

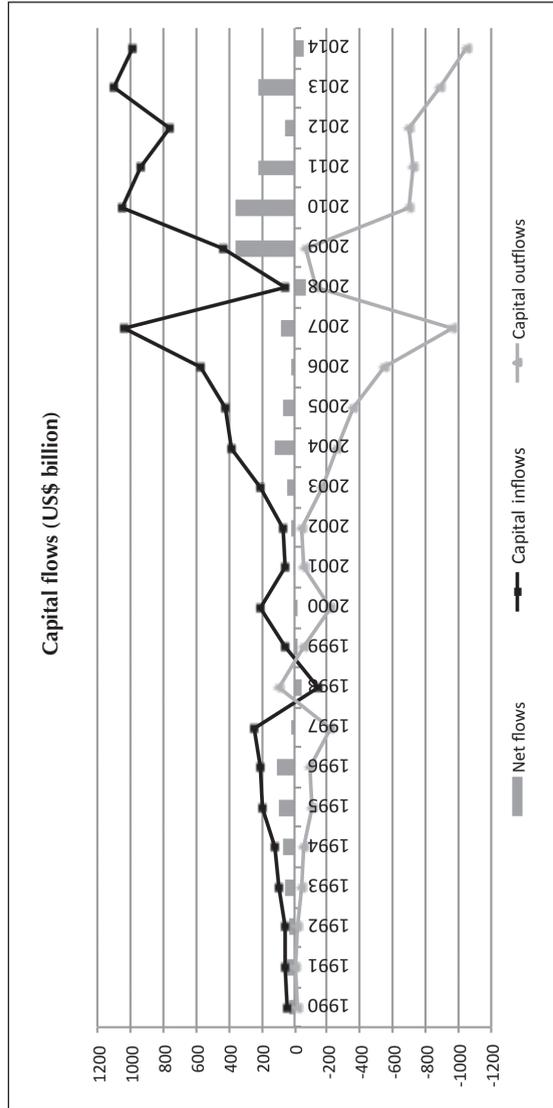
1 Introduction

Orthodox thinking on capital account convertibility during the Bretton Woods era maintained that capital account opening should be expedited cautiously and only after substantial progress has been made in restoring macroeconomic stability, liberalizing the trade account and establishing a strong regulatory framework to foster a robust domestic financial system. Any abrupt opening of capital accounts at an early stage in the reform process without achieving these pre-conditions was thought to constitute a recipe for exchange rate overvaluation, financial fragility and eventual economic collapse (Edwards 1984; Corbo and de Melo 1987; Michaely et al. 1991; McKinnon 1993).

There was, however, a clear shift in policy emphasis in favour of a greater volume of capital account openings from about the late 1980s, with the International Monetary Fund (IMF) and the US Treasury adopting such an emphasis as a basic tenet of their policy advocacy concerning developing countries (Bhagwati 1998; Rodrik 2011). This new policy shift was reflected in a major decision by the IMF to pursue capital account opening as one of its operational objectives. A milestone in capital liberalization arrived with the achievement of Article VIII of the IMF in the early 1990s. Private capital inflows to the developing Asian countries began in the latter half of the 1980s and gathered momentum in the early 1990s (see Figure 1.1). The contribution of non-foreign direct investment (non-FDI) inflows, especially bank loans, in other investment inflows increased noticeably during this period (see Figure 1.2).

