



Available online at www.sciencedirect.com

ScienceDirect

Journal of Policy Modeling 36S (2014) S67–S88

**Journal of
Policy
Modeling**

www.elsevier.com/locate/jpm

The systemic financial importance of emerging powers[☆]

Leslie Elliott Armijo ^{a,*}, Laurissa Mühlich ^b, Daniel C. Tirone ^c

^a *Mark O. Hatfield School of Government, Portland State University, Lake Oswego, OR 97035, USA*

^b *Freie Universität Berlin, School of Business & Economics, Institute for Latin American Studies, Rüdesheimer Straße 54-56, D-14197 Berlin, Germany*

^c *Department of Political Science, Louisiana State University, 240 Stubbs Hall, Baton Rouge, LA 70803, USA*

Received 15 January 2013; received in revised form 24 September 2013

Available online 1 November 2013

Abstract

Economic turmoil in advanced industrial economies since the 2008–9 crisis has intensified perceptions of rising global multipolarity. Several indices of the relative material capabilities of countries exist, yet few address a state's potential for financial influence abroad. We analyze indicators of a country's importance as a financial asset owner and participant in globalized financial markets, examining 180 countries during 1995–2010. The United States displays a high and stable systemic importance. An increase in the share of the BRICS countries, especially China, mirrors a strong decline in the global weight of Japan (still a senior financial power), and to a lesser extent, most other advanced industrial countries, with the exception of Germany.

© 2013 Society for Policy Modeling. Published by Elsevier Inc. All rights reserved.

Keywords: Emerging powers; BRICS; Financial power; Multipolarity; Monetary power

1. Introduction

Is the world becoming more multipolar and if so, how quickly? This paper responds to two compelling observations. First, pundits and policymakers in the wealthy industrial democracies

[☆] We are grateful for comments to Benjamin J. Cohen, Joshua Aizenman, Saori Katada, Hiroyoshi Ito, Nita Rudra, and Philippe De Lombaerde, and absolve them of responsibility for remaining errors. For travel funding and Workshop invitations we thank the GR:EEEN Program of the UNU-CRIS, the School of International Relations of the University of Southern California, and the Institute for Latin American Studies and www.desigualdades.net of the Freie Universität Berlin.

* Corresponding author.

E-mail addresses: leslie.armijo@cal.berkeley.edu (L.E. Armijo), laurissa.muehlich@fu-berlin.de (L. Mühlich), dtiron1@lsu.edu (D.C. Tirone).

URL: <http://leslie.armijo@gmail.com> (L.E. Armijo).

recently have become convinced that countries such as China, India, and Brazil, whose domestic affairs once seemed remote, are now “emerging powers,” whose choices will have significant impacts on the well-being of advanced industrialized as well as developing countries (for example, Bergsten, 2008). Former U.S. Treasury Secretary Lawrence Summers wrote on the eve of the worst days of the recent global financial crisis:

It has become a cliché to suggest that the world’s institutional approaches to economic co-operation need overhauling to take into account the rising economic clout of emerging markets and the decline in dominance of the group of seven leading industrialized nations (G7). This is correct. The steps taken so far . . . are valuable if insufficient” (*Financial Times*, August 25, 2008).

Second, the increasingly dense web of cross-border financial obligations linking firms and individuals worldwide has been volatile in the short-term, and may be shifting its basic structure over the medium- to long-term. The future of Western Europe and the euro is clouded. The eurozone could survive as it stands now, sustained by half-hearted and ad hoc interventions rather than serious multilateralization (“regionalization”) of fiscal policy or financial regulation. Yet this dynamic, if continued, would reduce the systemic financial importance of Western Europe and the eurozone over time (Cohen, 2012b). Meanwhile, Britain, for centuries Europe’s financial center, flirts with exiting the EU altogether (Economist, 2012). One alternative scenario projects China as the new global financial hegemon (Subramanian, 2011).

How might we assess these trends? The paper’s second section reconsiders a way of conceptualizing interstate “power” sometimes dismissed as outmoded. Section three reviews types of financial “power,” then introduces the research project. The paper’s fourth and fifth sections describe our methods and analyze our findings. The conclusion returns to the larger questions, summarizing our responses and suggesting further research directions.

2. The future of an anachronism? The “power-as-resources” approach in international relations theory

The most straightforward means of investigating possible shifts in the structure of the interstate system is through mapping the interstate distribution of capabilities over time. However, a contemporary international relations scholar choosing to construct a relative capabilities index for nation-states makes some controversial theoretical choices (Garrett & Tsebelis, 1999).

