

Capital Controls and Financial Crises



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Abstract

Capital controls were central to the Bretton Woods era but were sharply stigmatized as self-defeating under the neoliberalism of the 1980s and 1990s. The consensus against capital controls began to crack in the years following the East Asian financial crisis of the late 1990s. Views on capital controls evolved more significantly and consistently during the global financial crisis that began in 2008. Indeed, the normalization and rebranding of capital controls as an instrument of macroprudential management may ultimately be seen as one of the most important legacies of the global crisis. Beginning in 2008 a large number of emerging market and developing economies and several countries on the European periphery implemented far-reaching, heterogeneous controls on capital inflows and outflows in response to diverse economic challenges. Keynesian-inflected ideas about the legitimacy and necessity of managing international capital flows now infuse the work of a broad set of economists in academia and the policy community. The new pragmatic view of the International Monetary Fund recognizes that capital

controls are a legitimate part of the policy toolkit. Greater tolerance is also reflected in statements of officials associated with other multilateral institutions, central banks, and credit rating agencies. The complex processes of change around capital controls during and since the global crisis can most accurately be understood as experimental, messy, uneven, contested, and evolving.

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Synonyms

Capital account liberalization and regulation; Capital flow management; Prudential financial policies and regulation

Introduction

Capital controls refer to a broad family of policies designed to govern (i.e., manage) international private capital flows (see ► “[Capital Controls](#)”). These policies take many forms and are implemented through a range of tools.

Policymakers implement capital controls for three principal reasons (Epstein et al. 2004): (1) to promote financial and currency stability and thereby reduce the risk of financial crises (and the spillover effects thereof); (2) to influence

the financing profile and composition of domestic investment, to ensure the provision of adequate finance to favored sectors at the right price, and to protect domestic firms, sectors, and resources from foreign control or competition; and (3) to enhance the autonomy of macroeconomic policy.

Note that discussion in what follows draws heavily on Grabel (2011, 2015, 2017, chap. 7).

A Brief History of Capital Controls

In the immediate post-WWII era, the International Monetary Fund (IMF) fully embraced capital controls. For several decades following the war, capital controls were utilized almost universally around the globe. Capital controls were widely understood by academic economists, policymakers, and IMF officials as necessary tools of prudential financial management (Helleiner 1994).

John Maynard Keynes and US Treasury official Harry Dexter White are widely credited with incorporating capital controls as a central feature of the emerging Bretton Woods system (see ► “Keynes, John Maynard”; ► “White, Harry Dexter”; ► “Bretton Woods System”). They advocated controls on both sending and receiving ends and emphasized the need for cooperation between capital source and recipient countries (see Crotty 1983; Helleiner 1994; Steil 2013, 134,150). Keynes’ plan granted greater autonomy over the method and degree of controls to individual states. White’s plan placed cooperation among capital sending and recipient governments at center stage, with an obligation on the part of recipients of foreign capital to cooperate in blocking inflows when other governments made such requests (Steil 2013, 134,150).

Before Keynes and White, Raúl Prebisch advocated capital controls in peripheral economies (see ► “Prebisch, Raúl”). Prebisch maintained that controls were essential to manage cyclical fluctuations and to shift the composition of capital inflows away from short-term and toward long-term finance (Pérez Caldentey and Vernengo 2016, 1728).

The Neoliberal Era, the East Asian Financial Crisis, and Capital Controls

The stagflation of the 1970s inaugurated a paradigm shift in the economics profession away from traditional Keynesian thought and toward the Chicago School view of the virtues of market mediation. In that context the IMF began to turn away from capital controls during the 1970s (see ► “International Monetary Fund”). In that intellectual milieu, capital controls were largely derided as a vestigial organ of wrong-headed, dirigiste economic meddling (Helleiner 1994). The case for liberalizing international capital flows in EMDEs was nested in a broader neoliberal embrace of financial liberalization.

Recurrent financial crises during the 1980s and 1990s, rather than shaking the IMF from its neoliberal commitments, had the effect of recommitting the institution to financial liberalization (see ► “Crises; Financial Crisis”). The East Asian financial crisis (hereafter Asian crisis) of the late 1990s is emblematic in this regard. When Malaysia introduced outflow controls in 1998, the IMF viewed them as retrogressive, calling them a “step back” toward outdated, self-defeating policy (Adam and Kate 2010). The IMF was not alone in excoriating Malaysian leaders. A representative article in the international business press stated that “foreign investors in Malaysia have been expropriated. . .Malaysians will bear the cost of their distrust for years” (cited in Kaplan and Rodrik 2001, 11). Flagging the country’s controls, Moody’s, Standard and Poor’s, and Fitch downgraded Malaysia’s sovereign debt rating.

Investor antipathy toward capital controls continued through the next decade. Controls in Thailand were reversed by the Central Bank within a few days after their implementation in December 2006 (following a coup) after they triggered massive capital flight (Adam and Kate 2010).

With notable exceptions IMF staff and the economics profession remained largely intolerant of capital controls through the early 2000s. During the long neoliberal period, one had to look to the work of the Keynesian minority within the academic wing of the economics profession and

to the world's heretical finance ministries for consistent support of capital controls (e.g., Chang and Grabel 2014[2004]; Crotty 1983; Crotty and Epstein 1996; Epstein et al. 2004, Grabel 2003, 2004).

Ultimately, however, neither the IMF nor the economics profession could remain impervious to recurrent crises associated with financial liberalization, or to emerging market and developing economy (EMDE) practice that flouted the neoliberal prescription. In the late 1990s, just prior to the Asian crisis, the IMF was poised to enshrine capital flow liberalization in its Articles of Agreement. The Asian crisis derailed that effort. Moreover, despite the neoliberal tenor of the times, some countries (such as China, Chile, and Colombia) maintained controls, with notable success. Partly in response, the Asian crisis precipitated the beginning of a begrudging reevaluation of capital controls. Indeed, what during the global crisis came to appear as the "new normal" (Grabel 2011) regarding controls resulted from a gradual process of legitimization that began slowly and unevenly after the Asian crisis (Abdelal 2007; Chwieroth 2010).

Early cracks in the neoliberal consensus following the Asian crisis appeared in the work of prominent neoclassical economists, such as Bhagwati (1998) and Feldstein (1998), who criticized the way in which powerful interest groups and the IMF used the crisis to press for capital account liberalization (see also Obstfeld 1998; Krugman 1998). Academic literature following the Asian crisis gradually reflected this evolving view. Notably, cross-country empirical studies offered strong support for the macroeconomic achievements of inflow controls (Chwieroth 2010, chap. 8; Epstein et al. 2004; Magud and Reinhart 2006). Evidence supporting the achievements of outflow controls was far less abundant but nontrivial (see Epstein 2012). Research on Malaysia by Kaplan and Rodrik (2001), for instance, finds strongly in favor of the achievements of Malaysia's outflow controls. Research by IMF staff during the global crisis supports what is by now a sanguine consensus view on Malaysia's controls (Saborowski et al. 2014, 5–6).

IMF research economists began to adjust their views on capital controls in the context of this academic ferment. Early adjustments in IMF thinking were subtle, uneven, and inconsistent. Nonetheless, in the post-Asian crisis period, the center of gravity at the IMF shifted away from an unequivocal, fundamentalist opposition to any interference with the free flow of capital to a tentative, conditional acceptance of temporary, "market-friendly" inflow controls (Prasad et al. 2003).

