared (Herndon et al., 2013). Sovereign countries that control their own currency have much greater fiscal space than is often presumed by policymakers. Viet Nam's public and publicly guaranteed debt was 46.6% of GDP at the end of 2020, and the return on the ten-year Viet Nam government bond is currently 2.1%.

Does this mean the government can borrow as much as it likes without worrying about negative economic consequences? Unfortunately, no. The government can sustain a moderate deficit without fear of sparking inflation, since the economy normally has enough excess capacity to absorb a short-run increment in aggregate demand by drawing down inventories (which is a form of forced saving since inventories are considered as investment in the national accounts). Over the long term, output will adjust to the higher level of national income. But a sudden increase in the deficit can result in inflationary pressure in the short-term, since a shortage of workers and wage goods—food and other essentials—could push up prices.

But inflation is not the only, or even the most serious problem. In an open economy like Viet Nam, an increase in aggregate demand will spill over into imports. Depending on prevailing conditions in international capital markets, the need to raise international financing could lead to higher interest rates and slower growth, or exchange rate depreciation and domestic price inflation. Developing countries that record persistently large current account and government deficits can find themselves in the undesirable situation of building up foreign

liabilities, which can leave the economy vulnerable to sudden shifts in international sentiment.

Until recently, developing countries had difficulty borrowing internationally in their own currency because investors were unwilling to carry the foreign exchange risk associated with local currency bonds. This problem, which was ubiquitous and unrelated to the specific history of fiscal policy or exchange instability in any one country, was dubbed "original sin" in the economics literature (Eichengreen et al., 2005). However, since the early 2000s foreign investors have discovered an appetite for domestic currency-denominated public debt. Exceptionally low yields in the advanced countries, especially after the GFC, increased the attractiveness of developing country bonds leading to a significant improvement in borrowing terms for issuing countries. Yields fell, maturities lengthened, and governments found that they could sell bonds in the domestic currency without indexing or variable rates. This has resulted in a shift in the currency composition of public debt to local currencies.

This is a positive development from the perspective of developing countries exposure to exchange rate risk. Figure 19 shows the striking increase in foreign ownership of local currency bonds in Indonesia and Malaysia, and a slower rise in Thailand. These countries are now able to obtain international capital at favorable rates in their own currencies, and therefore their public debt burden will not be affected by sudden exchange rate movements. However, there is also a downside to these developments. Having opened up their domestic bond markets to foreign investors, these countries are vulnerable to sudden shifts in bond prices should expected yields increase in the advanced countries. The "taper tantrum" of 2013, when US yields spiked on the Federal Reserve's announcement that it would begin phasing out purchases of Treasury bonds, is an example of the turbulence that can result from heavy reliance on international investors. As foreign investors ran for the exits, Indonesian and Malaysian interest rates shot up and the rupiah and ringgit came under pressure (Akyüz, 2017, p. 104).



Figure 19. Share of foreign ownership of local currency bonds (Source:ADB)

Viet Nam's public borrowing has grown by about 11% per annum since 2000 in US dollar terms, but the rate of growth slowed markedly after 2015 as the government attempted to consolidate its fiscal stance (Figure 20). Most of this increment has taken the form of domestic bonds, in the early years acquired by banks but later divided approximately equally between domestic banks and other investors. The share of foreign official loans fell sharply from 79% of total borrowing in 2000 to 28% in 2019. As noted above, the reduction of the deficit from 2015 to 2018 slowed growth with no apparent effect on the current account balance, the exchange rate or interest rates.



Figure 20. Sovereign borrowing, Viet Nam, 2000-2019 (Source: IMF)

Public Investment

The Addis Ababa Action Agenda (AAAA) emphasizes the "crowding in" effects of public investment, which it sees as creating an enabling environment for private business activity. Improvements to public infrastructure, education and health raise productivity and the rate of return on private investment (Aschauer, 1988; Greene & Villanueva, 1991). This perspective, in which public and private investment are seen as complements, is opposed by another school of thought in which public "crowds out" private investment because of competition for domestic savings (Buiter, 1977; Evans & Karras, 1994).

The belief that public investment crowds out private investment rests on the same two assumption as the prior savings approach: that domestic savings are a pre-existing stock of loanable funds accumulated by frugal households and governments; and, that the economy always operates at full employment, such that an increase in one category of expenditure must come at the expense of another. But if these assumptions are invalid, public investment will increase incomes and therefore savings, and bring underutilized resources, including capital, into production.

We have already discussed limits to public borrowing. In addition, we should also draw a distinction between government consumption, which consists mostly of the salaries of civil servants and the military, and investment in physical infrastructure, education and training and research and development. Both forms of public expenditure produce public goods and contribute to aggregate demand. However, the multiplier effect of public investment on output is greater than government consumption. In the short run, public investment entails expenditure on capital equipment and other goods produced by domestic firms. In the long run, spending on physical infrastructure, skills and innovation have the potential to raise the rate of return on all forms of capital accumulation, making businesses more productive and profitable.

