

The IMF's Rethink of Global Banks: Critical in Theory, Orthodox in Practice

DANIELA GABOR*

The International Monetary Fund's (IMF) new financial interconnectedness agenda, developed in response to postcrisis calls from G20 to better understand systemic financial institutions, deploys a critical approach that stresses the spatial, political, and institutional dimensions of cross-border financial networks. It portrays global banks as key nodes in those networks, "super-spreaders" of systemic risk through complex business models that involve yield search, regulatory and tax arbitrage. Yet this critical view does not translate into its policy advice at country level. In regular surveillance of developing countries, the IMF remains committed to a benign view of transnational banking, even when confronted with growing cross-border fragilities. During crises of cross-border banking, the IMF tailors its conditionality to minimize domestic regulatory challenges to cross-border banking models and to propose crisis measures that create new profit opportunities for transnational banks.

Introduction

Financial interconnectedness became a salient political issue immediately after the collapse of Lehman Brothers. Global banks, and their cross-border networks, came under unprecedented scrutiny as governments around the world recognized their role in financial contagion (Helleiner and Pagliari 2011). In its spring 2009 meeting, the G20 mandated the International Monetary Fund (IMF), the newly created Financial Stability Board (FSB), and the Bank for International Settlements (BIS) to design a framework for assessing the global systemic importance of financial institutions, markets, and instruments. Six months later, the three organizations jointly presented the results of a survey asking countries to identify fundamental concerns about systemic risk (International Monetary Fund, Bank For International Settlements, and Financial Stability Board 2009). Respondents named interconnectedness as the second most important determinant of systemic relevance (after size), a policy problem in urgent need of solutions. Then, in October 2010, the IMF published its first *Understanding Interconnectedness* staff report. The report stressed that financial

*University of the West of England

Governance: An International Journal of Policy, Administration, and Institutions, Vol. ••, No. ••, •• 2014 (pp. ••–••).

© 2014 Wiley Periodicals, Inc.

doi:10.1111/gove.12107

fragility propagates quickly through global networks that are generated by “a handful of large, complex financial intermediaries,” mostly transnational banks (IMF 2010a, 1).

This, it is argued, constitutes a radical ideational shift, with important bearing on the Fund’s analytical and operational apparatus. Indeed, contrary to common assumptions about the staff’s expertise gaps on finance (see Chwiero 2010; Moschella 2012), the IMF (2010a, 2012a) embraced a critical approach to interconnectedness that highlights its political, spatial, and institutional dimensions. In conceptualizing interconnectedness, the IMF crossed the boundary from (analytically) invisible financial institutions in its macroeconomic models to conceive of transnational banks as complex businesses whose market-based business models render them “super-spreaders” of global systemic risk (see Haldane 2009; also Howarth 2013) through tax, regulatory, and yield arbitrage (IMF 2010a, 2012a, 2013a; Laeven, Ratnovski, and Tong 2014; Sun 2011).

This article is animated by a simple question: How did the shift to critical interconnectedness change the ideas about transnational banks espoused by the IMF in developing/emerging countries? This is an important, yet unexplored, question. Indeed, recent scholarship has argued that international organizations may exercise significant ideational influence over domestic policy processes beyond formal conditionality (see Béland and Orenstein 2013; also Broome and Seabrooke 2012). Furthermore, the new mandate for systemic surveillance allows the IMF to turn its Article IV consultations into a vehicle for monitoring cross-border financial spillovers at country level (IMF 2013a). In other words, while the IMF may not have the legal mandate to change global banking activities, its ideas matter for “sympathetic” policymakers (Woods 2006) in developing countries, particularly since the debate on cross-border interconnectedness is incipient there. Conducted in terms of capital controls (Gallagher 2011; Ostry, Ghosh, and Korinek 2012), its empirics remain anchored in broad balance of payments categories (FDI, portfolio, or debt flows) that shed little light on the actors and cross-border relationships that give rise to capital flows.

Thus, while the article engages with the organizational dynamics that shape ideational processes in international organizations (Chwiero 2010, 2014; Seabrooke and Nilsson 2014) in order to trace the construction of “cognitive authority” (Broome and Seabrooke 2012) on financial interconnectedness, the focus here is on the IMF’s struggle to adapt this critical concern with the super-spreaders at developing country level. The article thus contributes to scholarship on the IMF’s treatment of transnational finance. Much of this literature approaches the topic through the lens of capital account issues (Chwiero 2010; Gallagher 2011; Grabel 2013; Moschella 2012). Instead, the analysis here sheds light on financial connections that underpin systemic risk, proposing a framework that distinguishes between different mechanisms of interconnectedness, and links these to changes in (global) banks’ business models.

To do so, the article draws on insights about institutional complementarities developed in the institutionalist tradition in comparative political economy. In this literature, two sets of institutions are complementary if their interaction increases returns for both, and improves aggregate economic performance (see Crouch et al. 2005). Well aware of the complexities of the concept, including the need to account for origins, structural differentiation, elite struggles, contingencies, and constraints that govern the historical evolution of complementarities (see Crouch et al. 2005), the article uses a narrower definition of fragile complementarities in order to capture the systemic consequences of connections structuring global finance. Thus, it posits that fragile complementarities arise where interactions increase individual returns but create financial fragility as an externality. Following Streek (in Crouch et al. 2005), the article specifies “contingencies and constraints” that enable or hinder actors’ pursuit of fragile complementarities, in the form of regulatory regimes (including capital controls), macroeconomic policies, and ideological positions on financial liberalization. With this, the article further responds to recent calls to focus on the activities of banks in the comparative political economy of finance (see Hardie et al. 2013).

In developing countries, it is argued, transnational banks generate three such fragile complementarities: with the domestic banking system (interbank), with the central bank (protective), and with nonresident investors (shadow). These can shift and shape each other. *Bank-to-bank* complementarities stem from cross-border banking flows through which *resident banks* borrow from *parents* if affiliated to transnational banking groups or from cross-border interbank markets. Bank-to-bank complementarities, often driven by parent banks’ leverage cycles (Bruno and Shin 2014), feed credit booms and asset bubbles that unravel when cross-border funding dries out (Cetorelli and Goldberg 2011). *Protective* complementarities arise when the *central bank’s* currency manipulation enables *resident banks* to expand balance sheets by using their easier access to cross-border funding (Gabor 2012; Ostry, Ghosh, and Korinek 2012). Once the central bank intervenes in currency markets, it relinquishes control over domestic liquidity and, with that, its instruments to influence private financial relationships through nonregulatory means (i.e., the cost and availability of reserves). By borrowing abroad (from parents), resident banks can endogenously create domestic liquidity to acquire high-yielding assets, thus inflating asset prices. In turn, *shadow* complementarities are produced when *global financial institutions* (nonresident hedge funds, asset managers) enter the local currency (debt) markets of developing countries (see Feroli et al. 2014; Turner 2014). They cannot do so without first obtaining domestic liquidity from *resident banks* (see IMF 1997). When motivated by short-term search for yield, shadow complementarities are distinctly fragile. Nonresidents may withdraw rapidly if conditions in international financial markets or monetary policy in high-income countries change (Curcuro, Vega, and Hoek 2010), as the episode of “market tantrums” in early 2014 demonstrated

(Feroli et al. 2014). Shadow complementarities are the fastest growing financial linkages post crisis: As the local currency debt of developing countries nearly doubled to USD9.1 trillion between 2008 and 2012, non-residents' share of that debt also doubled to 26.6% (see Turner 2014).

The article argues that IMF research and position papers recognize the systemic risks embedded in these complementarities. In contrast to its erstwhile insistence on capital account liberalization, the Fund now admits that developing countries may want to limit participation in cross-border financial networks. Yet this is a case of ideational change that does not shape the IMF's country-level advice. To make this point, the article compares IMF policy advice in two distinctive regional settings. In Eastern Europe's crisis of cross-border banking after Lehman's collapse, the IMF reaffirmed the importance of allowing transnational banks to pursue bank-to-bank complementarities that host authorities threatened to curtail. Furthermore, the IMF advised that crisis management be reoriented to support profit generation through protective and shadow complementarities. Conversely, for five Latin American countries confronted with growing cross-border interconnectedness after 2009, a similar split emerged between critical ideas of interconnectedness and bilateral policy advice. Article IV reports highlight the risks underpinning shadow complementarities, yet without a systematic scrutiny or concrete policy proposals. In sum, at country level, the IMF's ideas about the systemic implications of integration in global financial architectures echo the precrisis insistence that further financial deepening works better than regulatory interventions to curtail the dangers of cross-border financial activity.