As to be expected, the new pragmatism encountered push back from many leading economists (e.g., Edwards 1999; Forbes 2005). The profession was clearly unwilling to shed its commitment to capital flow liberalization, and the new thinking failed to generate anything like a new consensus. Instead, the late 1990s and early 2000s are marked by halting steps away from the orthodoxy on capital flow liberalization. The resulting unevenness is apparent in the work of the IMF itself during and following the Asian crisis, as illuminated in a 2005 study by the Independent Evaluation Office (IEO) of IMF practice from the Asian crisis to 2004 (IEO 2005). The IEO (2005, 48) acknowledges a discernible disconnect between IMF research on the one hand, which at best featured ambivalence toward capital controls, and the creeping tolerance for controls by the institution's economists when they worked with particular countries on the other. The relative autonomy of different departments at the IMF, a lack of univocal leadership from the top, and the internal entrepreneurship of midrange staff when working in different contexts help to account for IMF inconsistency during the period (Chwieroth 2010, 2014).

Adding to the emerging confusion surrounding capital controls, policymakers from different parts of the world crafted competing etiologies of the Asian crisis. Those from the USA emphasized crony capitalism and overregulated banking systems, the solution for which was increased financial liberalization. In contrast, Asian and European analysis targeted radical financial deregulation (Wade 1998–1999). The divergent diagnoses generated conflict over the financial

liberalization ideal and contending perspectives on the need for and nature of desirable reforms to global financial governance.

Rebranding Capital Controls During the Global Financial Crisis

The global crisis occurred in the midst of the new aperture surrounding financial liberalization and transformed the landscape as concerns the legitimacy of capital controls. Beginning in 2008 a large number of EMDEs and several countries on the European periphery implemented far-reaching, heterogeneous controls on capital inflows and outflows in response to diverse economic challenges.

From an immediate pre-crisis vantage point, the impact of the crisis and the new capital management initiatives on economic thinking and practice is nothing short of stunning. Today there is appreciation among economists and policymakers of the channels by which unrestrained capital flows and high levels of liquidity can undermine macroeconomic and trade performance through their effects on the exchange rate and asset markets. The Asian and global crises together provided ample cross-national evidence that large, footloose capital inflows aggravate financial fragility by fueling spectacular, unsustainable asset bubbles and excessive leveraging by households and firms, including financing strategies that involve severe locational mismatch. Equally important, large-scale reversals of capital flows severely test the limits of financial resilience and reserve adequacy. On the political side, the crises underscored the connection between large, unmanaged capital flows and the rise of interstate tensions over policy spillover effects. They also highlighted the political tensions aggravated by creditor-mandated adjustment programs built on the myth of economic recovery through fiscal restraint. That the global crisis originated with the implosion of the highly liberalized, liquid, and internationally open financial system in the USA severely damaged the case that neoclassical economists had made for several decades that the US brand of financial

liberalization was the ideal to which all other countries should aspire (Kirshner 2014).

Keynesian-inflected ideas about the legitimacy and necessity of managing international capital flows now infuse the work of a broad set of economists in academia and in the policy community. Notably, the IMF evolved significantly during the crisis despite continuing signs of discomfort (Chwieroth 2014; Gallagher 2014; Grabel 2011, 2015, 2017; Moschella 2010, 2014). The new pragmatic IMF view recognizes that capital controls are a “legitimate part of the policy toolkit,” to borrow a now oft cited phrase from IMF research on the subject during the crisis (e.g., Ostry et al. 2010, 2011; Ghosh et al. 2018). Greater tolerance is also reflected in the statements of officials associated with other multilateral institutions, important figures in the world of central banking, analysts at credit rating agencies, and the recent research of economists whom one would not have associated with Keynesian thought.

The complex processes of change around capital controls during and since the crisis can most accurately be understood as experimental, messy, uneven, contested, and evolving (as per Grabel 2015, 2017, chap. 7). Capital controls have been thoroughly “rebranded.” Earlier efforts to rebrand controls failed to stick other than among the already-receptive Keynesian minority in economics. For instance, in 2003 and since, Ocampo (2003 #1508, 2010) argued consistently for “capital account regulations” to refer to a family of policies which includes capital controls. In 2004 Epstein et al. (2004) advocated “capital management techniques” involving two complementary, overlapping types of financial policies – capital controls and those that enforce prudential management of domestic financial institutions. Prior to the global crisis, these contributions attracted little attention among mainstream economists or practitioners. In contrast, the IMF today refers to capital controls matter-of-factly as “capital flow management” techniques (IMF 2011, 2012; Ostry et al. 2011). The new, innocuous term is suggestive of a neutral, technocratic approach to an instrument that had long been discredited as a policy mistake by backward countries.

Rebranding has occurred against a broader backdrop of uncertainty and financial volatility; economic, political, and ideational aperture; and broader discontinuities in financial governance. What Grabel (2011, 2015, 2017) terms the “productive incoherence” of this state of affairs is reflected in the proliferation of responses to the global crisis by national governments, multilateral institutions, rating agencies, and the economics profession that have not yet crystallized into a consistent vision or model. In response to diverse economic challenges, one finds a range of national experiments with capital controls and inconsistent practice by the IMF that are not adequately described by a simplistic narrative. This incoherence has widened EMDE policy space to a greater and more consistent degree than in the years following the Asian crisis.

The sheer scale of the crisis, the bold rhetoric around the need for new strategies to combat it, and the range of unorthodox policy responses pursued across the globe have provided broader validation for protective national policy responses in EMDEs. The Group of 20 nations brief “Keynesian moment” in 2008–2009 opened space for experimentation with capital controls and countercyclical monetary and fiscal policy responses. The G-20 did not explicitly address capital controls as a protective response to the crisis until late in 2010 at its Seoul Summit, when it charged the IMF with examining the matter. Chwieroth (2014, 2015) suggests that the G-20’s timid and late focus on capital flows reflects US policy preferences and influence.

The IMF’s rhetorical attention to pro-poor spending during the crisis also helped to legitimate countercyclical responses (Grabel 2011). At the same time, expansionary monetary policies in the USA and other advanced economies (AEs) contributed to the normalization of protective responses to the crisis in EMDEs. What the IMF’s Lagarde (approvingly) termed the rise of “unconventional monetary policies” (i.e., negative interest rates) in a number of AEs provided cover for other unorthodox policies, such as capital controls.

Winners, Losers, Spillovers, and Capital Controls

During the 2009–2014 period, EMDEs received net capital inflows of US\$2.2 trillion (Stiglitz and Rashid 2016a). As a consequence many EMDEs were confronted with surges of liquidity, asset bubbles, inflationary pressures, and currency appreciations (see ► “[Exchange Rate Volatility](#)”). That the market capitalization of stock exchanges in Mumbai, Johannesburg, São Paulo, and Shanghai nearly tripled in the years that followed the global crisis is just one indicator of the fragility induced by these inflows (Stiglitz and Rashid 2016a).

Expansionary monetary policies in AEs exacerbated the flood of capital to EMDEs. Investors and speculators were able to engage in profitable “carry trade.” (Carry trade refers to the practice of borrowing at low interest rates in order to invest in high-interest-rate environments. During much of the global crisis, this meant borrowing in AEs and investing in EMDEs.) In a departure from the old script, capital controls were necessitated by the side effects of the relative success with which many EMDEs navigated the global crisis and their own good fortune when it came to commodity prices and economic growth. This success, coupled with economic weakness and low returns on assets in AEs, drove investors and speculators to EMDE markets. The use of capital controls by what we might think of as “winning economies” contributed significantly to the legitimization of this policy instrument in the eyes of policymakers, the IMF, the international investment community, and the neoclassical core of the economics profession. Despite relative EMDE success, precious little of the capital inflows went to fixed investment and hence could not be said to benefit the real economy (Stiglitz and Rashid 2016b). In addition, capital inflows facilitated increases in EMDE dollar-denominated corporate debt. The BIS reported that the debt of nonfinancial corporations in EMDEs went from approximately US\$9 trillion at year-end 2008 to over US\$25 trillion by year-end 2015 and doubled as a percentage of GDP over the same period (cited in UNCTAD 2016, chap. 1).