Outside of China, developing Asia suffers from a widening infrastructure gap. Although great strides have been made in communications and information technology, investment in transport and logistics, renewable energy and access to clean water and sanitation have not kept pace with demand. Climate change adaptation and mitigation will increase the investment requirement in Southeast Asia by nearly one percentage point of GDP, and nearly two percentage points in South Asia according to the Asian Development Bank(Table 5).

		2016-2030		
	Public investment in	Investment requirement	Investment requirement	
	infrastructure 2011	without climate change	with climate change	
South Asia	4.8%	6.9%	8.8%	
Southeast Asia	2.1%	5.0%	5.7%	

Table 5. Infrastructure Investment Requirements (% GDP), Developing Asia (Source: (Asian Development Bank, 2017))

The large multiplier effect of public investment makes it an important tool of countercyclical fiscal policy. Increasing public investment during recessions stabilizes output and employment levels, and unlike short-term increases in public consumption has a lasting impact on productivity.

There are reasons to suppose that the relationship between public and private investment is different in developing and advanced countries. Because access to public infrastructure increases with income, returns to public investment are higher in developing than in advanced countries. Figure 21 shows the relationship between public capital stock (as a share of GDP) and income per capita in 2017 for countries in the region. While the relationship is not linear, there is a tremendous difference between lower income countries grouped in the bottom left of the chart and upper-middle- and higher-income countries.

Although most studies of the relationship between public and private investment do not differentiate between developing and developed countries, the few that do find that public investment crowds in private investment in developing countries, but not necessarily in high income countries. Erden and Holcombe, for example, report that a ten percent increase in public investment is associated with a two percent rise in private investment in their sample of developing countries, but found a negative relationship among advanced countries (Erden & Holcombe, 2005). Cavallo and Daude confirm this result but conclude that the crowding in effect is conditional on the quality of domestic economic institutions (Cavallo & Daude, 2011). Bahal, Raissi and Tulin find a strong crowding-in effect of public investment in India, but only after 1980 when policies that had suppressed private investment were reversed (Bahal et al., 2018). The relationship between public and private investment is particularly strong in the agricultural sector in both the long run and short run in India, and the trend decline in public investment is a significant cause of slowing productivity growth in the sector (Akber & Paltasingh, 2019)



Figure 21. Public capital stock as % GDP and GDP per capita in PPP USD, 2017 (Source IMF)

As discussed above in the context of national development banks, the experience of the GFC was a reminder of the role of public investment in countercyclical fiscal policy. During recessions, public investment supports aggregate demand while adding to the nation's productive capacity. In a widely cited study, Kaminsky, Reinhart and Vegh find that while fiscal policy is generally countercyclical in high-income countries, it is procyclical in nearly all developing countries (including Viet Nam) (G. Kaminsky et al., 2004). A significant difference between developing and advanced countries is dependence on natural resource exports, which is associated with procyclical revenue and expenditure policy (Herrera et al., 2019).

V. Conclusions and Policy Implications

Containing the Covid-19 pandemic and restarting economic activity are urgent, immediate policy challenges. Once these objectives have been achieved, attention will again turn to realizing the Socio-Economic Development Plan and the Socio-Economic Development Strategy and SDGs by 2030. Protecting vulnerable regions and populations from the effects of climate change, and the development of renewable energy systems, will require a massive investment effort. This will all take place in the context of a global economy plagued by uncertainties, including a build-up of private debt, a fractious multilateral trading regime and a global slowdown in productivity growth.

Viet Nam needs to maintain an investment rate between 35 and 40% of GDP to achieve the country's economic ambitions. Yet the investment rate declined after the GFC and was only beginning to recover when the Covid-19 pandemic hit. Moreover, the investment recovery relied heavily on foreign direct investment, which is expensive and results in the accumulation of foreign liabilities. Identifying sustainable sources of development finance, and rebalancing investment toward domestic sources, will be a top priority of the Government for the rest of this decade.

Until recently, a consensus had formed among economists that development finance was essentially a matter of matching supply and demand, and that this function was best carried out by private markets unfettered by government regulation. Freeing up interest rates, bank licensing and controls on capital mobility were the order of the day. Equilibrium real interest rates would encourage saving, which markets would allocate to the most efficient and profitable projects. Unfortunately, the results of financial liberalization were disappointing. Domestic saving did not increase, investment rates languished, and banks continued to favor short-term lending. The developing world experienced a series of financial crises brought on by over-leveraging, speculation in property and financial assets, connected lending and unpredictable shifts in foreign capital flows. Flexible exchange rates—a core tenet of liberalized finance—tended to overshoot, destabilizing balance sheets and trade flows.