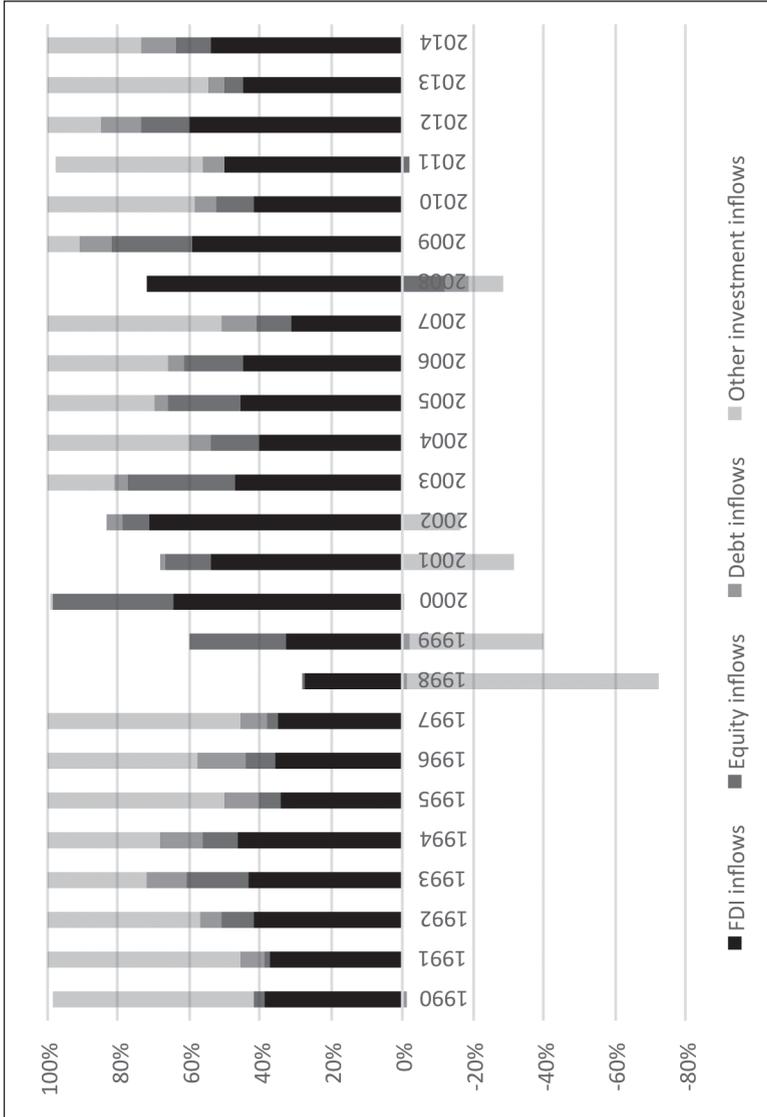
The push towards opening capital accounts, however, was subject to serious reconsideration following the onset of the Asian financial crisis (1997–98). The fact that the countries which succumbed to the crisis had for some years benefited from substantial flows of foreign capital, especially non-FDI in terms of bank loans, has raised questions about the role of capital inflows in creating the conditions that generated the crisis, or at least favoured its dissemination. There

FIGURE 1.1
Capital Flows to/from Developing Asia, 1990–2014



Source: International Financial Statistics (IFS), IMF.

FIGURE 1.2
Composition of Capital Inflows in Developing Asia, 1990–2014



Sources: International Financial Statistics (IFS), IMF, and CEIC database.

has been a huge swing in informed opinion towards thinking that those countries which still maintain closed capital account regimes should undertake the liberalization of short-term capital movements only gradually and with extreme caution (Bhagwati 1998; Radelet and Sachs 1998; Cooper 1999; Eichengreen 2003; Stiglitz 2002). In the years following this crisis, many countries in Asia adopted a more flexible exchange rate policy, some in the context of an inflation targeting framework. Economies successfully recovered and growth in Asia remained on track despite the bursting of the IT bubble in 2001.

Beginning in 2002, capital movement into Asia turned to constitute net inflows away from the outflows previously experienced, and foreign direct investment (FDI), instead of bank loans, contributed significantly to such inflows (see Figure 1.2). However, flows in portfolio equity accelerated and became more volatile and sensitive to developments in the global equity markets (see Figures 1.1. and 1.2). A number of emerging economies experienced large capital inflows and sharp currency appreciation, especially from mid-2006 until mid-2008, reawakening interest in capital controls. For example, in Thailand the unremunerated reserve requirement on fixed income flows was introduced in September 2006 after unsuccessful measures to limit the build-up in non-resident holdings of baht accounts had taken place in 2003. The Chinese authorities restricted the borrowing of dollars by foreign bank branches in China in September 2006. Such a restriction was also introduced in Korea and India in April and August 2007, respectively.

The erstwhile relative calm in the global economic environment was disturbed as external shocks impinged on macro stability and growth in the run-up to the 2008 global financial crisis. The ensuing financial turmoil provoked a deleveraging process that saw large capital outflows from Asia in 2008 (see Figure 1.1) as the United States (US) economy went through a recession so severe that the Great Depression became its comparator. The collapse of Asia's export trade, particularly with the US, dramatically reduced growth across the region in 2008 and 2009. Recovery required considerable fiscal and monetary stimulus by countries in the region in order to compensate for the loss of demand from the US and sustain growth. Asia has recovered more quickly and in a more robust manner than the US and Europe, which are currently facing several challenges of their own.