The tide of capital flows turned late in the crisis. Net capital flows to EMDEs turned negative in the second quarter of 2014. Net outflows were about US\$656 billion in 2015 and US\$185 billion in the first quarter of 2016 (UNCTAD 2016, chap.1). These amounts are significant: the 2015 outflows alone amounted to more than 25% of the capital inflows that EMDEs had received during the previous 6 years (Stiglitz and Rashid 2016a). The Institute for International Finance (IIF, an industry group), which takes account of previously unrecorded capital flows captured by errors and omissions, reports much larger net outflows, US\$735 billion in 2015 (IIF 2016). Although several large EMDEs experienced net outflows in 2015 (e.g., Korea, Russia, and South Africa), the bulk of the outflows (US\$676 billion) came from China (IIF 2016). China's net capital flow deficit for 2015 was equal to 4.5% of its GDP (UNCTAD 2016, ch.1). The net capital outflow figures for 2015 and 2016 are striking: by comparison, net outflows from all East Asian economies during the Asian crisis in 1997 were just US\$12 billion (Stiglitz and Rashid 2016a).

In this context several EMDEs abandoned or loosened inflow controls, and some implemented new controls, particularly on outflows. These steps were taken in response to the accelerating pace of outflows and the combined effects of slowing growth, falling commodity and asset prices, weakening currencies, and dramatic reserve disaccumulation. The excess of cheap liquidity and asset bubbles inevitably gave way to sovereign and private debt overhangs, which are aggravated by the locational mismatch that is made worse by the weakening of EMDE currencies.

The unsettled state of international financial markets and the spillover effects of monetary policy in AEs also aggravated pressures and volatility in EMDEs. In 2013 the US Federal Reserve (hereafter the Fed) began to discuss eventual "policy tapering," which refers to a gradual move away from the quantitative easing (QE) that constituted its policy stance during much of the global crisis. The talk of tapering spawned reversals of capital flows from EMDE markets, equity market losses, currency depreciations, and increases in

bond yields. These trends incited what became known as the "taper tantrum" of May and June 2013. The decision by the Fed to begin actual tapering in December 2015 induced further disruption in EMDE markets, which was subsequently compounded by large capital outflows in late 2016 following the US presidential election – what came to be termed the "Trump tantrum." The flight of capital to US markets was triggered by expectations that the new administration would increase infrastructure spending and reduce taxes on large firms and the wealthy. Fiscal expansion is widely seen as the harbinger of restrictive monetary policy aimed at containing inflation and growth pressures. In this context, the currencies of many EMDEs depreciated sharply against the dollar in anticipation of higher US interest rates, increased debt-service costs borne by EMDE borrowers, and tightening credit market conditions worldwide. There is good reason to expect additional volatility in global financial markets in the coming years owing to uncertainty associated with the implementation of "Brexit"; instability fueled by economic conflict, rising economic nationalism, challenges to multilateralism, and an erratic policy environment induced by the actions of several governments (most notably that of the USA); and volatility associated with the move toward a more restrictive monetary policy stance by the US Fed and the European Central Bank (ECB). Indeed, as of this writing, the shift toward tightening monetary policy is inducing acceleration in the pace of capital outflows from EMDEs to AE markets. In this challenging environment, there is good reason to expect vicious macroeconomic cycles in EMDEs, cycles that are easily aggravated by high leverage rates in many EMDEs. The ability of EMDE policymakers to respond to the disturbances via strategic deployment and adjustment of capital controls may be severely tested.

Capital controls were implemented in a wide range of macroeconomic contexts during the global crisis, as will be shown below.

Too Much of a Good Thing

Policymakers in a large set of EMDEs deployed capital controls to mitigate the financial fragility

and vulnerabilities induced by the large capital inflows that they received during much of the global crisis. In several country settings, controls were “dynamic” such that policymakers tightened, broadened, or layered new controls over existing measures as new sources of financial fragility and channels of evasion were identified and/or when existing measures proved inadequate to discourage undesirable financial activities (see Epstein et al. 2004). Controls were also removed as circumstances changed.

Brazil exemplifies the use of dynamic capital controls. The case is interesting because the government (particularly former Finance Minister Mantega) staked out a strong position on policy space for controls throughout the crisis and because the IMF’s response to the country’s controls reveals the evolution and equivocation in the views of Fund staff. (See Chwieroth (2015) on the country’s successful “counter-stigmatization” of controls and Fritz and Prates (2014) on the political economy of its controls.)

In late October 2009, Brazil imposed a tax on inflows of portfolio investment. The controls were intended to slow the appreciation of the currency in the face of significant capital inflows. Brazil imposed a 2% tax on money entering the country to invest in equities and fixed-income investments and later a 1.5% tax on certain trades involving American Depository Receipts while leaving foreign direct investment (FDI) untaxed. The IMF’s initial reaction to Brazil’s inflow controls was mildly disapproving. A senior official said: “[t]hese kinds of taxes provide some room for maneuver, but it is not very much, so governments should not be tempted to postpone other more fundamental adjustments. Second it is very complex to implement those kinds of taxes, because they have to be applied to every possible financial instrument,” adding that such taxes have proven “porous” over time in a number of countries. A week later the IMF’s the Managing Director Strauss-Kahn reframed the message on Brazil’s controls. The new message was stunning: “I have no ideology on this”; capital controls are “not something that come from hell” (quoted in Guha 2009).

Brazil continued to strengthen and layer new controls over existing measures in 2010 and 2011. These included controls that specifically targeted derivative transactions and others that closed identified loopholes as they became apparent. Despite an array of tightening controls, IMF economists called its strategies “appropriate” in an August 2011 review of Brazil (Ragir 2011).

In 2011 and 2012, Brazilian policymakers began to narrow some capital controls even as it extended others. In December 2011 the tax on equity and fixed-income portfolio inflows was lowered to zero percent, in March 2012 the hedge operations of exporters were exempted (up to a specified limit) from the tax on inflows, and the tax on new and renewed foreign loans was extended to loans with a maturity of up to 5 years.

Other EMDEs implemented and adjusted controls as circumstances warranted. Some strengthened existing controls, while others introduced new measures. For some countries (such as Argentina, Ecuador, Venezuela, China, and Taiwan), these measures were part of broader statist approaches to policy. For most other countries (e.g., Brazil, South Korea, Indonesia, Costa Rica, Uruguay, the Philippines, Peru, and Thailand), controls were central features of a pragmatic, dynamic, multipronged effort to respond to the challenges of attracting too much foreign investment and speculative activity.

Peru began to impose inflow controls in early 2008. The country’s central bank raised the reserve requirement tax four times between June 2010 and May 2012. The May 2012 measures included a 60% reserve ratio on overseas financing of all loans with a maturity of up to 3 years (compared to 2 years previously) and curbs on the use of a particular derivative. What is particularly interesting about Peru’s measures is the way in which they were “branded” by the central bank. In numerous public statements, the Central Bank President maintained that the country did not need capital controls even while it implemented and sustained its reserve requirement tax (Quigley 2013).