The article first explores how the IMF engaged with the new financial interconnectedness agenda. It then outlines a taxonomy of fragile connections in order to explore how the fresh ideas about systemic risk in global banking travel into policy advice. The article concludes with three conjectures about the causes of the observed outcomes for future research: time lags, internal politics of the IMF country missions, and strategic management of global legitimacy and local leverage.

Shifting Ideas about Systemic Interconnectedness

Theories of financial interconnectedness have changed rapidly since the global financial crisis. The growing interconnectedness scholarship can be divided into two distinctive approaches. The older, narrow approach focuses on the domestic interbank market as the site of interconnectedness. Studies typically conceive of banks as traditional financial intermediaries that connect borrowers and savers inside national borders, with shortfalls and surpluses of reserves traded on the interbank market. The relevant question is how distinctive interbank configurations influence systemic risk. Earlier research argued that dense connections distribute risk better (Allen and Gale 2000) and sharpen

incentives for banks to bail each other out in response to market stress (Leitner 2005). In contrast, later studies proposed that larger, more interconnected banks increase financial fragility (Cont, Moussa, and Santos 2013; Freixas, Parigi, and Rochet 2000; Gai, Haldane, and Kapadia 2010). Yet such models do not explain the causal mechanisms driving interconnectedness.

The crisis generated more critical readings. An emerging “critical interconnectedness” approach closely scrutinizes the systemic footprints left by bank business models reliant on leverage, with cross-border connections arising from a global search for yield that exploits variegated regulatory and tax regimes. Most ideas came from ideational entrepreneurs, well established within central banks and international organizations, with first-hand experience of financial markets. Thus, Andrew Haldane (2009), then the Bank of England’s director for Financial Stability, first formulated the problem of transnational banks as “super-spreaders” of systemic risk. He argued that banks had collectively migrated to business models that prioritized the production and trading of risk (through securitization and off-balance sheet instruments), leveraged proprietary trading, market making, and global management of asset and liabilities. More politicized still, the Organisation for Economic Co-operation and Development’s Adrian Blundell-Wignall, Wehinger, and Slovik (2009) and Blundell-Wignall, Atkinson, and Roulet (2012) observed how Citigroup, Bank of America, UBS, Barclays, and Deutsche Bank had become too big to fail through tax (havens) arbitrage and aggressive lobbying. Drawing on Shin (2009), Janet Yellen (2013), of the U.S. Federal Reserve, noted that networks of mutual exposures became increasingly complex because banks could only grow by trading with each other. In sum, global banks expanded rapidly through complex, layered intra-(global) financial system relationships increasingly disconnected from the “real” economy (Bruno and Shin 2014). Lehman’s collapse highlighted just how fragile these connections were.

The critical interconnectedness approach converges with the literature that highlights the power of large financial institutions to intervene in regulatory debates. Scholarship focused on the Basel regimes suggests that the process of negotiating biting regulatory measures is particularly ineffective when those measures affect transnational banks (see Helleiner and Pagliari 2011). Instead, at least before the crisis, global banks were successful at translating into Basel policy their preferred rules for internal ratings or securitization (Claessens, Underhill, and Zhang 2006). Crucially, banks won the ideational battle to be viewed as productive economic actors, national champions that needed support and light-touch regulation to become serious competitors in global financial markets (Christophers 2013).

As the global financial crisis disrupted this ideational consensus (Froud et al. 2012), financial interconnectedness took a central role in global reform agendas.

The IMF's Views of Interconnectedness

... Financial sector reforms are being considered to address the risks posed by large and complex financial institutions (LCFIs). The vast majority of global finance is intermediated by a handful of these institutions with growing interconnections within and across borders. (IMF 2010a, 1)

... the Fund's recent Triennial Surveillance Review called for enhancing our understanding of interconnectedness and incorporating this understanding into the analysis of risks and policies. (IMF 2012a, 45)

Since the 1990s, the IMF sought to strengthen its ability to engage with finance, both conceptually and operationally. In addition to paying more attention to systemic financial issues in the regular Article IV consultations, it introduced the Financial Sector Assessment Program (FSAP) in 1999 as an instrument for regular country-level evaluations (Moschella 2012). Yet the global financial crisis called into question the effectiveness of these efforts. For example, precrisis FSAP assessments were either ignored by private financial institutions or, worse, praised countries that turned out to have highly fragile financial sectors (see Seabrooke and Nilsson 2014). Bilateral surveillance failed to trace the rapid growth in systemic cross-border financial flows that would have required capital controls (see Gabor 2012).

Indeed, scholarly accounts of the IMF's attempts to mainstream finance in its analytic apparatus highlight the incremental, often contested, nature of reform. First, the organizational and professional politics of the IMF matter. Chwioroth (2010) drew attention to the professional socialization of IMF staff, versed in general equilibrium macroeconomics that ignores finance. With skills gaps and limited resources, Seabrooke and Nilsson (2014) note, the professional composition of FSAP teams—IMF permanent staff and external consultants—plays an important role in the organization and message of the FSAP assessments. Second, scholars argue that the preference of powerful members on the Executive Board may prompt ideational entrepreneurs within the IMF to “add at the margin,” often in a transformative manner, rather than take a radical approach (Chwioroth 2014; Moschella 2012).

In contrast, the interconnectedness agenda placed on the IMF the demands of “big-bang change.” The spring 2009 G20 meeting gave the Fund, along with the FSB and the BIS, the theoretical remit to construct analytical frames for large systemically important institutions and to develop templates to improve the data collected on their interconnectedness (through the G20–IMF Data Gaps Initiative). This remit was further strengthened by the Fund's new mandate for multilateral surveillance (Moschella 2012), which involves tracing cross-border spillovers, and by the 2011 Triennial Surveillance review that stressed the need for fast analytical progress on interconnectedness (IMF 2012a, 45). Furthermore, the emphasis that the aforementioned 2009 country survey placed on interconnectedness also implied a new willingness from countries on

the Executive Board to allow the IMF staff a free hand to build new analytical frameworks.

Scholars would expect the IMF to struggle to compete in this context of overlapping theoretical mandates because its academic-trained staff has little direct experience with financial markets, either through employment or as regulators—unlike the BIS and FSB (see Moschella 2012; also Seabrooke and Nilsson 2014). Olivier Blanchard, the IMF's chief economist, illustrated well this expectation when he recognized that before coming to the Fund: "I thought of the financial system as a set of arbitrage equations," where the details of financial intermediation had no analytical relevance (Wessel 2013). The general equilibrium macroeconomics in which he and other IMF economists were trained treated banks as passive intermediaries in a process controlled by the central bank's monetary policy decisions (Gabor 2010).

Yet the first *Understanding Financial Interconnectedness Report*, published in October 2010, and subsequent reports (see IMF 2012a), including Spillover reports (IMF 2013b), calls this prediction into question. Rather than following the narrow interconnectedness view, the 2010 report embraces a critical approach. Written by the Strategy, Policy, and Review Department and the Monetary and Capital Markets Department (MCM henceforth), the report highlights the importance of complex business models in global banking. It provides rich empirical detail of, among others, the Swiss financial industry, offshore (tax-haven) conduits, and funding exposures of the Greek financial sector, and it identifies several critical fault lines, including cross-border, cross-currency wholesale funding, shadow banking, etc.