Nevertheless, the slow rate of global economic recovery and recent uncertainties arising from the withdrawal of the United Kingdom from the European Union (EU), the so-called Brexit, have stimulated capital inflows into emerging countries, including Asia (see Figure 1.1).

There are fears that capital inflows will inundate Asia and threaten macroeconomic and financial stability once again. Issues related to capital flows have received attention once again and some countries in Asia had begun to re-employ capital control measures first initiated in 2002 in order to discourage such inflows. Policymakers in many countries in Asia have also responded to capital inflows by liberalizing outflows, particularly in more recent times, initially and ostensibly to prevent any sharp currency appreciation. Figure 1.1 shows that capital outflows have increased noticeably in the region since 2002, albeit with an interruption in 2008–9.

While issues relating to capital flows have received renewed attention, there still exists a lack of empirical studies comprehensively examining the causes and consequences of capital flows, as well as the effectiveness of capital account policy in dealing with such flows in Asian countries. Most previous studies paid attention more to the consequences of capital inflows with their analysis restricted to conditions prior to the Asian financial crisis.¹ In fact, it is noteworthy that the nature of the current global financial crisis differs from that of the Asian turmoil. In particular, the effects of the former, originating from developed countries, spread through all regions and countries with varying degrees of impact, while the latter affected only a small group of countries, mostly in East and Southeast Asia. In addition, economic fundamentals, especially those connected with financial institutions, in Asian countries have improved substantially in the wake of the Asian financial meltdown.

1.1 PURPOSE OF THE BOOK

Against this backdrop, we aim to comprehensively examine three issues related to capital movements; which are (1) the key factors determining such mobility; (2) the impact of capital movements in a home country, especially on real exchange rates; and (3) the effectiveness of capital account policies. In order to achieve this, selected Asian countries will be analyzed as case studies.

Capital mobility in this book is divided into three main types: FDI; portfolio investment, comprising equity and debt securities; and other investment. Portfolio investment and other investment are sometimes referred to here as non-FDI flows. FDI is defined following the IMF (2013), as a “cross-border investment associated with a resident in one economy having control or a significant degree of influence, i.e. owning 10 per cent or more of the ordinary shares or voting power, on the management of an enterprise in

another economy". There are two types of FDI, namely Greenfield investment and cross-border Merger & Acquisition (M&A). These two forms of investment differ in nature since in the former a parent company builds its operations in an investing country from the ground up, while in the latter a parent company merges with another company(ies) to form a single operation, the so-called Merger, or purchases the shares of one company or group of companies, constituting an Acquisition.

Portfolio investment refers to cross-border transactions and positions involving debt or equity securities, while other investment comprises transactions relating to trade credits, loans and currency and deposits (IMF 2013). Other investment differs from portfolio investment in the sense that the latter provides a direct way to access financial markets so that it tends to be more liquid and flexible. In contrast to FDI, both portfolio investors and investors in other investments typically play a more diminished role in the decision making of the enterprise. Differences in this characteristic potentially make non-FDI flows more volatile than FDI.

While capital inflows into emerging Asian countries have continued to increase, barring interruptions during the 1997-98 Asian financial crisis and 2007-8 global turmoil, the first objective aims to examine the key factors that cause capital to flow into Asian countries. Portfolio investment and other investment (i.e. bank loans) are distinct from FDI due to difference in the nature of these flows. In terms of FDI, along with ordinary variables suggested by previous studies (e.g. Dunning 1993; Buckley et al. 2007; Bénassy-Quéré et al. 2005), this book pays attention to the role of international production networks, which have become an important feature of the structural interdependence of the world economy, in promoting FDI inflows into the Asian economies. In addition, our study also examines the role of investment-saving gaps in the region in determining capital movements, especially concerning non-FDI inflows. Before the Asian financial crisis, an increase in investment-saving ratios tended to go hand-in-hand with huge non-FDI inflows, especially other investment-related. Such capital inpouring continued to escalate after the Asian financial crisis, but investment-saving ratios declined in almost all Asian nations. In such conditions, does the substitutability between capital flows and savings in the region reduce? Does this situation relate to the inability to mobilize savings within a country and region? These are issues that are also explored within the first objective.