In August 2012, Uruguay imposed a reserve requirement tax of 40% on foreign investment in one type of short-term debt. Like Peru, a bilateral

agreement with the USA could have made this control actionable. Currency pressures also induced Costa Rica to use capital controls for the first time in 20 years. The country began to use controls in September 2011 when it imposed a 15% reserve requirement tax on short-term foreign loans received by banks and other financial institutions. In January 2013, the Costa Rican President sought Congressional approval to raise the reserve requirement tax to 25% and to increase from 8% to 38% a levy on foreign investors transferring profits from capital inflows out of the country.

In another sign of changing sentiments during the crisis, the rating agency Moody's recommended in 2013 that South East Asian countries use controls to temper currency appreciation. Indeed, numerous Asian countries deployed new or strengthened existing controls during periods of large capital inflows. For instance, in November 2009 Taiwan imposed new inflow restrictions that precluded foreign investors from placing funds in time deposits. At the end of 2010, controls on currency holdings were strengthened twice. In 2010, China added to its existing and largely quantitative inflow and outflow controls. In 2013 China's State Administration of Foreign Exchange (SAFE, unit of the Peoples Bank of China, PBOC) took new steps to control "hot money" flows to manage the appreciation of the currency, reduce external risks, and curb efforts to bring capital into the country via trade mis-invoicing.

In June 2010, Indonesia announced what its officials termed a "quasi capital control" via a 1-month holding period for central bank money market securities. At the same time, it introduced new limits on the sales of central bank paper by investors and on the interest rate on funds deposited at the central bank. During 2011 the holding period on central bank securities was raised to 6 months, a 30% cap on short-term foreign exchange borrowing by domestic banks was reintroduced, and a reserve requirement on foreign currency deposits was raised twice (from 1% to 5% and then to 8%). The awkward labeling of controls in Indonesia reflected the fact that its government was still afraid of the stigma that

long attached to capital controls (per personal communication with a former Indonesian central bank staff member).

Thailand introduced a 15% withholding tax on capital gains and interest payments on foreign holdings of government and state-owned company bonds in October 2010. In December 2012, the Philippines announced limits on foreign currency forward positions by banks and restrictions on foreign deposits.

As in Brazil, Korean authorities took a dynamic, layered approach to capital controls while also targeting the particular risks of derivatives. But unlike in Brazil, Korean authorities reframed these measures as "macroprudential" and not as capital controls (see Chwieroth 2015). In 2010 Korean regulators began to audit lenders working with foreign currency derivatives, placed a ceiling on the use of this instrument, and imposed a levy on what it termed "noncore" foreign currency liabilities held by banks. In 2011 Korea also levied a tax of up to 0.2% on holdings of short-term foreign debt by domestic banks, banned "naked" short selling, and reintroduced a 14% withholding tax on foreign investment in government bonds sold abroad and a 20% capital gains tax on foreign purchases of government bonds.

Stopping the Bleeding

Some countries used capital controls during the global crisis for the more customary reason of stemming a financial or economic collapse in the face of sudden, large-scale capital outflows (see ► "[Capital Flight](#)"). In these cases, the IMF tolerated controls on capital outflows. This is notable insofar as the Fund and the neoclassical heart of the economics profession have long seen outflow controls as far more damaging than inflow controls.

Iceland's policymakers put outflow controls in place to slow the implosion of the economy before signing an SBA with the IMF in October 2008. The SBA made a very strong case for the extension of these controls as means to restore stability and protect the krona (Sigurgeirsdóttir and Wade 2015). In public statements the IMF's staff repeatedly said that the country's outflow controls were

crucial to prevent a collapse of the currency, that they were temporary, and that it was a priority to end all restrictions as soon as possible. The IMF's Mission Chief in the country commented that "capital controls as part of an overall strategy worked very, very well" (Forelle 2012). Fitch praised the country's "unorthodox crisis policies" when announcing that it had raised its credit rating to investment grade in February 2012 (Valdimarsson 2012). Iceland's "temporary" outflow controls turned out to be rather long lived – indeed the central bank and the Finance Ministry did not begin to remove them until October 2016 in a gradual process that continued into 2017 and 2018. In a statement announcing an upgrade in the country's sovereign debt rating in 2016, Moody's favorably noted the cautious nature of the liberalization program while also highlighting the continued risks of removing controls (Moody's 2016b).

The IMF's characterization of and role in strengthening Iceland's outflow controls marked a dramatic precedent and revealed a fundamental change in thinking. The December 2008 SBA with Latvia allowed for maintenance of pre-existing restrictions arising from a partial deposit freeze at the largest domestic bank. Soon thereafter, a Fund report acknowledged that Iceland, Indonesia, the Russian Federation, Argentina, and Ukraine all put outflow controls in place to "stop the bleeding" related to the crisis (IMF 2009). In a sign of de-stigmatization, the report provides no commentary on their ultimate efficacy or warnings against their use. Outflow controls in Cyprus and Greece also precipitated measured reactions by the IMF and by the EU and the ECB. Indeed, the IMF's IEO (2015) takes note of the institution's greater tolerance for outflow controls during the global crisis as exemplified by its support for outflow controls in Iceland, Cyprus, and Latvia (though not in Ukraine).

Cyprus was the first country in the eurozone to implement capital controls during the global crisis. The IMF and the EU did not flinch when stringent outflow controls were implemented as the country's economy imploded in March 2013. Cypriot controls evolved in the months that

followed and after Cyprus began to receive IMF support in May 2013. Capital controls began to be removed in March 2014, and remaining controls were lifted in April 2015. Standard and Poor's upgraded Cyprus' sovereign debt rating to BB- in September 2015, and in doing so cited the removal of capital controls (Zikakou 2015).

Greece became the second eurozone country to implement capital controls. These were put in place at the end of June 2015, when the government was locked in a pitched battle with the IMF, EC, and ECB (known as the Troika) over the referendum on a third assistance package. Stringent outflow controls were put in place once eurozone leaders announced that they would not extend Greece's then current assistance package beyond June 30 (when it was scheduled to expire) and that the ECB would cap emergency liquidity assistance to Greek banks. Greek officials removed some controls in July 2016 in hopes of attracting deposits and continued to remove others during 2017 and 2018.

Several Latin American countries also implemented controls on capital outflows when they were deemed necessary to manage instability. In December 2008 Ecuador doubled its tax on currency outflows, established a monthly tax on the funds and investments that firms kept overseas, discouraged firms from transferring dollar holdings abroad by granting tax reductions to firms that reinvest their profits domestically, and established a reserve requirement tax. In October 2010, Venezuela implemented outflow controls and new restrictions on access to foreign currency and tiered exchange rates. In October 2010, Argentina implemented and the next year strengthened outflow controls that placed stricter limits on dollar purchases. Unlike controls implemented elsewhere, Argentina's 2011 measures were associated with a ratings downgrade (on oil and gas companies by Moody's). However, this had far more to do with nationalization of a Spanish oil company and the long running conflict with foreign investors and the IMF, than with capital controls. Argentina's controls were lifted in December 2015 following the presidential election of Mauricio Macri, a neoliberal who sought to distinguish his government from its populist

predecessor. The Macri government settled with foreign investors in February 2016. Moody's and Fitch upgraded the country's debt rating in April 2016. Moody's cited the removal of capital controls as among the factors in the ratings upgrade, and both credit rating agencies highlighted the settlement with foreign investors (Moody's 2016a). The Macri government did not implement capital controls in the face of an economic crisis and a significant weakening of the country's currency during the spring and summer of 2018. Instead, and reverting to an old pattern, the government signed a US\$50 billion agreement with the IMF in June 2018.