In the wake of the Mexican tequila crisis, the East Asian financial crisis and finally the GFC in 2008, skepticism regarding the growth and stability implications of financial liberalization moved from the fringes of the economics profession to the mainstream (Jeanne et al., 2012). From "an idea whose time is past" (Dornbusch, 1998), capital controls have been accepted by the international financial institutions as a legitimate instrument to manage surges of short-term capital flows (Ostry et al., 2010). Unremunerated reserve requirements, taxes on portfolio inflows, minimum stay or holding periods and restrictions on foreign borrowing are now common (Akyüz, 2017, p. 71). Financial liberalization was partly reversed in the OECD countries, with increases in statutory capital requirements, new lending curbs and renationalization of banks. There was less change in policy among developing countries, but in these countries regulation is still more strictly regulated than in the advanced countries (Denki & Gomes, 2017).

It is now widely accepted that government has an important role to play in stabilizing the financial system and intervening when necessary to ensure that financing is available for investments that serve important national economic and social objectives. This does not mean that governments are prepared to simply turn back to the clock to the days before financial globalization. New solutions are required to meet today's challenges that both learn from the innovations and mistakes of the recent past.

Increasing the supply of long-term finance

The provision of stable, long-term financing is a key development challenge. Most countries, including developed countries with deep financial markets, have concluded that left to their own devices markets will undersupply long-term credit to important classes of borrowers such as small businesses, homeowners, infrastructure development projects and export industries. Interest in national development banking surged after the GFC because of the capacity that these institutions demonstrated to ramp up investment in a timely manner to support aggregate demand as the crisis unfolded. Recognition of the scale of investment required to adapt to and mitigate the effects of climate change has prompted governments to enlist the support of national development banks to convert energy systems from fossil fuel dependence to renewable sources.

National development banks take many forms, and outcomes have varied with the quality of governance, technical and managerial capacity and the volume of resources at their disposal. The most successful institutions have played a transformative economic role. They usually work in tandem with other financial institutions in the public and private sectors, providing second tier loans and loan guarantees. Banks that separate loan decisions from political considerations and are financially self-sufficient—meaning that they manage to turn a profit and therefore do not rely on support from the treasury—have had the greatest impact.

Sovereign wealth funds are another government financing vehicle that has moved from the periphery to the mainstream. Once the preserve of resource rich countries building up global investment portfolios, SWFs have diversified funding sources and investment outlets. Countries that record persistently large current account surpluses have repurposed foreign a portion of their exchange reserves to SWFs to earn a higher rate of return on national assets and to provide long-term financing to projects of national importance.

Mobilizing public resources

Developing countries need to raise more revenue to sustain higher levels of public investment. Governments rely heavily on broad-based taxes like value added tax and payroll taxes because they cover the largest volume of transactions and do not discourage private investment. Collecting these taxes is difficult when many businesses and workers are informal or unenumerated. Therefore, formalizing businesses and labor relations must be a priority for governments seeking to stabilize public finances. Government must work to convince informal businesses that the benefits of formalization outweigh the burden of taxation, even if this means helping them to meet the costs of abiding by labor and environmental laws and regulations. While access to formal credit is as an advantage, it is not sufficient to persuade informal businesses register with the authorities. Informal businesses are more likely to respond to concrete benefits, for example assistance with training, marketing and distribution and access to infrastructure. In this sense, widening the tax base needs to be linked to strategies to develop the productive capacity of firms in the informal sector.

Property taxes are another source of revenue that most development countries underexploit. Land and buildings tax is an important source of funding for local government and reduces the burden on the central government of inter-government transfers. Property taxes are unpopular among elites, which makes raising them and expanding coverage politically difficult. But this is a hurdle that must be overcome, not only as a needed source of revenue but as an instrument to discourage speculation in land and financial assets. As with widening the tax base, property tax increases are much more likely to be supported by elites if there are specific plans to develop profitable business ventures from which they can see a benefit.

Another important development since the GFC is the increasing willingness of foreign investors to acquire government bonds denominated in domestic currencies. Once considered too risky (tainted by "original sin"), foreigners flocked to domestic currency assets in search of yield as the advanced countries endured many years of historically low

interest rates. Foreigners' appetite for domestic currency bonds is something of a chicken and egg situation: the larger the share of foreign ownership of domestic currency bonds, the less latitude the government (or independent central bank) has when it comes to setting the level of the domestic currency. For foreign investors there is safety in numbers, but for governments the large-scale participation of foreigners in domestic public bond markets narrows the policy space for an independent monetary policy. Governments need to decide whether opening domestic currency bonds to foreigners is worth loss of control over the level of the exchange rate and interest rates

Prioritizing domestic finance

Countries that rely more on domestic finance grow faster. This is an empirical regularity that economists have often found puzzling. But the reasons for this relationship are not difficult to fathom. Countries pursuing a strategy of export-led growth record trade surpluses and thus are net capital exporters in some form. On average, they invest a larger share of national income than capital importing countries. Since international capital flows tend to be pro-cyclical, countries that depend on foreign capital inflows are prone to overheating during periods of rapid growth and deeper recessions during slowdowns.