Furthermore, as mentioned earlier, since 2003 capital outflows have increased noticeably across the region. The determinants of

capital outflows are examined along with those of inflows. Previous studies (e.g. Brana and Lahet 2010; Kim and Wu 2008; Filer II 2004) primarily examined the determinants of capital inflows, not outflows. Considering the differences in the nature of these two channels, especially pertaining to the actors who conduct the flows,² separating them would allow more precise determinants of capital flows. Again, portfolio investment and other investment outflows are distinct from outward foreign direct investment (OFDI). While a substantial portion of OFDI from the region tends to take place in the form of cross-border M&A, as opposed to Greenfield investments, this book pays more attention to investigating determinants of the former, instead of the latter. In addition, since the Asian financial crisis, institutions in the region have improved substantially. Equity and bond markets have become increasingly prominent as sources of funds in these economies, though the banking sector still dominates the development of financial markets. Whether improvements in the financial market helps stimulate capital outflows from the region will be an issue we examine in the context of our first objective.

When considering the consequences of capital movements, the second objective of the book, we pay attention to the ramifications of capital flows on real exchange rates. One of the unfavourable side effects of “too much” capital flow is (real) exchange rate appreciation – a loss of a country’s competitiveness – that could adversely affect the tradable production and export sectors. Real exchange rate appreciation occurs regardless of the nature of the exchange rate regime implemented in a country. Under a flexible exchange rate regime, real exchange rate appreciation occurs through the appreciation of the nominal exchange benchmark, while under a fixed exchange rate regime appreciation comes mainly through a rise in non-tradable prices. Under an intermediate regime, real currency appreciation transpires through a mixture of these two processes. There are a number of empirical studies examining the determinants of real exchange rates including a capital flow variable in the model (e.g. Elbadawi 1994, Hinkle and Montiel 1999, Baffes et al. 1999, Jongwanich 2008). However, only a limited sample of systematic empirical studies have paid attention to the effect of different types of capital flows, both in terms of asset types and direction of flows, on real exchange rates. Specifically, whether the impact of FDI, in which M&A activities dominate in some emerging Asian countries, on real exchange rates differs from other forms of capital flows, especially portfolio and other investment, and whether capital outflows, which have escalated noticeably in Asia, have a different impact than capital inflows on real exchange rates have not yet been

systematically examined. In this book, we divide capital flows into FDI, portfolio investment and other investment (bank loans).³ Inflows and outflows for all types of capital are also treated differently in our empirical analysis. This helps us clearly examine whether the composition of capital flows matters in determining movements in (real) exchange rates.

The last objective, which aims to examine the effectiveness of capital account policies, arises from the fact that after the 1997–98 Asian financial crisis, there has been a huge swing in informed opinion towards thinking about capital account openings. Krugman (1999), for example argues in favour of using capital (outflow) controls as a means of regaining macroeconomic policy autonomy in countries where the currency crisis has rapidly translated into a painful economic collapse. Recently the thinking about capital account policy not only favours retaining exiting controls, but also imposing new controls to tame short-term capital inflows. As mentioned earlier, in the early 2000s, some countries in Asia, including Thailand, introduced capital control policies to discourage capital inflows.

Capital control policy involves restrictions imposed on cross-border capital flows, which can be broadly classified as constituting either administrative or market-based controls (Ariyoshi et al. 2000). Administrative controls comprise the use of outright prohibitions on the transfer of funds and associated payments, or explicit quantitative limits or approval procedures. Market-based controls work on either the price or volume of transactions or both in tandem, and discourage such actions by making them more costly to undertake, e.g. via explicit taxes, unremunerated reserve requirements (URR), and other price- and/or quantity based regulatory measures discriminating between long and short currency positions or between residents and non-residents. Capital controls can be introduced to restrict either capital inflows, outflows or both simultaneously. The justification to impose controls on these forms of capital is slightly different. While controls on capital inflows are mostly introduced during boom periods to restrict excessive and volatile capital movement, restrictions on outflows are mostly imposed during bust cycles to limit downward pressure on a domestic currency, as well as any depletion of foreign exchange reserves. During normal periods, restrictions on capital outflows are mainly expedited to preserve savings for domestic investment.

Critics of capital controls argue that they are unlikely to cushion economies against any volatility and unpredictability inherent in capital movement, given the difficulties involved in their actual implementation. A major doubt shadowing the effectiveness of capital

controls relates to the presumably ample scope for avoidance and evasion, which can simply negate the expected monetary policy autonomy (Hale 1998; Edwards 1999). The general argument here is that, the more extensive trade and investment links there are, the more difficult and costly it is to control capital account transactions. This is down to the multiplication in the number of arbitrage possibilities that arise in the course of normal business dealings.