"Taper Tantrums," "Trump Tantrums," and the New Outflow Rout

Beginning in 2013, EMDEs again began to introduce and adjust diverse types of capital controls against the backdrop of growing financial fragility, weakening economic performance, depreciating currencies, and turmoil induced by international policy spillovers. The taper and Trump tantrums exacerbated EMDE fragility in 2015 and 2016. At the same time, however, controls that had been put in place to deal with challenges associated with large capital inflows were loosened or abandoned. Taken together, the new activism represented a dramatic turn toward widespread pragmatic adjustment and experimentation.

Examples of ad hoc adjustment and experimentation abound. In June 2013 Brazil eliminated some of the controls it introduced just a few years earlier. In January 2016 the Governor of the Bank of Mexico, Agustín Carstens, a longtime critic of capital controls, announced that it might soon be time for central bankers in EMDEs "to become unconventional" to stem the vast tide of capital outflows (Wheatley and Donnan 2016).

Even in the face of mounting capital outflows, Costa Rica anticipated and planned for an eventual reversal of fortunes. In March 2014, Costa Rica put in place a framework for new capital controls intended to give the central bank the ability to curb speculative money inflows from abroad.

China's strategy of "managed convertibility" became increasingly difficult for officials to

navigate in the wake of growing national and global economic turbulence and missteps by national policymakers, particularly involving decisions to devalue the currency in August 2015 and again in late December and early January 2016. Managed convertibility involves a complex mix of liberalizing capital controls so as to increase the convertibility of the RMB (without making it fully convertible) and facilitate its flow and use across borders while also tightening existing and implementing new controls to protect the economy and the currency from volatile capital flows (Subacchi 2015, 2017). Liberalizing capital controls was also necessitated by policymakers' long-held goal of having the IMF include the RMB in the SDR (a goal that was realized in October 2016). Against this backdrop and in a series of announcements in 2014, the country's policymakers eased some capital controls, such as those that restricted domestic investors from investing in foreign stocks and properties, firms from selling RMB-denominated shares abroad, and doubling the daily trading range of the RMB.

After the surprise decision to allow the RMB to devalue in August 2015, SAFE expended up to US\$200 billion in reserves defending the currency during the next month, increased monitoring and controls on foreign exchange transactions, and imposed a 20% reserve on currency forward positions in hopes of curbing intense speculation against the currency. Following another round of large capital outflows in January 2016, SAFE implemented several new, stringent capital controls. China still had more than US\$3 trillion in reserves in early 2016 despite having depleted nearly US\$500 billion in reserves in the previous year when trying to stem outflows and protect the currency. Nonetheless, in a widely reported speech at the 2016 World Economic Forum in Davos, the Governor of the Bank of Japan, Haruhiko Kuroda, suggested that China tighten or use new capital controls to support its currency and economy against growing pressure. The IMF's Lagarde deflected requests for comment on this suggestion but admitted that it would be a mistake for China to deplete too many reserves to support the currency (Wheatley and Donnan 2016).

Chinese authorities again intervened to support the RMB against the backdrop of large outflows in the third quarter of 2016. It is estimated that US\$88 billion in reserves were used to support the currency in September–October 2016, leading reserves to fall to US\$ 3.05 trillion in November of that year. Reserves fell further to US\$2.99 trillion in January 2017. While still vast, the country's reserves fell to their lowest level since March 2011. In late 2016 the government implemented new restrictions to protect reserves, reduce outflows, and dampen financial and currency instability. Additional scrutiny and reporting requirements on transfers were put in place in 2017. Taking a page from other countries, China's state news agency announced that these measures were "not controls" (Reuters 2017).

In August 2013 India introduced capital controls on the amount that Indian-domiciled companies and residents could invest abroad. These steps were taken in the context of a weakening rupee, growth in the current account deficit, and the Federal Reserve's talk of eventual tapering. Then governor of the Reserve Bank of India, Duvvuri Subbarao, took pains to explain that these measures should not be labeled capital controls. In his last speech as central bank governor, he said of these measures: "It is not the policy of the Reserve Bank to resort to capital controls or reverse the direction of capital account liberalization," and he emphasized that the measures did not restrict inflows or outflows by nonresidents (Reuters 2013b). His subterfuge was only partly successful: market observers dubbed the measures "partial capital controls." When the new central bank governor Raghuram Rajan took his place in September 2013, he promptly rolled back the new outflow controls.

Tajikistan deployed several types of outflow controls during 2015 and 2016 in the context of turmoil induced by falling oil prices. These involved closure of private currency exchange offices, requirement that rouble-denominated remittances be converted to the national currency, restrictions on foreign currency transactions, and termination of the direct sale of foreign currency to the population. Here, too, authorities attempted to brand these measures as something other than

capital controls. In an interview with the *Financial Times*, First Deputy Chairman of the country's central bank, Nuraliev Kamolovich, denied that these moves amounted to capital controls (Farchy 2016).

In December 2014, the Russian government put outflow controls in place, though these were referred to in the country's press as "informal" capital controls. The government set limits on net foreign exchange assets for state-owned exporters and required large state exporting companies to report to the central bank on a weekly basis and reduce their net foreign exchange assets to the lower level that prevailed earlier in the year.

Ukraine deployed several outflow controls in February 2014 in the context of a highly unstable political backdrop, significant currency weakening, depletion of official reserves, and fears of default on external debt. Measures included a ceiling on foreign currency purchases by individuals; a ban on buying foreign exchange to invest overseas or prepay foreign debt; a 5-day waiting period before companies can receive the foreign exchange that they have purchased; and a limit of about US\$1500 per day on foreign currency withdrawals from bank deposits. Some of these measures were loosened in 2015.

The case of Azerbaijan is illustrative of the continued tensions over capital controls and also of the rating agencies' new measured response to them. In January 2016 the country's parliament passed a bill that would impose a 20% tax on foreign currency outflows and allow repayment of dollar loans up to US\$5000 at the exchange rate that prevailed prior to the currency's devaluation. The country's President, Ilham Aliyev, rejected the bill the next month. In doing so, the President said that "[it] was a mistake to tax foreign-currency outflows as it would scare away foreign investors" (Agayev 2016). In the period between the Parliament's passage and the President's rejection, the rating agencies had a subdued reaction to the prospect of outflow controls in the country. Standard and Poor's lowered the country's rating but cited low oil prices in doing so, while Fitch maintained its rating, stating that "the introduction of the capital controls does not 'automatically'

have consequences for the country's sovereign rating" (Eglitis 2016; *Financial Times* 2016).

Beginning in late 2014, Nigeria began to implement outflow controls as falling oil prices and a concomitant drop in foreign reserves destabilized its economy. In December 2014, limits on currency trading were imposed. Then, in April 2015 and continuing through the year, new outflow controls were put in place. These included limits on what Nigerians could spend on credit cards abroad; restrictions on access to hard currency and cross-border payments; limits on dollar-denominated transactions using ATM cards and daily limits on foreign ATM withdrawals; and foreign currency quotas and restrictions on access to dollars. In February 2016, the IMF's Lagarde began to urge the government to remove controls (and pursue other reforms as well).