At one time the dominant discourse in political science identified actors—whether politicians, interest groups, or sovereign states—as either “powerful” or less so, with power, or more accurately potential power, understood as a characteristic of the actor (subject) being observed. Potential power, of course, was not an absolute quality, analogous to height, but instead was a relational quality, such as being “short” or “tall.” a judgment that necessarily implies a comparison with other similar actors or units in an interpersonal, inter-unit, or interstate system.

Today, however, the majority of contemporary scholars of international politics reserve the term “power” for relations of realized influence. Barnett and Duvall (2005), for example, write that, “Power is the production, in and through social relations, of effects that shape the capacities of actors to determine their circumstances and fate” [emphasis added] (39). In distinguishing among four sub-types of power, they include not only the direct and intentional exercise of influence by actor A over actor B, but also various types of indirect and attenuated influence, such as A shaping the rules of institutions within which B must act, the unintended consequences (externalities) for B of A’s actions, and even the ways in which A’s choices, often unintentionally, shape the future

ideological or cultural environment that B experiences. What is remarkable in the Barnett and Duvall typology is its rigorous emphasis on the *object* of power: the actor(s) being constrained. In two of the four types of power proposed, a subject intentionally acting on an object is dispensed with entirely.

Even scholars whose conceptualization retains the idea that “power” must be exercised by someone, and with more or less conscious intent, emphasize its relational aspect (Baldwin, 2013; Chiu & Willet, 2012; Cohen 2012a). Thus we have the “three faces of power” (Baldwin, 2013: 276). The first face represents actor A acting directly to induce, persuade, or coerce actor B (Etzioni, 1961). Financial sanctions are direct (Baldwin, 1985; Steil & Litan, 2006). A second face is the indirect exercise of power, as when A designs and biases the rules of an institution that subsequently limits the choices available to B (Bachrach & Baratz, 1962; Thelen & Steinmo, 1992). For example, the International Monetary Fund’s (IMF) conditionality, a result of creditor country preferences, has meant that countries experiencing balance of payments crises must endorse fiscal and monetary austerity. The third face of power is A’s influence over ideas and cognitions that B subsequently applies to him/her/itself (Gramsci, 1971 [1920s]), as through the transmission of the neoliberal economic reform ideas of the “Washington consensus” (Williamson, 1989, 2004) to finance ministries in developing countries.

Some literature retains the older power-as-resources tradition. Scholars of “power transitions” focus on the potential for interstate military conflict between a declining hegemon and a rising challenger, with analogies sometimes made between pre-1914 Germany and China today (Organski & Kugler, 1981; Tammen et al., 2000). Systems-level theorists such as the late Waltz (1979) concerned themselves less with the options or constraints that relative capabilities give the leaders of particular states, than with predicting the properties of interstate systems with differing capabilities distributions (hegemonic, unipolar, bipolar, or multipolar).

This paper explicitly returns to the earlier theoretical stance. While we recognize the importance of relational power (influence) we also affirm the continuing relevance of the old-fashioned “power-as-resources” approach, particularly when one is deciding what yardstick to use to extend the universe of relevant players beyond the usual suspects. New actors, or “emerging powers” in international politics, are by definition relatively unknown on the global playing field. To identify them, we must think in terms not of realized influence, but of a country’s potential capacity for exercising influence. In this light, we discuss relative capabilities indices below. As justification for the exercise, we note that even the basic membership of the circle of “major powers,” or globally significant states, is not obvious and may be contested. Thus in January 2009 a top American international relations journal published a special issue on the structure of the international system. Editors Ikenberry, Mastanduno, and Wohlforth (2009) concluded that the international system continued to be securely unipolar, as the U.S. remained overwhelmingly capable in both hard capabilities and in the “soft power” (Nye, 1990, 2004) dimensions such as education, scientific knowhow, cultural capabilities, and reputation. In a table reporting on the relative material capabilities of the “major powers,” these authors included the G5 (the U.S., Japan, Germany, Britain, and France), Russia, and China. Neither India nor Brazil was included, although these emerging powers are equivalent to Britain and France on many traditional “hard power” capabilities, including economic size, territory, access to natural resources, and population.