Such in-depth analysis suggests that IMF staff was, one year after Lehman, more familiar with complex details of global financial architectures than commonly assumed. This finding fits well with recent arguments that international organizations are more flexible in the ideas they choose to mobilize than commonly assumed (Béland and Orenstein 2013). New ideas emerge through ideational struggles in a context-contingent, expert-dominated environment (Seabrooke and Nilsson 2014), rather than entrenchment in ideological positions or the interest of the powerful states. This is particularly important during crises that require new cognitive maps, as with globally systemic financial institutions. The IMF staff thus had room to engage with the new ideas on interconnectedness introduced by high-profile ideational entrepreneurs, not only in its academic-type research (see Cerutti et al. 2010; Laeven, Ratnovksi, and Tong 2014; Sun 2011) but also in its more formal staff reports and position papers (see IMF 2010a, 2012a, 2013b). Indeed, the 2012 *Enhancing Surveillance: Interconnectedness and Clusters* report goes as far as to recognize that developing countries should reassert their influence over private finance, as critical finance scholars have called for (Gabor 2012; Gallagher 2011).

How can countries change the mechanisms through which transnational banks carry systemic risks inside their borders? The IMF lacks

definitive answers because it has not yet brought together its critical interconnectedness ideas into a coherent analytical framework that can capture the architecture of interconnectedness at country level and because of significant data gaps at individual bank level (see IMF 2012a). The next section proposes such a framework.

Theorizing Fragile Connections

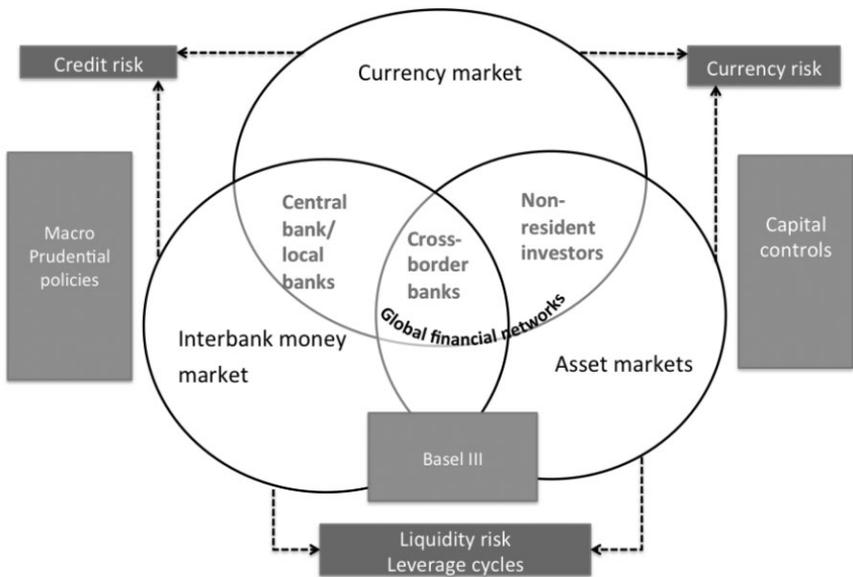
From a critical interconnectedness perspective, systemic risks arise as an externality of cross-border connections established by global banks through market-based business models. Thus, the concept of fragile complementarities introduced above captures the idea that individual gains from financial transactions increase systemic risk, as well as Streek's observation that conceptually, complementarities require "contingencies and constraints" enabling or interfering with actors' actions (Crouch et al. 2005, 364). As shown below, a regime of closed capital accounts, tight liquidity conditions, and financial repression will hinder banks from pursuing fragile complementarities, and vice versa.

This section explores in detail three fragile complementarities forged by transnational banks in emerging countries: (1) *bank-to-bank*, with domestic banks; (2) *protective*, with central banks; and (3) *shadow*, with nonresident financial actors. The taxonomy maps well onto the different components of systemic risk that regulators have targeted since 2009 through the Basel III provisions, macroprudential policies, and capital controls (see De Nicolò, Favara, and Ratnovski 2012; also see Figure 1). For example, easy liquidity conditions on the interbank market, arising from the central bank's currency interventions, enable the local banking system to sustain credit booms that feed housing bubbles. Macroprudential policies would curtail credit risk by reducing banks' reliance on cross-border markets to fund asset growth. Conversely, nonresident interest in domestic assets may inflate asset prices and appreciate the domestic currency, increasing risks of asset bubbles and falling currencies. Capital controls can restrict nonresident access to domestic asset markets and contain currency risk. The framework further allows highlighting the risks that the IMF's research has identified in relationship to fragile complementarities (see Table 1).

Bank-to-Bank Complementarities

Bank-to-bank complementarities stem from cross-border banking flows through which transnational banks allocate liquidity to affiliates through internal capital markets or lend to nonaffiliated local banks (Bruno and Shin 2014; Cetorelli and Goldberg 2011; also IMF 2011a). The concept of internal capital markets refers to centralized liquidity management decisions made by parent banks that compare profitable opportunities in

FIGURE 1
Transnational Banks and the Architecture of Domestic Interconnectedness



different jurisdictions (contingent on regulatory and tax regimes) and move funds from low- to high-profitability jurisdictions.

Before 2008, cross-border banking flows exploded from USD7 trillion in 2000 to USD25 trillion by September 2008. Drawing on narratives of market efficiency that shaped precrisis regulatory regimes (Froud et al. 2012), regulators trusted that foreign banks would help countries overcome the constraints of low savings rates and improve capital allocation. Aside from a few, mostly East Asian, countries that sought to curtail credit booms (see Gabor 2012), global banks could move capital across borders without much regulatory interference.

The systemic risks underpinning bank-to-bank complementarities became visible once Lehman collapsed. With funding pressures from exposures to complex financial products in the USA, parent banks curtailed net lending to affiliates (Cetorelli and Goldberg 2011). Indeed, regulators discovered how little they knew about the complex connections between and within global banks that typically had thousands of affiliates operating in many countries (Cerutti et al. 2010).

The IMF (2010b, 11) recognized the “destabilizing . . . floods and draughts” of cross-border banking and later proposed, in a Staff Position Paper (IMF 2011a), two policy measures to constrain cross-border connections. Regulators could either fragment internal capital markets, curbing the free movement of liquidity within the banking group, or restrict

TABLE 1
The IMF's Ideas and Policy Advice on Fragile Complementarities

	Transnational Banks/ Local Banks	Transnational Banks/ Domestic Macro-Policies	Transnational Banks/ Nonresident Investors
IMF research/position papers	<ul style="list-style-type: none"> • Cross-border banking loans "destabilizing . . . floods and draughts" • Internal capital markets increase transmission of risks between home/host: fragmentation desirable 	<ul style="list-style-type: none"> • Sterilized currency interventions necessary but may trigger further capital inflows 	<ul style="list-style-type: none"> • Resident banks may enable nonresidents to undertake speculative attacks • Curtail nonresidents' access to funding from resident banks
Vienna Initiative	<p>Ideas about financial linkages</p> <ul style="list-style-type: none"> • Resident banks should fund locally <p>Policy suggestions</p> <ul style="list-style-type: none"> • <i>No segmentation of cross-border banking</i> • <i>Ex ante home-host coordination</i> • <i>Financial deepening</i> 	<ul style="list-style-type: none"> • Host countries should generate alternative investment opportunities for banks • <i>No discrimination in liquidity support</i> • <i>Avoid adverse tax/regulatory measures against banks</i> 	<ul style="list-style-type: none"> • Poor supervisory capacity to blame for speculative behavior • <i>None</i>
Bilateral appraisals	<p>Ideas about financial linkages</p> <ul style="list-style-type: none"> • Sustainable local banking model (Colombia, Mexico) • Spillovers from European banking crisis (Chile, Mexico, Brazil) <p>Policy suggestions</p> <ul style="list-style-type: none"> • <i>Careful monitoring</i> • <i>Negative spillovers from Basel III and global regulation (Mexico)</i> 	<ul style="list-style-type: none"> • Aggressive sterilized interventions costly for central bank (Mexico, Peru, Brazil) • Transnational banks supportive of local capital markets • <i>Monitoring of central bank balance sheet</i> • <i>No actor-based analysis of central bank currency interventions/sterilizations</i> 	<ul style="list-style-type: none"> • High-dependence on nonresident capital entails systemic risks (Mexico, Peru, Colombia) • <i>No analysis of Peru's 2010 or Colombia's 2012 change in residency-based capital controls</i>

resident banks' foreign borrowing (see Table 1). Both measures would enact a local banking model reliant on domestic sources of funding (retail deposits or domestic capital markets).