Similar Pressures, Dissimilar Responses, and Legal Constraints

Not all policymakers responded to the pressures induced by large inflows, outflows, and policy spillovers with capital controls. Policymakers in some countries that enjoyed high inflows during much of the global crisis, such as Turkey, Chile, Mexico, and Colombia, publicly rejected inflow controls. Instead they increased their purchases of dollars and used expansionary monetary policy to staunch currency appreciation. Divergent responses to similar pressures reflect many factors, not least of which are differing internal political economies, the continued sway of neoliberal ideas, and the long shadow cast by the belief that central banks must signal their commitment to neoliberalism in order to maintain international credibility (see ► “Neoliberalism”).

There is more to the matter of resisting capital controls than the long half-life of neoliberalism, however. Some countries simply cannot introduce capital controls – on either inflows or outflows – because of bi- or multilateral trade and investment treaties with the USA (such as the North American Free Trade Agreement, NAFTA, and the Dominican Republic-Central American Free Trade Agreement) or because of commitments embedded in European Union (EU) and

Organization for Economic Cooperation and Development (OECD) membership (Gallagher 2014, chap. 8; Shadlen 2005; Wade 2003). The failed Trans-Pacific Partnership (TPP), a multilateral trade agreement, would have made it more difficult for signatory countries to utilize capital controls.

Governments also face restrictions on controls from the obligations to liberalize financial services under the World Trade Organization. Article 63 of the Lisbon Treaty of the EU enforces open capital accounts across the union and requires that members not restrict capital transactions with other countries. However, EU members Cyprus and Greece did deploy stringent outflow controls in 2013 and 2015 (respectively) when their banking systems imploded. The European Commission (EC) and the ECB gave their blessing to capital controls on the grounds that controls were temporary and essential to preventing large scale capital flight and the collapse of the banking system. This suggests that EU strictures can be less binding than is usually thought, at least when countries avail themselves of the treaty's temporary safeguard measures during crises. Other restrictions appear in the OECD's Code of Liberalisation of Capital Movements; though since it is not a treaty, the obligations are not actionable (Abdelal 2007).

At the time when many of these agreements were negotiated, the restrictions on capital controls no doubt seemed redundant since controls were effectively blocked by the effective constraints imposed by the IMF, rating agencies, and investors. Today, however, in the face of reversals by the previous enforcers of neoliberalism, the provisions are consequential. Chile's refusal to use capital controls during the global crisis has far more to do with its 2004 trade agreement with the USA than with neoliberal ideology. The US-Chile Trade Agreement exposes the country to lawsuits by investors who are able to demonstrate that they are harmed by controls. By contrast, Korea's 2007 trade agreement with the USA allows temporary controls under certain circumstances. The greater leeway granted to Korea proved consequential: although Korea is an OECD member, it was nevertheless able to implement

capital controls (labeled as macroprudential regulations) during the global crisis without raising the ire of other members. In the case of Mexico, neoliberal views are backed up by the strictures in NAFTA that threaten to punish any change in its policy stance. (NAFTA includes a balance of payments exception, but use of this exception must be temporary and nondiscriminatory (Gallagher 2014, 181).) By contrast, Brazil was free to utilize controls during the global crisis because it did not sign bilateral treaties with the USA.

Reframing capital controls as something other than controls seems to be one viable avenue in cases where policymakers do not have the appetite to push the limits of trade/investment agreements (as with Peru and Uruguay) or where they otherwise fear the stigma that attaches to dirigisme. Hence, Korea's macroprudential measures; Indonesia's quasi-controls; Russia's informal controls; Tajikistan's outright denial that its measures amount to controls; and India's partial controls. When policymakers are not confident of their ability to sell reframed controls to foreign investors, they are sometimes led, like Azerbaijan's President, to block capital controls altogether.

Revising the Rule Book

Since 2008, many EMDEs have implemented controls without seeking permission from the IMF. For many countries, controls were a response to the side effects of their relative economic success during much of the global crisis. It is highly unlikely that capital controls could have been rebranded as legitimate policy tools as quickly and deeply as has been the case had it not been for the divergent effects of the crisis across the globe and the initiatives of many of the winners from the crisis to assert control over financial flows. Just as history is written by the victors, so may it be the case that the rebranding and re legitimizing of a forbidden policy tool depend primarily on the practices and strategies of those countries whose success grants them the latitude, confidence, and influence over other countries, not just to "cheat" in a policy domain but to rewrite the rule book. Whether the IMF and the economics profession have changed

fundamentally their view of capital controls, then, may matter less than the altered global economic and political context in which they are being utilized.

It is clear that outflow controls are still seen in a different light than inflow controls, but the crisis has catalyzed rethinking on this controversial instrument as well. This may prove to be important in the near future, if the economic turbulence deepens. A new round of crises might very well feature increased use of outflow controls, which may test the limits of the new policy space surrounding capital controls.

The rebranding of controls has also been facilitated by the fact that carry trade pressures in some AEs caused central bankers to reconsider their long-held opposition to currency interventions and even to capital controls. For example, in 2013 a top official of Germany's Bundesbank signaled a softening of its traditional position, stating that "limited use of controls could sometimes be appropriate" to counter currency pressures (Reuters 2013a). In 2015, the Swiss National Bank intervened aggressively and repeatedly to curb the Swiss franc's appreciation (Moschella 2015). These attitudes and actions could be expected to spread in the future as a consequence of the broadening mission of central banks in the AEs and EMDEs during the crisis. Central banks began to target financial stability and the reduction of systemic risk through macroprudential policies, rather than simply price stability (Benlialper and Cömert 2016; Moschella 2015).

Conclusion

The ultimate outcome of the rethinking of capital controls is uncertain, of course. It is possible that the pre-2008 view of controls may re-establish itself. As with most rebranding exercises, there is also uncertainty about whether the new framing will prove sufficiently sticky, especially in the context of tensions and countervailing impulses at the IMF and elsewhere, a resilient bias within economics against state management of economic flows, and new attempts to assert outflow controls

in times of distress that would run counter to the interests of powerful financial actors.

That said, it seems most unlikely that the pendulum will swing back in the direction of reifying capital liberalization. The global crisis inaugurated a pragmatic turn in the global financial governance architecture (see Grabel 2017). These changes – along with the growing exigencies occasioned by the latest turbulence in the world economy – portend continuing interest in and experimentation with capital controls.

The widening of policy space and the practical experience with capital controls gained during the global crisis may prove consequential in the immediate future, if emerging financial fragility continues to deepen. Even as the problems of “doing too well” fade across EMDEs, earlier experiments with controls on capital inflows may pay important dividends in what are likely to be challenging times ahead. A critical test of recent and ongoing experiences with capital controls will occur in future crises, as states rely on and adjust fledgling practices and policies in hopes of dampening instability and otherwise managing turbulence better than they had over the course of previous crises. The coming period may test – sooner rather than later – the resilience of the new openness to controls, especially on outflows. It may also test the ability of states and institutions to capitalize on the opportunities that they have had for learning by doing and learning from others that have thus far been afforded by the crisis.

Cross-References

- [Bretton Woods System](#)
- [Capital Controls](#)
- [Capital Flight](#)
- [Crises](#)
- [Exchange Rate Volatility](#)
- [Financial Crisis](#)
- [International Monetary Fund](#)
- [Keynes, John Maynard](#)
- [Neoliberalism](#)
- [White, Harry Dexter](#)

Bibliography

Abdelal, Rawi. 2007. *Capital rules: The construction of global finance*. Cambridge, MA: Harvard University Press.