Developing countries need to protect themselves from the negative effects of the global credit cycles by careful monitoring of capital inflows and their effect on domestic credit growth. Permanent capital controls on specific types of liabilities and temporary limits on the volume of inflows during the boom phase of the cycle can help restore some policy space. Regulatory limits on the ability of domestic banks to increase leverage are important instruments in the developing country context.

Foreign direct investment contributes to growth when it is export-oriented and opens access to foreign markets. At the early stages of development, FDI creates formal sector jobs for workers with relatively low skills, which raises productivity and contributes to poverty reduction. However, policymakers should recognize that the real differences between FDI and portfolio flows are often exaggerated. FDI is not necessarily less risky than loans, and it creates liabilities that can weigh heavily on the balance of payments. Moreover, as a source of finance it is expensive, and much of is derived from profits rather than inflows of new capital. Most studies have failed to detect significant technological transfers (spillover effects) from foreign to domestic firms. In this light, it is not surprising that most innovative and successful export firms in developing countries are domestically owned business rather than subsidiaries of foreign firms.

In the long-term, the impact of FDI depends on whether it crowds in or crowds out domestic investment. FDI policy should target backward and forward linkages between foreign and domestic firm rather than the volume or exports or new jobs. The size and scope of linkage effects are product and context specific, so it is difficult to formulate simple rules identify projects that are likely to increase domestic investment and value added. Industrial policy is an important tool to improve quality and reduce production costs of domestic goods to help local firms gain access to the supply chains of export-oriented foreign companies.

Learning from the past, looking to the future

Responding to the chaos and uncertainty of the East Asian financial crisis and Global Financial Crisis was a chastening experience for policy makers. The twin crises were a reminder that financial markets are prone to herd behavior and over-leverage, leading to instability in the absence of limits on borrowing. East Asian governments also learned that foreign exchange markets to not adjust seamlessly to shocks, and that a sudden shift in sentiment—even if unrelated to macroeconomic fundamentals—can in a short period of time annihilate billions of dollars in assets and leave the government to pick up the bill. Positions fervently held before the twin crises—for example, that asset bubbles are rational because markets are efficient, or floating exchange rates reduce the need to hold foreign exchange reserves—are heard less frequently today.

However, as much as we would like to learn from history, the lessons of the past often seem irrelevant because each new era brings with it a unique constellation of circumstances and considerations. A well-worn maxim of the financial markets is that policy makers are always prepared for the last crisis, but the next crisis never fails take us by surprise. Returning to policies that have worked in the past is tempting, but not a viable option because the economic and geopolitical context is in constant flux. Globalization is here to stay, although the pace and form of global economic relations will be shaped in unexpected ways by political, economic and technological change. Blockchain, cryptocurrency, peer-to-peer lending and the growing importance of shadow banking institutions are all sources of risk. The realities of today—a lingering, global pandemic, rising levels of poverty and "the unprecedented challenge" of climate change—could not have been imagined just a few years ago. No doubt the coming decade has a few more surprises in store.

Unfortunately, there is no "one size fits all" solution to the problem of development finance. Nor is the world likely to reach a consensus in favor of a root and branch reorganization of global financial regimes and institutions. Economic and political power is more dispersed now than it has been for decades, which will complicate efforts to reach a consensus on reform. Every country will need to design a system appropriate to its conditions, such as its level of development, demographic trends, trade patterns and industrial structures. National policies will need to take heed of, but not necessarily conform to, developments in international finance. Crucially, the national financial framework must be consistent with and supportive of national development strategies and plans. Financial, sectoral and regional policies must share a common vision for economic and social transformation, with clear priorities, approaches and benchmarks.

The objectives of development finance policy are clear: Increasing access to long-term finance for infrastructure, industry and other classes of borrowers including small and medium sized businesses; maintaining macroeconomic stability by reducing the procyclicality of finance; discouraging investment in unproductive speculative activities; and reducing the probability and severity of financial crisis. However, the means to achieve these objectives will differ from place to place and over time. This framework paper has identified instruments and institutions that could form part of a national strategy to achieve these interconnected aims. It is accompanied by policy briefs addressing specific topics

ranging from National Development Banking to limits on public borrowing and public investment. The aim has not been to provide a blueprint, but rather to sharpen the focus on desirable outcomes while widening the scope of policy alternatives available to the Government.

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