Protective Complementarities

Protective complementarities stem from the intersection of banks' market-based activities and central banks' currency manipulation. In developing countries that receive large capital inflows, central banks typically intervene in currency markets to curb excessive currency speculation (see Mohanty and Berger 2013 for a survey of central banks). In doing so, central banks transfer control of domestic liquidity conditions to resident banks, enabling them to expand balance sheets and inflate asset prices. Entangled in global financial cycles, central banks must choose between independent monetary policy and capital controls (Rey 2013).

Until recently, the IMF advised central banks in developing countries that macroeconomic management should be limited to changing interest rates to control price inflation (Gabor 2010). The IMF reconsidered its position post crisis, recognizing that exchange rate management may minimize the costs of financialized globalization (Ostry, Ghosh, and Korinek 2012). This step forward in policy autonomy, however, downplays the consequences for interbank money markets and interconnectedness in general. Once the central bank intervenes in currency markets, it relinquishes control of domestic liquidity conditions, and with that, its influence over private financial relationships through the cost and availability of official funding. It enables resident banks to create domestic currency by borrowing abroad. Consider this scenario: Santander Chile borrows U.S. dollars from the parent (Santander Spain) and swaps the foreign currency with the Chilean central bank, since the latter does not want the domestic currency to appreciate. Santander Chile now has Chilean pesos (reserves) without paying the interest rate in the Chilean interbank market, pesos that it can use to acquire high-yielding Chilean assets (equity, sovereign debt, private debt) or to lend to local banks. As Figure 1 suggests, Santander Chile thus links together the currency, interbank and asset markets.

For the IMF, this is not a problem as long as the Chilean central bank can borrow or buy those Chilean pesos (reserves) back from Santander Chile through what are known as sterilization operations (see IMF 1997; Mohanty and Berger 2013; Ostry, Ghosh, and Korinek 2012; also Gabor 2012). While it warns that sterilizations may perversely trigger more capital inflows—since Santander Chile can repeat the operation above to increase holdings of low-risk sterilization instruments—the IMF continues to endorse it as the instrument best suited to control domestic liquidity conditions. But in this position, the IMF falls into the precrisis trap of portraying banks as passive intermediaries in a process actively controlled by the central bank. Rather, Santander Chile ultimately decides whether it lends back the pesos to the central bank in sterilization operations or purchases instead other high-

yielding assets. Its decision ultimately rests on relative returns: Santander Chile compares returns on sterilization operations with other yields on private assets or government bonds. In fact, Paineira (2012) persuasively argues, even if the central bank sterilizes its currency interventions fully, the effects of this action would still be expansionary because banks receive safe assets in exchange for liquidity and can use those assets as collateral to raise further funding and expand balance sheets.

The institutional incentives at play make it difficult to constrain banks in the pursuit of protective complementarities. Both central banks and governments benefit from banks' intermediation of capital inflows, the former because capital inflows appreciate the domestic currency and keep import prices low, the latter because banks' demand for sovereign debt increases market liquidity and reduces sovereign yields. The difficulty lies in recognizing that these benefits are cyclical. When central banks do so, they can exclude banks altogether from sterilization operations or impose capital controls that reduce the necessity of currency interventions.

Shadow Complementarities

Shadow complementarities arise through the presence of global financial actors with short-term horizons in the local currency debt markets of developing countries. They occur "in the shadows" of banking via off-balance sheet, over-the-counter transactions. The contours of these shadows are traceable. Consider the JP Morgan's NEXGEM index that captures the costs of dollar debt for "frontier" developing countries. Between 2009 and 2012, restored international risk appetite reduced average NEXGEM yields from 20% to 6%. Furthermore, on the back of quantitative easing in high-income countries, sizable flows have targeted local currency debt markets in emerging countries, bringing the strategies of global asset managers under increased scrutiny (Feroi et al. 2014).

The question of *how* these managers incorporate local debt markets in global financial networks emerges as a critical aspect of cross-border fragility. The IMF (2011b) highlights distinctive investor types. "Real money" investors (private wealth funds, mutual funds, insurance or pension funds) follow a long-term approach driven by the search for safe assets. In contrast, short-term investors (hedge funds, investment banks) typically rely on cross-currency, leveraged risk trading known as carry trades. Therein lies a danger. Carry traders borrow in low-yielding (funding) currencies and invest in higher-yielding currencies. In the example above, Santander Chile engaged in a carry by funding its holdings of sterilization instruments through dollar loans from the parent bank. The higher the leverage carry-traders take, the higher their returns. Conversely, since carry profits disappear if the target currency depreciates, or if funding costs increase (when the central bank of the funding currency raises interest rates), carry trades constitute the most volatile trading strategy of foreign financial actors (Curcuro, Vega, and Hoek 2010; Feroi

et al. 2014; IMF 2011c). As Paulo Batista Nogueira, Brazil's representative to the IMF put it, "non-resident investors behave in a systematically different way to residents" (*Financial Times* 2012). Indeed, most capital controls that developing countries, including Peru and Brazil (see IMF 2011c), have introduced since 2009 focus on restricting nonresident carry trades.¹

How does the nonresident carry increase interconnectedness? Carry-traders can either take a pure currency speculative position or purchase high-yielding local currency assets, including central bank sterilization instruments (see IMF 2011c). They can only do so if a resident bank provides the local currency (IMF 1997; Fritz and Prates 2014; Gabor 2012). By providing domestic currency, resident banks connect foreign investors with domestic asset markets and sharpen cyclicity in those markets (Feroli et al. 2014; Turner 2014). Furthermore, transnational banks are best placed to sustain shadow complementarities. Through the protective complementarities described earlier, transnational banks can generate the domestic liquidity demanded by nonresident investors: Santander Chile borrows dollars from the parent, exchanges those for Chilean pesos with the Chilean central bank, and lends the pesos to nonresident investors (U.S. hedge funds) who then buy Chilean equities or government bonds.

While the IMF (2012a) Interconnectedness report does not mention nonresidents, the IMF (2012b) report detailing the new institutional view on capital controls agrees that developing countries can discourage shadow complementarities either by targeting the nonresidents with capital controls or by constraining the relationships between resident banks and nonresidents since "restrictions on nonresident access to funding in local currency can at times make currency speculation more difficult" (IMF 2012b, 27), a view going as far back as the 1997 East Asian crisis (see IMF 1997).

The next sections explore how these ideational openings at the Fund traveled in its multilateral crisis management and bilateral policy advice.

The Practice of the IMF's Critical Approach to Interconnectedness

Multilateral Crisis Management and the Vienna Initiative

The Vienna Initiative (VI) refers to an ad hoc institutional arrangement set up in early 2009 to deal with the urgent threat that Western European banks, systemic in Eastern European banking systems, would leave the region (De Haas and van Lelyveld 2011; also Pistor 2010). It brought together international organizations (including the IMF), home/host regulators, and parent banks, seeking to renew the latter's commitments to the region.² Completed successfully in 2010, a second round (VI2) was initiated in early 2012 to address the potential spillovers of the European banking and sovereign crisis.

Throughout the 2000s, interconnected banking flourished in Eastern Europe. With few exceptions (Slovenia, Czech Republic), Western

European banks became dominant in national financial systems, pursuing fragile complementarities against a political context of European membership (ambitions) that left little room for capital controls and ill-defined cross-border regulatory responsibilities. Transnational banks lent to affiliates in Eastern Europe to the tune of \$1.3 trillion exposure by 2008, with Austrian banks accounting for almost 20%, followed by Italian and German banks (17% and 15%). In turn, affiliates fed household credit and real estate bubbles (Kudrna and Gabor 2013; Pistor 2010) and engaged in carry trades through the large sterilization operations of local central banks that sought to prevent the currency appreciation attending such large inflows (Gabor 2012). Indeed, domestic banking systems had structural excesses of liquidity across the region, a symptom of central bank currency interventions and partial sterilizations (see Balogh 2009; De Haas and van Lelyveld 2011; Gabor 2012). When host regulators tried to curb credit booms, parent banks resorted to regulatory arbitrage, extending, for example, direct cross-border credit to companies based in host countries (Pistor 2010).