Adam, Shamin, and Dan Ten Kate. 2010. Asia should consider capital controls to stem asset-bubble risks, UN says. *Bloomberg*, May 6. <http://www.bloomberg.com/news/articles/2010-05-06/asia-should-consider-capital-controls-to-stem-asset-bubble-risks-un-says>.

Agayev, Zulfugar. 2016. Azeri leader rejects bill to tax outflows of foreign currency. *Bloomberg*, February 10. <http://www.bloomberg.com/news/articles/2016-02-10/azeri-leader-rejects-bill-to-tax-outflows-of-foreign-currency>.

Benlialper, Ahmet, and Hasan Cömert. 2016. Central banking in developing countries after the crisis: What has changed?. IDEAS working paper series, No. 1. http://www.networkideas.org/working/jan2016/01_2016.pdf

Bhagwati, Jagdish. 1998. The difference between trade in widgets and dollars. *Foreign Affairs* 77 (3): 7–12.

Chang, Ha-Joon, and Ilene Grabel. 2014[2004]. *Reclaiming development: An alternative economic policy manual*. London: Zed Books.

Chwieroth, Jeffrey. 2010. *Capital ideas: The IMF and the rise of financial liberalization*. Princeton, NJ: Princeton University Press.

Chwieroth, Jeffrey. 2014. Controlling capital: The International Monetary Fund and transformative incremental change from within international organizations. *New Political Economy* 19 (3): 445–469.

Chwieroth, Jeffrey. 2015. Managing and transforming policy stigmas in international finance: Emerging markets and controlling capital inflows after the crisis. *Review of International Political Economy* 22 (1): 44–76.

Crotty, James. 1983. On Keynes and capital flight. *Journal of Economic Literature* XXI: 59–65.

Crotty, James, and Gerald Epstein. 1996. In defence of capital controls. In *Are there alternatives? Socialist register 1996*, ed. Leo Panitch, 118–149. London: Merlin Press.

Edwards, Sebastian. 1999. How effective are capital controls? *Journal of Economic Perspectives* 13 (4): 65–84.

Eglitis, Aaron. 2016. Azerbaijan credit rating cut to junk by S&P after oil plunge. *Bloomberg*, January 29. <http://www.bloomberg.com/news/articles/2016-01-29/azerbaijan-credit-rating-cut-to-junk-by-s-p-after-oil-s-collapse>.

Epstein, Gerald A. 2012. Capital outflow regulation: Economic management, development and transformation. In *Regulating global capital flows for long-run development, Pardee center task force report*, ed. Kevin P. Gallagher, Stephany Griffith-Jones, and José Antonio Ocampo, 47–58. Boston: Boston University: Pardee Center for the Study of the Longer-Range Future.

Epstein, Gerald, Ilene Grabel, and K.S. Jomo. 2004. In *Capital management techniques in developing countries: An assessment of experiences from the 1990's and*

lessons for the future, G24 discussion paper No. 27, ed. Intergovernmental Group of Twenty Four. Geneva: United Nations Conference on Trade and Development, March. http://policydialogue.org/files/publications/Capital_Mgmt_Epstein.pdf.

Farchy, Jack. 2016. Tajikistan and IMF in talks over bailout. *Financial Times*. February 23. <http://www.ft.com/intl/cms/s/0/3dd384b0-da48-11e5-98fd-06d75973fe09.htm> – axzz43ISYfpkX.

Feldstein, Martin. 1998. Refocusing the IMF. *Foreign Affairs* 77 (2): 20–33.

Financial Times. 2016. Fitch keeps wary eye on Azerbaijan after controls. January 22. <http://www.ft.com/fastft/2016/01/22/fitch-keeps-wary-eye-on-azerbaijan-after-capital-controls/>

Forbes, Kristin. 2005. Capital controls: Mud in the wheels of market efficiency. *Cato Journal* 25 (1): 153–166.

Forelle, Charles. 2012. In European crisis Iceland emerges as an island of recovery. *Wall Street Journal*. May 21. <http://www.wsj.com/articles/SB10001424052702304203604577396171007652042>.

Fritz, Barbara, and Daniela Magalhães Prates. 2014. The new IMF approach to capital account management and its blind spots: Lessons from Brazil and South Korea. *International Review of Applied Economics* 28 (2): 210–239.

Gallagher, Kevin P. 2014. *Ruling capital: Emerging markets and the reregulation of cross-border finance*. Ithaca, NY: Cornell University Press.

Ghosh, Atish R., Jonathan D. Ostry, and Mahvash S. Qureshi. 2018. *Taming the tide of capital flows: A policy guide*. Cambridge: MIT Press.

Grabel, Ilene. 2003. Averting crisis? Assessing measures to manage financial integration in emerging economies. *Cambridge Journal of Economics* 27 (3): 317–336.

Grabel, Ilene. 2004. *Trip wires and speed bumps: Managing financial risks and reducing the potential for financial crises in developing economies*. G-24 discussion paper no. 33. Geneva: United Nations Conference on Trade and Development, November. http://www.unctad.org/en/docs/gdsmdpb2420049_en.pdf.

Grabel, Ilene. 2011. Not your Grandfather's IMF: Global crisis, 'productive incoherence' and developmental policy space. *Cambridge Journal of Economics* 35 (5): 805–830.

Grabel, Ilene. 2015. The rebranding of capital controls in an era of productive incoherence. *Review of International Political Economy* 22 (1): 7–43.

Grabel, Ilene. 2017. *When things Don't fall apart: Global financial governance and developmental finance in an age of productive incoherence*. Cambridge, MA: MIT Press.

Guha, Krishna. 2009. IMF refuses to rule out use of capital controls. *Financial Times*. November 2. <http://www.ft.com/intl/cms/s/0/80201cce-c7ef-11de-8ba8-00144fea849a.html> – axzz43ISYfpkX.

Helleiner, Eric. 1994. *States and the reemergence of global finance*. Ithaca, NY: Cornell University Press.

IEO. 2005. *Report on the evaluation of the IMF's approach to capital account liberalization*. Washington, DC: Independent Evaluation Office of the International Monetary Fund. <http://www.ieu-imf.org/ieu/pages/CompletedEvaluation118.aspx>.

IEO. 2015. *IMF's approach to capital account liberalization, revisiting the 2005 IEO evaluation*. Washington, DC: Independent Evaluation Office of the International Monetary Fund. <https://ieu.imf.org/en/our-work/Evaluations/Updates/The-IMFs-Approach-to-Capital-Account-Liberalization>.

IIF. 2016. *Capital flows to emerging markets*. Washington, DC: Institute of International Finance. January 19. [https://images.magnetmail.net/images/clients/IIF_2/attach/CF_0116_Press\(3\).pdf](https://images.magnetmail.net/images/clients/IIF_2/attach/CF_0116_Press(3).pdf).

IMF. 2009. Annual report on exchange rate arrangements and exchange restrictions. Washington, DC: International Monetary Fund, various years. <http://www.elibrary.imf.org/page/AREAER/www.imfarear.org>.

IMF. 2011. *Recent experiences in managing capital inflows-cross-cutting themes and possible policy framework. Report prepared by the strategy, policy, and review department*. Washington, DC: International Monetary Fund. February 14. <http://www.imf.org/external/np/pp/eng/2011/021411a.pdf>.

IMF. 2012. *The liberalization and management of capital flows: An institutional view*. Washington, DC: International Monetary Fund. November 14. <http://www.imf.org/external/np/pp/eng/2012/111412.pdf>.

Kaplan, Ethan, and Dani Rodrik. 2001. *Did the Malaysian capital controls work?* NBER working paper no. 8142. Cambridge, MA: National Bureau of Economic Research, February. <http://www.nber.org/papers/w8142>.