Over the past two decades, several empirical studies have examined the effectiveness of capital account policies introduced in emerging countries (e.g. Tamirisa, 2004; Edison and Reinhart 2001; Coelho and Gallagher 2010). However, the results gleaned are mixed and vary according to the countries and periods in which the studies took place. Tamirisa (2004), for example, shows that the capital account policies introduced in Malaysia during the Asian crisis were able to help the central bank to gain monetary autonomy. By contrast, Edison and Reinhart (2001) found evidence of the ineffectiveness of capital control policy in Thailand in 1997, while Coelho and Gallagher (2010) revealed that the capital controls introduced in the 2000s were modestly successful in reducing the overall volume of inflows in Thailand.

One of the drawbacks of previous studies in this area lies in the use of annual information derived from the *Annual Report on Exchange Arrangement and Exchange Restrictions* published by the IMF when constructing capital restriction indexes in their analysis. Using highly aggregated information potentially fails to adequately capture changes in the frequency of either the usage or degree of changes in restrictiveness across a year. Thus generating misleading results as to the effectiveness of such capital account policies. In addition, they tend to examine the effects of capital control policy mainly on capital inflows, but in fact policy which is introduced to affect capital inflows, could have additional side-effects on capital outflows. Consequently, examining only one side of the potentially dual effect would not accurately represent the true impact of capital account policy implementation.

To redress problems arising from using the highly aggregated information presented in the IMF *Annual Report on Exchange Arrangement and Exchange Restrictions* when constructing capital restriction indexes, we developed capital account policy indexes using high frequency information published on a monthly basis by central banks. We disaggregate capital account policies into inflows and outflows, as well as asset categories, to clearly examine the effectiveness of implemented policies in a particular country. In addition, the effectiveness of capital account policies examined in this

study will cover not only their ability to change the volume of capital movements, but also their ability to change the composition of capital flows and to redress the pressure of real exchange rate appreciation.

It is noteworthy that within the context of the last objective, Malaysia and Thailand are employed as case studies. The Malaysian and Thai experience provides an excellent laboratory for investigating these issues, given the nature of policy shifts related to capital account openings over the past four decades. During this period, Malaysia has imposed selective capital control measures on a temporary basis on two occasions as part of state macroeconomic policy, against the backdrop of a long-term commitment to maintaining an open capital account policy regime. In the first half of 1994 capital inflow controls were introduced when the booming economy triggered massive short-term capital inflows jeopardizing macroeconomic stability. Capital outflow controls were the centrepiece of Malaysia's unorthodox policy response to the Asian financial crisis (1998–99). This was the first case in the post-war economic history of an emerging market economy imposing capital outflow controls in a crisis context in order to set the stage for fixing the exchange rate, and monetary and fiscal expansion. Regarding Thailand, after the central bank introduced capital inflow liberalization in the early 1990s, from late 1994 until 1997 it imposed capital inflow restrictions to reduce the volume of capital inflows and redress pressure on the real exchange rate. Through 2003–8, the central bank re-introduced capital inflow restrictions and announced a relaxation policy on capital outflows originated by Thai residents in response to an influx of short-term capital inflows and the appreciation of exchange rates. In December 2006, the central bank instigated a Chilean-style capital restriction, i.e. participants in all foreign transactions⁴ were required to deposit 30 per cent of foreign exchange with the central bank as an unremunerated reserve requirement (URR).

1.2 CONTENTS OF THIS BOOK

The book is organized as follows. Chapter 2 looks at trends and patterns concerning capital flows in selected emerging Asian nations during the Asian financial crisis and beyond. There were three waves of private capital inflows into developing Asian countries over the past two decades. The first sub-section of this chapter discusses the first wave and how capital flows responded to the Asian financial crisis. The second sub-section presents details of the second surge of inflows, especially highlighting distinctive patterns in capital

movement after the Asian financial crisis. This chapter then reviews how the current global financial turmoil has affected trends and patterns in capital flows and whether the effects have been different from those during the previous Asian financial crisis. The final section provides conclusions.