In Vienna, the IMF and other participants shared a common diagnostic of cross-border vulnerabilities that focused on interbank fragilities (see Table 1). Having relied excessively on cross-border loans (De Haas and van Lelyveld 2011; European Bank Coordination Initiative [EBCI] 2011), affiliates became exposed to the parents' scramble for liquidity after Lehman. Yet Vienna participants disagreed on how to encourage a local banking model, and representatives from the IMF's European department sided with the transnational banks.

Thus, host authorities sought to reform bank activities through regulatory means. Several countries introduced (informal) capital controls during late 2008, either to ring-fence resident banks' assets (and thus restrict bank-to-bank complementarities, in Poland, Croatia, and Turkey; see Cerutti et al. 2010) or to restrict resident banks from providing domestic currency to nonresident speculators (and thus limit shadow complementarities in Latvia or Romania; see Buiter and Sibert 2008; Gabor 2012), just as East Asian countries did in 1997 (see IMF 1997).

The IMF, already a lender to several countries (Romania, Hungary, Latvia, Ukraine), joined transnational banks in advocating a *gradual* and largely *market-based* transition to the local banking model. Indeed, VI reports, coauthored by IMF staff, stressed "the commitment to free movement of bank liquidity and capital in accordance with the Treaty for EU members" (EBCI 2012, 1), thus reaffirming the sanctity of unrestricted internal capital markets even at the height of the European banking crisis in 2011–2012. In turn, Vienna discussions made no reference to the systemic risks accompanying banks' market-based activities, evident from the rapid deterioration of financial systems across Eastern Europe after Lehman's collapse (see Gabor 2012), all too familiar to Eastern Europe from previous banking crises (see Christensen 2004). Rather, the IMF and transnational banks wrote joint policy papers to propose that local banking essentially required host countries to enact policy measures that

would improve the availability of domestic savings, so that resident banks would not need to borrow abroad (EBCI 2011, 2012). With this, the IMF suggested that further financial liberalization (financial deepening), rather than formal constraints on bank activities, would best guide the transition from the precrisis interconnected banking paradigm.

Furthermore, transnational banks became important actors in the IMF's conditionality. During the 1980s debt crisis, scholars highlighted a close relationship through which banks enlisted IMF support to ensure that developing countries repaid their debt (see Bernal 1982). In Eastern Europe, that relationship took a new turn, yet undocumented in the literature. Thus, it is important to remember that the Fund designs conditionality policies that ask the domestic actors deemed responsible for the crisis to undergo macroeconomic adjustments, be they governments (fiscal adjustment), state-owned companies (privatization), central banks (monetary tightening), or labor (wage cuts). But in Eastern Europe's crisis of cross-border banking that forced several countries to ask for IMF support, the actors responsible instead sought reassurances that crisis measures would remain supportive of their profitability in exchange for lending to affiliates:

We are aware that it is in our collective interest and in the interest of Hungary for all of us to reconfirm, in a coordinated way, our commitment to maintain our overall exposure to Hungary. Mechanisms to specify this effort will be developed in due course, taking into account availability of *adequate lending opportunities or alternative investment instruments* in Hungary.³ (European Banking Group Coordination Meeting for Hungary 2009)

In other words, transnational banks demanded that host authorities reestablish protective and shadow complementarities. Conversely, the joint reports advised central banks against discriminating between local and foreign-owned banks when providing emergency liquidity support (EBCI 2010; Kudrna and Gabor 2013). Without this liquidity, foreign-owned banks could not reconnect with nonresident investors that were returning to the region, nor could they buy local government debt, rapidly rising due to the crisis.

What explains this reluctance to bring a critical interconnectedness approach to the Vienna debates? In Vienna, the IMF left change at the discretion of transnational banks. This outcome chimes well with the literature on policy change in a context with overlapping bureaucratic responsibilities (Barnett and Finnemore 2004). International institutions "co-evolve" through incremental change rather than through new, riskier, rules (Broome 2013). Thus, in the VI, the IMF's institutional learning about financial interconnectedness had no grounding in a legal mandate (Moschella 2012). The Executive Board only extended the IMF's remit to include multilateral consultations in January 2013, under the new Integrated Surveillance Framework (IMF 2013a). Furthermore, consistency with its ideational shift would have required the IMF to explicitly question the European principle of full capital mobility, a political priority of European institutions and old member states (at least until the Cyprus crisis).

Would ideas about interconnectedness travel better to different political contexts? To address this question the article examines the IMF's bilateral surveillance in five Latin American countries (LA5) that experienced growing financial interconnectedness after 2009. The context is different not only in terms of the actors with stakes in cross-border interconnectedness, but also in what concerns the IMF's role. Thus, the article focuses on the IMF's activities of financial surveillance to alert authorities about risks related to cross-border financial flows through Article IV consultations.

The IMF's Bilateral Financial Surveillance in Latin America

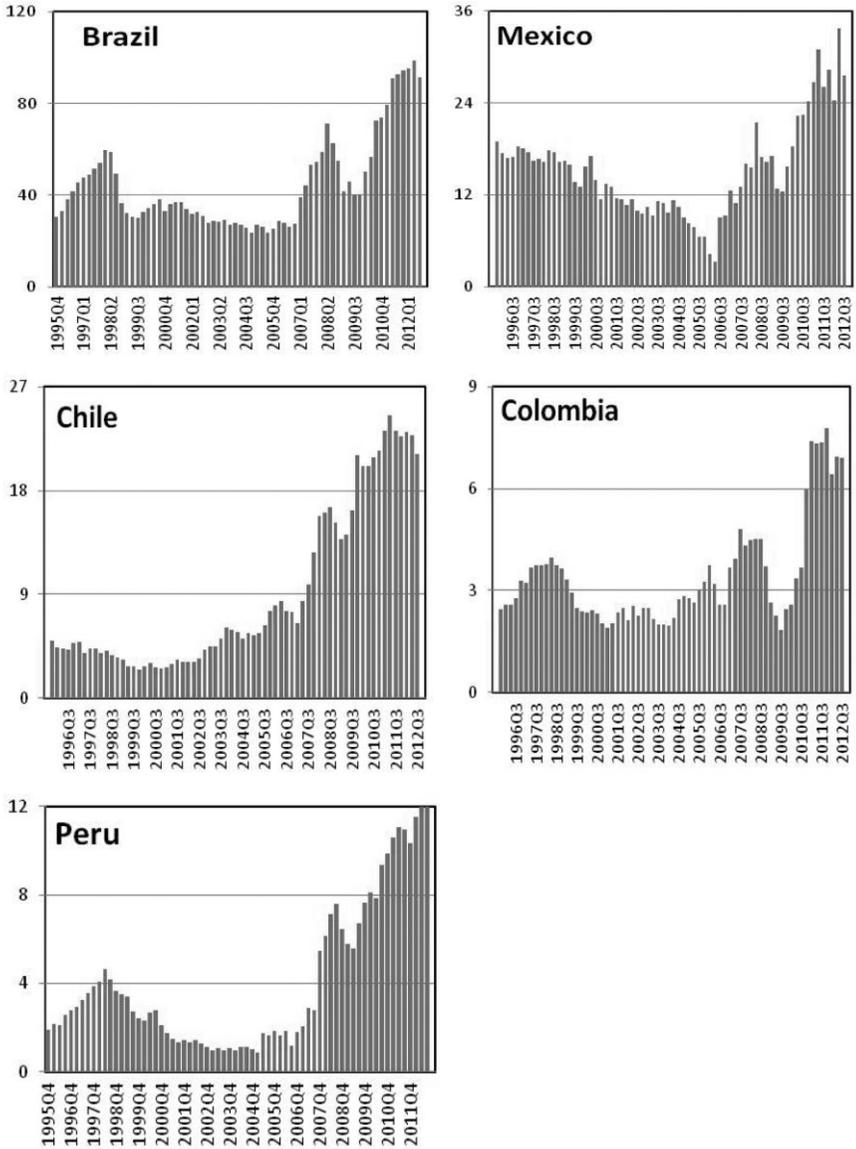
In an open letter to the *Financial Times* in February 2013, Felipe Larrain, the Chilean Minister of Finance, warned that quantitative easing in high-income countries (read USA) was pushing four Latin American countries (Mexico, Chile, Colombia, and Peru) into embracing Brazil's approach to "currency wars" (Larrain 2013). Since 2009, Brazil had vocally contested quantitative easing, which it described as deliberate attempts to gain competitiveness at the expense of developing countries. Confronted with the threat of appreciating currencies, Brazil argued, developing countries had to experiment with capital controls (see Chamon and Garcia 2013).