Kirshner, Jonathan. 2014. *American power after the financial crisis*. Ithaca, NY: Cornell University Press.

Krugman, Paul. 1998. Saving Asia: It's time to get radical. *Fortune*, September 7: 35–36. http://archive.fortune.com/magazines/fortune/fortune_archive/1998/09/07/247884/index.htm.

Magud, Nicolas, and Carmen M. Reinhart. 2006. *Capital controls: An evaluation*, NBER working paper no. 11973. Cambridge, MA: National Bureau of Economic Research. <http://www.nber.org/papers/w11973>.

Moody's. 2016a. Moody's upgrades Argentina's issuer rating to B3 with a stable outlook. April 15. https://www.moodys.com/research/Moodys-upgrades-Argentinas-issuer-rating-to-B3-with-a-stable%2D%2DPR_347279

Moody's. 2016b. Rating action: Moody's upgrades Iceland's government ratings to A3. September 1. https://www.moodys.com/research/Moodys-upgrades-Icelands-government-ratings-to-A3-outlook-stable%2D%2DPR_351195

Moschella, Manuela. 2010. *Governing risk: The IMF and global financial crises*. Basingstoke: Palgrave Macmillan.

Moschella, Manuela. 2014. Institutional roots of incremental ideational change: The IMF and capital controls

after the global financial crisis. *British Journal of Politics and International Relations* 17 (3): 442–460.

Moschella, Manuela. 2015. Currency wars in the advanced world: Resisting appreciation at a time of change in central banking monetary consensus. *Review of International Political Economy* 22 (1): 134–161.

Obstfeld, Maurice. 1998. Global capital markets: Benefactor or menace? *Journal of Economic Perspectives* 12 (4): 9–30.

Ocampo, José Antonio. 2003. Capital Account and Counter-cyclical Prudential Regulation in Developing Countries. In *From Capital Surges to Drought: Seeking Stability for Emerging Markets*, edited by Richardo Ffrench-Davis and Stephany Griffith-Jones 217–44. Basingstoke: Palgrave Macmillan.

Ocampo, José Antonio. 2010. Time for global capital account regulations. *Economic and Political Weekly* 45 (46): 32–33.

Ostry, Jonathan D., Atish R. Ghosh, Karl Habermeier, Marcos Chamon, Mahvash S. Qureshi, and Dennis B.-S. Reinhart. 2010. *Capital inflows: The role of controls*, IMF staff position note no. 4. Washington, DC: International Monetary Fund, February 19. <https://www.imf.org/external/pubs/ft/spn/2010/spn1004.pdf>.

Ostry, Jonathan D., Atish R. Ghosh, Karl Habermeier, Luc Laeven, Marcos Chamon, Mahvash Qureshi, and Annamaria Kokenyne. 2011. *Managing capital inflows: What tools to use?* IMF staff discussion note no. 6. Washington, DC: International Monetary Fund, April 5. <https://www.imf.org/external/pubs/ft/sdn/2011/sdn1106.pdf>.

Pérez Caldentey, Esteban, and Matías Vernengo. 2016. Reading Keynes in Buenos Aires: Prebisch and the dynamics of capitalism. *Cambridge Journal of Economics* 40: 1725–1741.

Prasad, Eswar, Kenneth Rogoff, Shang-Jin Wei, and M. Ayan Kose. 2003. *Effects of financial globalization on developing countries: Some empirical evidence*, IMF occasional paper no. 220. Washington, DC: International Monetary Fund, September 9. <https://www.imf.org/external/pubs/nft/op/220/>.

Quigley, John. 2013. Velarde says he Doesn't see need for Peru capital controls. *Bloomberg*. January 25. <http://www.bloomberg.com/news/articles/2013-01-25/velarde-says-he-doesn-t-see-need-for-peru-capital-controls-1->.

Ragir, Alexander. 2011. Brazil's capital controls are 'appropriate' tool, IMF says. *Bloomberg*. August 3. <http://www.bloomberg.com/news/articles/2011-08-03/brazilian-capital-controls-are-appropriate-tool-imf-says>.

Reuters. 2013a. Bundesbank warms to capital controls in currency war debate. January 24. <http://in.reuters.com/article/emerging-currencies-germany-idINL6N0AT3XC20130124>

Reuters. 2013b. India Cbank chief says policy not to resort to capital controls. August 29. <http://in.reuters.com/article/india-cbank-governor-idINI8N0EW02N20130829>

Reuters. 2017. China's new rules on Yuan transfers are not capital controls: Xinhua. January 2. <http://www.reuters.com/article/us-china-yuan-idUSKBN14M032?il=0>

Saborowski, Christian, Sarah Sanya, Hans Weisfeld, and Juan Yepez. 2014. *Effectiveness of capital outflow restrictions*, IMF working paper no. 8. Washington, DC: International Monetary Fund. January. <https://www.imf.org/external/pubs/ft/wp/2014/wp1408.pdf>.

Shadlen, Kenneth. 2005. Exchanging development for market access? Deep integration and industrial policy under multilateral and regional-bilateral trade agreements. *Review of International Political Economy* 12 (5): 750–775.

Sigurgeirsdóttir, Silla, and Robert H. Wade. 2015. From control by capital to control of capital: Iceland's boom and bust, and the IMF's unorthodox rescue package. *Review of International Political Economy* 22 (1): 103–133.

Steil, Benn. 2013. *The Battle of Bretton Woods: John Maynard Keynes, Harry Dexter White, and the making of a new world order*. Princeton, NJ: Princeton University Press.

Stiglitz, Joseph, and Hamid Rashid. 2016a. Closing developing countries' capital drain. *Project Syndicate*. February 18. <https://www.project-syndicate.org/commentary/developing-countries-capital-outflows-by-joseph-e-stiglitz-and-hamid-rashid-2016-02?barrier=true>.

Stiglitz, Joseph, and Hamid Rashid. 2016b. What's ailing the world economy? *Third World Resurgence* 307–308: 19–20.

Subacchi, Paola. 2015. The renminbi goes forth. *Project Syndicate*. December 11. <https://www.project-syndicate.org/commentary/renminbi-international-currency-in-the-making-by-paola-subacchi-2015-12>.

Subacchi, Paola. 2017. *The people's money: How China is building a global currency*. New York: Columbia University Press.

UNCTAD. 2016. *Trade and development report*. Geneva: United Nations Conference on Trade and Development.

Valdimarsson, Omar. 2012. Iceland to apply new rules before capital controls are removed. *Bloomberg*. August 27. <http://www.bloomberg.com/news/articles/2012-08-27/iceland-to-apply-new-rules-before-capital-controls-are-removed>.

Wade, Robert H. 1998–1999. The coming fight over capital controls. *Foreign Policy* (113): 41–54.

Wade, Robert H. 2003. What strategies are viable for developing countries today? The world trade organization and the shrinking of 'development space'. *Review of International Political Economy* 10 (4): 621–644.

Wheatley, Jonathan, and Shawn Donnan. 2016. Capital controls no longer taboo as emerging markets Battle flight. *Financial Times*, January 27. <http://www.ft.com/intl/cms/s/0/36cfcc66-c41b-11e5-808f-8231cd71622e.html#axzz41OPv4o3d>.

Zikakou, Ioanna. 2015. S&P upgrades cyprus after capital control removal. *Greek Reporter*, September 26. <http://greece.greekreporter.com/2015/09/26/sp-upgrades-cyprus-after-capital-control-removal/>.