As FDI inflows in emerging Asian economies have risen noticeably over the past three decades, Chapter 3 examines the determinants of inward FDI in selected Asian countries. As mentioned earlier, along with an increase in FDI in the region, the cross-border dispersion of component production/assembly within vertically integrated production processes has still become an important feature of the structural interdependence of the world economy. The existence of these two phenomena has raised the question of whether the increasing importance of international production networks has any implications in promoting FDI inflows in the region. Vertical FDI, where home-country firms relocate different parts of the production process to take advantage of factor endowment between countries, could also become increasingly crucial and dominate traditional or horizontal FDI, where multi-plant firms roughly duplicate the same activities across multiple countries. These are issues which will be examined in this chapter.

While the determinants of capital inflows and outflows could be different, Chapter 4 looks at the determinants of OFDI in selected emerging Asian countries. Among emerging countries, Asia has been at the forefront of OFDI. A substantial portion of OFDI from the region tends to take place in the form of cross-border M&A, as opposed to Greenfield investments. The noticeable rise of cross-border M&A from Asian countries over the past decade has also coincided with the substantial improvement in financial markets in the region. Equity and bond markets have increased their importance extensively as sources of funds in these economies, though the banking sector still dominates the development of financial markets. Bearing in mind this coincidence, this chapter examines the determinants of OFDI, with an emphasis on the relationship between financial development and cross-border M&A (purchase) activity in developing Asian nations under consideration.

What determines non-FDI flows in the Asian countries constitutes the key question under scrutiny in Chapter 5. Portfolio investment (equity and debt securities) is examined separately from other investment flows. Inflows and outflows are independently estimated in these two types of non-FDI flows since their nature tends to be different, as mentioned earlier. In addition to examining the relative importance of external and internal factors in driving non-FDI flows,

this chapter looks at the role of investment–saving situations on capital movements in the region. Before the Asian financial crisis, an increase in investment–savings ratio went hand-in-hand with huge capital inflows. Such inflows continued to escalate after the Asian financial crisis, but investment–saving ratios declined in many Asian countries. Under such conditions, does the substitutability of capital flows and savings in the region decline? Is this situation related to any inability to mobilize savings within a country and region? These are issues that are explored in the chapter.

Chapter 6 examines the relationship between real exchange rates and capital flows in emerging Asian countries, particularly focusing on how far and how fast (real) exchange rates are adjusted in response to capital flows. While there is strong evidence to believe that different types of capital flows behave differently, whether the composition of capital flows matters in determining movements in (real) exchange rates is also another question of interest. In particular, does the impact of FDI on real exchange rates differ from non-FDI flows, including portfolio and bank loan investment? Whether an increase in M&A activities in emerging Asia matters to the relationship between FDI and real exchange rates is another related question. Furthermore, after 2003 capital outflows built up noticeably in the region, before declining in response to the global economic downturn, and then seemingly resuming an upward path after 2009Q2. The huge capital outflows since 2003 have generated another interesting consideration pertaining to whether or not capital inflows and outflows facilitate different impacts on real exchange rates in the region.

Chapter 7 investigates the effectiveness of capital controls by using Malaysia and Thailand as case studies during the period 1990–2010, during which marked changes in capital account policies were experienced in these two countries. As mentioned earlier, the Malaysian and Thai experience provides an excellent laboratory to investigate these issues, given the nature of policy shifts related to capital account opening over the past decades. To analyze the effectiveness of capital account policy, *de jure* capital account policy indexes are constructed using the high frequency information on a monthly basis, published by the central banks. Furthermore, we disaggregate capital account policies into inflows and outflows as well as asset categories to clearly examine the effectiveness of implemented capital account policies in each nation.

The final chapter provides key inferences and sheds light on factors to consider when forming policy conducive to sustainable economic development. It also identifies policy lessons for other developing countries and makes suggestions for further research initiatives.

Notes

1. See, for example, Kose et al. (2006); Wei (2006); and Obstfeld (2008) for literature surveys on issues concerning financial globalization, economic growth and macroeconomic stability.
2. Foreign investors comprise those who conduct (net) capital inflows, which are reported under the “Liability side” of balance of payment ledgers, while domestic investors conduct (net) capital outflows, reported under the “Asset side” of balance of payments.
3. Note that portfolio investment is further disaggregated into equity and debt security. However, the impact of both flows on real exchange rate is statistically indifferent, so we can use portfolio flows as a proxy of both equity and debt security.
4. These do not include issues related to trade in goods and services, repatriation of investment abroad by residents and FDI.