Indeed, LA5 countries experienced a rapid build-up of fragile complementarities between 2009 and 2012. First, foreign banks have an uneven presence across this group. In Brazil, foreign banks control 17% of banking assets, a similar level to Colombia (22%), but significantly less than in Chile (37%), Peru (51%), and Mexico (74%). Despite these structural differences, cross-border interbank loans increased rapidly once high-income countries introduced quantitative easing in March 2009 (see Figure 2), nearly doubling in Peru, Colombia, and Brazil, with lower but sustained growth in Mexico and Chile. Similarly, debt held by nonresidents fell by an average of 30% across LA5 immediately after Lehman, to then double (Colombia) or triple (rest LA5) in volume (see Table 2). In an effort to stem currency appreciation, central banks intervened in currency markets, leading to large sterilizations of an average of 20% of GDP. across the group between 2010 and 2012. Despite these interventions, exchange rates appreciated by around 30% for Chile and Colombia, 25% for Peru, and 10% for Mexico.

How did the IMF advice address the fragilities underpinning stronger interconnectedness, beyond recognizing, as, for example, in the 2012 Brazil report (IMF 2012c), the "chronic problem" of capital inflows?

Despite the rapid growth in cross-border bank lending to LA5 countries, the attending fragilities remains surprisingly underexamined in IMF country reports. Reports highlighted risks stemming from the European banking crisis (IMF 2012c, 2012d, 2012e, 2012f), but suggested that these were manageable as long as resident banks borrowed in U.S. markets, as if the IMF's own research had not emphasized that super-spreaders act, and spread contagion, across global financial architectures. Moreover, the

FIGURE 2
Cross-Border Bank-to-Bank Loans, from BIS Banks, 1995–2012, USD
bn.



Source: IMF-World Bank External debt hub.

TABLE 2
Indicators of Interconnectedness

	Debt Held by Nonresidents (USD Billion)			Central Bank Sterilization
	2007	2008	2012	(% GDP over 2010–2012)
Brazil	82.9	77.1	295.6	18.8
Chile	10.9	8.4	25.6	37.4
Colombia	12.6	11.4	26.3	23.2
Peru	8.2	5.8	18.9	20
Mexico	59.5	43.6	190.6	19.6

Source: IMF-World Bank External debt hub, central bank Web sites, IMF country reports.

Note: Sterilizations were averaged over 2010–2012 due data availability gaps.

various country reports produced between 2010 and 2013 show no systematic scrutiny of the sectors, financial or otherwise, targeted by rapidly growing banking flows.

The closest the IMF came to examining super-spreaders was in the country reports for Mexico, but rather to warn about negative spillovers of tighter global regulations. The Mexico reports first noted that curbs on borrowing from parent bank were effective in creating a local banking model (IMF 2011d, 2012f), as in other LA5 countries. Yet the Fund also warned that the wave of global regulatory initiatives (Dodd–Frank, Basel III, or surcharges on global banks) might have negative consequences for banks' market activities. Faced with tighter regulatory regimes, transnational banks would reduce market-making and trading in derivative/private debt markets. Thus, the IMF stressed the trade-off between regulation and financial deepening without questioning the cyclical nature of the latter.

As for protective complementarities, the IMF reports highlighted the costs of massive sterilization across the region (IMF 2012c, 2012d, 2012e, 2013c, 2013d). If the Fund was intent on exploring interconnectedness, it would ask how currency manipulation enabled resident banks to trade risk or to lend to nonresidents in pursuit of shadow complementarities (see Fritz and Prates 2014; also Kaltenbrunner 2010). Instead, country reports note central bank operations without analyzing any systemic implications, in sharp contrast to IMF policy papers on the management of capital flows (see IMF 2011c for a detailed analysis of Peru). Colombia's decision to issue long-maturity sterilization bonds, explicitly designed to discourage carry trades, is relegated to a footnote (IMF 2013e, also 2012e)—still better than the silence on Peru's capital controls on nonresident holdings of sterilization instruments. The 2012 country report notes that the Peruvian central bank only sterilized part of its currency interventions (IMF 2012g), while the Chile report remarks in passing that the Chilean peso shifted from being

a funding currency for carry trades into Brazil to target currency once the central bank raised interest rates (IMF 2012d, 2013d).

The IMF was most consistent with its critical interconnectedness approach when engaging with shadow complementarities. Country reports highlighted the risks associated with the flood of nonresidents into LA5 local debt markets, with strong warnings such as “the high tenure of sovereign domestically issued debt held by nonresidents makes Peru vulnerable to a rapid reversal in risk sentiment” (IMF 2013c, 15) or “given the impact that a surge in global risk aversion could have on emerging markets as an asset class, including sound countries like Mexico, the large portfolio exposure of foreign market participants represents significant risks” (IMF 2012f, 40). Yet policy advice falls short, despite calls from Brazil to focus analytical attention on the distinctiveness of nonresidents. The Peru and Brazil reports (IMF 2012c, 2013c) simply noted that authorities were prepared to tighten residency-based capital controls in response to a surge in inflows. The same analytical reluctance is manifest for Colombia (IMF 2013e), which relaxed controls on nonresidents in December 2012.

Avenues for Future Research

What explains this struggle to adapt critical interconnectedness ideas at country level? While a causal account is outside the scope of this analysis, tentative answers open up three avenues for further research.

Thus, to address the conflict between theoretical and country-level positions on financial interconnectedness, scholars could examine the conjecture that norm entrepreneurs inside the IMF are gradually building the kind of internal influence that would make their critical interconnectedness ideas shape the positions of field staff. This may be the case given the inclusion of financial linkages in the immediate priorities of the IMF's financial surveillance strategy, with clear resource commitments, and progress in the G20 Data Gaps Initiatives (see IMF 2013f). Both resource and data constraints could thus become less relevant in internal ideational battles on interconnectedness.

Yet it is intriguing that some country reports do mention and (rarely) analyze systemic connections forged by transnational and nonresident investors. In other words, the staff writing these reports seems aware of fragile connections, but reluctant to explore them systematically and to draw policy implications. This typically occurs where staff from the MCM department joins the mission, as in the Mexico or Colombia Article IV consultations (see IMF 2012e, 2012f). Future research could explore the internal dynamics of IMF country missions, asking how the presence of MCM staff shapes ideas about interconnectedness at country level.

Another line of research could frame the puzzle in terms of the Fund's strategic management of its global legitimacy and local leverage. Its engagement with global dialogues on interconnectedness suggests the IMF has taken important steps to move away from the precrisis image as an

institution that does not understand global finance. Yet at country level, different politics underpin the IMF's leverage. There, its best bet is to engage with "sympathetic" policy institutions. Therein lies the difficulty. An actor-based analysis of cross-border interconnectedness would force the IMF to confront central banks, typically their closest allies in domestic policy arenas, with the idea that their sterilized currency interventions may contribute to asset bubbles whenever these interventions involve resident banks or nonresident investors. The problem is not so much that central banks refuse to engage with questions of interconnectedness. The 2009 survey showed its centrality in the postcrisis introduction of macroprudential policies. The real challenge may be that IMF staff still disagrees on the basic principles that should underpin the governance of interconnected financial systems. Only a coherent view of finance would allow the Fund to recognize that its critical interconnectedness approach must go hand in hand with a normalization of capital controls, not as a last-resort solution—the current stance (Gabor 2012)—but as part of day-to-day policy toolkit.

Conclusion

The IMF's position on financial interconnectedness has summoned a new image of global banks spreading risks across national financial systems. The institution recognizes that the governance of financial interconnectedness requires countries to think about the financial interactions produced by (global) banks, that those interactions may produce systemic vulnerabilities and that developing countries have to manage them more assertively if they wish to benefit from financial globalization.

To better examine the extent to which this radical intellectual shift travels to policy advice, this article proposed a taxonomy of fragile connections that captures the most pervasive mechanisms through which cross-border banks carry and create systemic risks across and within borders. It suggests that Fund's crisis advice in Eastern Europe and its financial surveillance of Latin American countries confronted with growing cross-border interconnectedness does not explore these relationships in sufficient depth, nor does it attempt to formulate policy recommendations that would assist countries to construct a clearer picture of which financial actors are to be encouraged and which to be left out. Without these, the better theorizing of financial interconnectedness seems to be a strategic decision to build global credibility in the ongoing discussions about the reform of systemic transnational banking.

Acknowledgments

The author would like to thank the journal editors, the three referees, Cornel Ban, Kevin Gallagher, and Nina Kaltenbrunner for insightful comments on earlier drafts.

Notes

1. After 2008, capital controls targeting nonresidents were introduced in Ukraine, Peru, Thailand, Brazil, South Korea, Iceland, and Colombia (see IMF 2012b).
2. The following banks participated in the Vienna Initiative meetings: Bayerische Landesbank, Eurobank EFG, Erste Bank, Intesa Sanpaolo, KBC, National Bank of Greece, OTB Bank, Piraeus Bank, Raiffeisen Bank International, Societe Generale, Swedbank, and Unicredit.
3. Broadly identical statements were released for Romania, Latvia, Lithuania. Author's emphasis.

References

- Allen, Franklin, and Douglas Gale. 2000. "Financial Contagion." *Journal of Political Economy* 108 (February): 1–33.
- Balogh, Csaba. 2009. "The Role of the MNB Bills in Domestic Financial Markets." *Magyar Nemzeti Bank Bulletin* (October).
- Barnett, Michael, and Martha Finnemore. 2004. *Rules for the World: International Organizations in Global Politics*. Ithaca, NY: Cornell University Press.
- Béland, Daniel, and Mitchell Orenstein. 2013. "International Organizations as Policy Actors: An Ideational Approach." *Global Social Policy* 13 (2): 125–143.
- Bernal, Richard. 1982. "Transnational Banks, the International Monetary Fund and the External Debt of Developing Countries." *Social and Economic Studies* 31 (4): 71–101.
- Blundell-Wignall, Adrian, Paul Atkinson, and Caroline Roulet. 2012. "The Business Models of Large Interconnected Banks and the Lessons of the Financial Crisis." *National Institute Economic Review* 221: R31–R43.
- Blundell-Wignall, Adrian, Gert Wehinger, and Patrick Slovik. 2009. "The Elephant in the Room: The Need to Focus on What Banks Do." *OECD Journal, Financial Market Trends* 2 (1): 1–24.
- Broome, Andre. 2013. "The Politics of IMF-EU Cooperation." *Journal of European Public Policy* 20 (4): 589–605.
- Broome, Andre, and Leonard Seabrooke. 2012. "Seeing Like an International Organization." *New Political Economy* 17 (1): 1–16.
- Bruno, Valentina, and Hyun Song Shin. 2014. "Cross-Border Banking and Global Liquidity." Available online at <http://www.princeton.edu/~hsshin/www/capital_flows_global_liquidity.pdf>.
- Buiter, Willem, and Anne Sibert. 2008. "The Icelandic Banking Crisis and What to Do About It: The Lender of Last Resort Theory of Optimal Currency Areas." CEPR Policy Insight No. 26. <<http://www.willembuiter.com/iceland.pdf>> (December 12, 2010).
- Cerutti, Eugenio, Anna Ilynia, Yulia Makarova, and Christian Schneider. 2010. "Bankers without Borders? Implications of Ring-Fencing for European Cross-Border Banks." IMF Working Paper no. 10/247.
- Cetorelli, Nicola, and Luisa Goldberg. 2011. "Global Banks and International Shock Transmission: Evidence from the Crisis." *IMF Economic Review* 59: 41–76.
- Chamon, Marcos, and Marcio Garcia. 2013. "Capital Controls in Brazil: Effective?" RJC Discussion Paper 606.
- Christensen, Jakob. 2004. "Capital Inflows, Sterilization, and Commercial Bank Speculation: The Case of the Czech Republic in the Mid-1990s." IMF Working Paper 04/218.
- Christophers, Brett. 2013. *Banking across Boundaries: Placing Finance in Capitalism*. Oxford, UK: Wiley-Blackwell.

- Chwieroth, Jeffrey. 2010. "How Do Crises Lead to Change? Liberalizing Capital Controls in the Early Years of New Order Indonesia." *World Politics* 62 (3): 496–527.
- . 2014. "Controlling Capital: The IMF and Transformative Incremental Change from within International Organizations." *New Political Economy* 19 (3): 445–469.
- Claessens, Stijn, Geoffrey Underhill, and Xiaoke Zhang. 2006. "The Political Economy of Global Financial Governance: The Costs of Basel II for Poor Countries." WEF Working Papers 0015, University of London.
- Cont, Rama, Amal Moussa, and Edson Santos. 2013. "Network Structure and Systemic Risk in Banking Systems." In *Handbook of Systemic Risk*, ed. Jean-Pierre Fouque and Joe Langsam. New York: Cambridge University Press.
- Crouch, Colin, Wolfgang Streeck, Robert Boyer, Bruno Amable, Peter Hall, and Gregory Jackson. 2005. "Dialogue on Institutional Complementarity and Political Economy." *Socio-Economic Review* 2 (4): 59–382.
- Curcuro, Stephanie, Carlos Vega, and Jeroen Hoek. 2010. "Measuring Carry Trade Activity." *IFC Bulletin* 34 (10): 9–23. (December 14, 2012).
- De Haas, Richard, and Imran van Lelyveld. 2011. "Multinational Banks and the Global Financial Crisis: Weathering the Perfect Storm?" EBRD Working Paper 135.
- De Nicolò, Gianni, Giovanni Favara, and Lev Ratnovski. 2012. "Externalities and Macroprudential Policy." IMF Staff Discussion Note 12/05.
- European Bank Coordination Initiative (EBCI). 2011. "Report by the Public-Private Sector Working Group on Local Currency and Capital Markets Development." Brussels, European Bank Coordination Initiative.
- . 2012. Full Forum Meeting of the European Bank Coordination "Vienna 2.0" Initiative. <<http://vienna-initiative.com/wp-content/uploads/2012/08/Full-Forum-Meeting-of-the-European-Bank-Coordination-Vienna-2.0-Initiative.pdf>> (January 11, 2013).
- European Banking Group Coordination Meeting for Hungary. 2009. "Concluding Statement by Participating Parent Banks." <<http://www.imf.org/external/np/cm/2009/052009.htm>> (June 23, 2011).
- Feroli, Michael, Anil Kashyap, Kermit Schoenholtz, and Hyun Song Shin. 2014. "Market Tantrums and Monetary Policy." Report for the 2014 US Monetary Policy Forum, February 28.
- Freixas, Xavier, Bruno Parigi, and Jean-Charles Rochet. 2000. "Systemic Risk, Interbank Relations and Liquidity Provision by the Central Bank." *Journal of Money Credit and Banking* 32 (3): 611–638.
- Fritz, Barbara, and Daniela Prates. 2014. "The New IMF Approach to Capital Management and Its Blind Spots: Lessons from Brazil and South Korea." *International Review of Applied Economics* 28 (2): 210–239.
- Froud, Julie, Adriana Nilsson, Michael Moran, and Karel Williams. 2012. "Stories and Interests in Finance: Agendas of Governance Before and After the Financial Crisis." *Governance* 25 (1): 35–59.
- Gabor, Daniela. 2010. "The International Monetary Fund and Its New Economics." *Development and Change* 41 (5): 805–830.
- . 2012. "Managing Capital Accounts in Emerging Markets: Lessons from the Global Financial Crisis." *Journal of Development Studies* 48 (June): 714–731.
- Gai, Prasanna, Andrew Haldane, and Sujit Kapadia. 2010. "Complexity, Concentration and Contagion." *Journal of Monetary Economics* 58 (July): 453–470.
- Gallagher, Kevin. 2011. "Regaining Control: Capital Controls and the Global Financial Crisis." Political Economy Research Institute Working Paper No. 250.
- Gabel, Irene. 2013. "The Rebranding of Capital Controls in an Era of Productive Incoherence." PERI Working Paper 20. <<http://www.peri.umass.edu/>

- fileadmin/pdf/working_papers/working_papers_301-350/WP318.pdf> (June 21, 2013).
- Haldane, Andrew. 2009. "Rethinking the Financial Network." Speech at the Financial Student Association, Amsterdam.
- Hardie, Iain, David Howarth, Sylvia Maxfield, and Amy Verdun. 2013. "Banks and the False Dichotomy in the Comparative Political Economy of Finance." *World Politics* 65: 691–728.
- Helleiner, Eric, and Stefano Pagliari. 2011. "The End of an Era in International Financial Regulation? A Postcrisis Research Agenda." *International Organization* 65 (January): 169–200.
- Howarth, David. 2013. "France and the International Financial Crisis: The Legacy of State-Led Finance." *Governance* 26: 369–395.
- International Monetary Fund. 1997. "Capital flow sustainability and Speculative Currency Attacks." *Finance and Development*, December.
- . 2010a. "Understanding Financial Interconnectedness." <<http://www.imf.org/external/np/pp/eng/2010/100410.pdf>> (June 22, 2012).
- . 2010b. Global Financial Stability Report: Sovereigns, Funding, and Systemic Liquidity. October.
- . 2011a. "Cross-cutting Themes in Advanced Economies with Emerging Market Links." Staff Position Paper 11/14/21.
- . 2011b. "Long Term Investors and Their Asset Allocations. Where Are They Now?" Global Financial Stability Report, Chapter 2, September.
- . 2011c. Recent Experiences in Managing Capital Inflows—Cross-Cutting Themes and Possible Policy Framework. Prepared by Strategy, Policy and Review Department.
- . 2011d. Mexico: Article IV Consultation, IMF Country Report No. 11/249. August.
- . 2012a. "Enhancing Surveillance: Interconnectedness and Clusters." <<http://www.imf.org/external/np/pp/eng/2012/031512.pdf>> (January 22, 2013).
- . 2012b. Liberalization and Management of Capital Flows: An Institutional View. November 14.
- . 2012c. Brazil: 2012 Article IV Consultation, IMF Country Report No. 12/258. October.
- . 2012d. Chile: 2012 Article IV Consultation, IMF Country Report No. 12/232. September.
- . 2012e. Colombia: Review Under the Flexible Credit Line Arrangement. IMF Country Report No. 12/274. August.
- . 2012f. Mexico: Article IV Consultation, IMF Country Report No. 12/316. November.
- . 2012g. Peru: Selected Issues, IMF Country Report No. 12/27. February.
- . 2013a. "Integrated Surveillance Decision." <<http://www.imf.org/external/np/exr/facts/pdf/isd.pdf>> (June 22, 2014).
- . 2013b. IMF Multilateral Policy Issues Report. 2013 Spillover Report. August 2013.
- . 2013c. Peru: Article IV Consultation, IMF Country Report No. 13/45. February.
- . 2013d. "Chile: Article IV Consultation." Country Report No. 13/198.
- . 2013e. Colombia: 2012 Article IV Consultation. IMF Country Report No. 13/35.
- . 2013f. "The IMF's Financial Surveillance Strategy." <<http://www.imf.org/external/np/pp/eng/2012/082812.pdf>> (January 9, 2014).
- International Monetary Fund, Bank For International Settlements, and Financial Stability Board. 2009. "Guidance to Assess the Systemic Importance of Financial

- Institutions, Markets and Instruments: Initial Considerations." Report to G20 Finance Ministers and Governors.
- Kaltenbrunner, Annina. 2010. "International Financialization and Depreciation: the Brazilian Real in the International Financial Crisis." *Competition and Change* 14 (3-4): 296-323.
- Kudrna, Zdenek, and Daniela Gabor. 2013. "The Return of Political Risk: Foreign Banking in CEE countries." *Europe-Asia Studies* 65 (April): 548-566.
- Laeven, Luc, Leo Ratnovski, and Hui Tong. 2014. "Bank Size and Systemic Risk." IMF Staff Discussion Note 14/04.
- Larrain, Felipe. 2013. "QE Takes a Toll on Emerging Economies." *Financial Times*, February 4. <<http://www.ft.com/cms/s/0/bdae7ca2-6ebd-11e2-9ded-00144feab49a.html#axzz2V8qH3H23>> (January 22, 2014).
- Leitner, Yaron. 2005. "Financial Networks: Contagion, Commitment and Private Sector Bailouts." *Journal of Finance* 60 (6): 2925-2953.
- Mohanty, Madhusudan and Bat-el Berger. 2013. "Central bank views on foreign exchange interventions." BIS Working Paper, 73. <http://www.bis.org/author/madhusudan_mohanty.htm> (October 10, 2013).
- Moschella, Manuela. 2012. "IMF Surveillance in Crisis: The Past, Present and Future of the Reform Process." *Global Society* 26 (1): 43-60.
- Ostry, Jonathan, Atish Ghosh, and Anton Korinek. 2012. "Multilateral Aspects of Managing the Capital Account." IMF Staff Discussion Note 12/10.
- Painceira, Juan-Pablo. 2012. "Financialisation, Reserve Accumulation and Central Bank in Emerging Economies: Banks in Brazil and Korea." Research on Money and Finance Discussion Paper no. 38. <<http://researchonmoneyandfinance.org/media/papers/RMF-38-Painceira.pdf>> (October 7, 2012).
- Pistor, Katharina. 2010. "Into the Void: Governing Finance in Central and Eastern Europe." WIDER Working Paper, 65. <http://wider.unu.edu/publications/working-papers/2010/en_GB/wp2010-65/> (June 22, 2012).
- Rey, Helene. 2013. "Dilemma Not Trilemma: The Global Financial Cycle and Monetary Policy Independence." Jackson Hole Symposium, August 2013. <<http://www.kansascityfed.org/publications/research/escp/escp-2013.cfm>> (October 5, 2013).
- Seabrooke, Leonard, and Emelie Rebecca Nilsson. 2014. "Professional Skills in International Financial Surveillance: Assessing Change in IMF Policy Teams." *Governance. Advance* online publication. DOI: 10.1111/gove.12106.
- Shin, Hyun Song. 2009. "Financial Intermediation and the Post-Crisis Financial System." Paper presented at the Eighth BIS Conference, Basel, Switzerland, June 25-26.
- Sun, Tao. 2011. "Identifying Vulnerabilities in Systemically-Important Financial Institutions in a Macrofinancial Linkages Framework." IMF Working Paper 11/11.
- Turner, Philip. 2014. "The Global Long-term Interest Rate, Financial Risks and Policy Choices in Emerging Markets." BIS Working Paper 441. <<https://www.bis.org/publ/work441.htm>> (February 11, 2014).
- Wessel, David. 2013. "Olivier Blanchard's Five Lessons for Economists from the Financial Crisis." <<http://blogs.wsj.com/economics/2013/04/01/olivier-blanchards-five-lessons-for-economists-from-the-financial-crisis/>> (April 22, 2013).
- Woods, Ngaire. 2006. *The Globalizers: The IMF, the World Bank and their Borrowers*. Ithaca, NY: Cornell University Press.
- Yellen, Janet. 2013. "Interconnectedness and Systemic Risk: Lessons from the Financial Crisis and Policy Implications." American Economic Association Joint Luncheon, California.