If many in the academic community have been slow to recognize the relatively increasing capabilities of the BRICS (Brazil, Russia, India, China, and since 2010 South Africa) and other emerging powers, the same may be said of practical policymakers. Following the Asian financial crisis (AFC) in the late 1990s, the major advanced industrial powers created two new multilateral organizations. The financial G20, tasked with writing recommendations to reform the global

financial architecture, was one of the first prestigious international clubs to include both the dominant advanced industrial countries and key emerging economies.¹ However, the really consequential work of writing specific new global banking regulations occurred in the Basle Committees on Banking Reform and in the Financial Stability Forum (FSF). The FSF, also dating from 1998, had as members advanced industrial countries and international financial regulatory institutions dominated by these same powers, with only the financial entrepôts Singapore and Hong Kong from among the emerging economies. Yet after the crash of investment bank Lehman Brothers in September 2008, the U.S. George W. Bush administration recognized that an emergency meeting of the G7 major advanced industrial democracies (the G5 plus Canada and Italy) would not yield sufficient firepower to respond to the spreading international crisis, and so convened the first G20 heads of state summit, held in November 2008 in Washington, DC. The group adopted a more or less coordinated global stimulus, which likely was essential to averting world depression (Prasad & Sorkin, 2009). The decision to pass the crown of the senior policy coordination body for global economic governance from the G7 to the financial G20 was neither capricious nor temporary, but instead constituted recognition of an underlying capabilities shift that had been underway for some time. One of the least well-understood dimensions of that shift has been precisely in the financial sphere, a challenge we begin to address in this paper.

We close this section with a *caveat*. While we enthusiastically defend the need to investigate the relative material capabilities of sovereign states, we do not intend to impose a steadfastly “Realist” (Mearsheimer, 2001; Morgenthau, 1966 [1948]) framing on international relations in general nor international economic relations in particular. Attention to relative national capabilities need not imply a belief that global politics—anymore than international trade or financial relations—operates in a zero-sum fashion, with one country’s gain being an equivalent loss for another. While assessing the relative interstate distribution of capabilities is necessarily a zero-sum exercise, all of international politics is not. The authors stand within the broad Western liberal tradition, recognizing and valuing the (somewhat) independent reality of international governmental institutions (IGOs) and the global influence of ideas such as democracy and multilateral cooperation.

3. Theorizing the financial capabilities of states and a research project

This paper’s previous section proposed the continuing relevance of assessing the relative material capabilities of sovereign nation-states. By most accounts, instances of violent interstate conflict have been decreasing since the mid-twentieth century (Sarkees, Whelon Wayman, & Singer 2003). This section argues that traditional capabilities indices, which implicitly focus on resources relevant to military conflict, have neglected a category of capability—control over financial resources—that has become increasingly important to nation-states in the early twenty-first century. Financial globalization, which implies both a rise in the value of cross-border investments and financial contracts, and increasing speed and volatility of financial trading, has dramatically increased over the past three decades. The global stock of internationally traded corporate shares, plus public and private bonds, approximately tripled between 1995 and 2010, rising from \$72 to \$212 trillion (at constant 2010 exchange rates) (Roxburgh, Lund, & Piotrowski, 2011:2). While daily foreign exchange turnover averaged \$1.5 trillion as recently as 1998, it reached nearly \$4

¹ The financial G20 (also called the large economies G20) should not be confused with the developing countries’ trade G20, formed in 2003 to negotiate jointly within the World Trade Organization.

trillion in 2010 (BIS, 2010:7). If we assume that a state's desire to influence the behavior of others is constant over time, which spectrum do we believe currently to be more important to these dynamics: military capabilities or the measures related to increasing depth and breadth of cross-border interconnectedness associated with the globalization process? Trading relationships, foreign aid, and other financial flows are all resources which states can use to affect the behavior of others. Increasingly interconnected and complex relationships do not mean that a more powerful state which controls a greater quantity of financial resources can simply compel a weaker state to acquiesce; the weaker state still has structural power in many of these complex relationships. As we've seen repeatedly during the post-2008 eurozone crisis, Germany and Greece reciprocally influence one another. Yet each state is not on equal footing with all others. Interstate disparities in financial resources matter.

We identify four broad types of international financial capabilities. Two are especially relevant to the national policy goal of protecting the domestic economy from succumbing to imported financial crises, an activity sometimes referred to as the exercise of "defensive" financial statecraft (Armijo & Katada, 2014) or promotion of national financial "autonomy" (Cohen, 2012a). The first type of international financial capability is possession of solid *macroeconomic and financial regulatory fundamentals*. "Fundamentals" refers to all of the standard measures currently used by investors, international bond rating agencies, and the international financial institutions such as the IMF and World Bank to assess a country's economic soundness within a broadly neoliberal, pro-market framework. Indicators include macroeconomic outcome variables such as rates of GDP growth, inflation, public debt, and deficits; financial variables such as credit to the private sector as a share of GDP, the spread between deposit and loan rates, or the stock market turnover rate; and government policy variables, such as the policy interest rate, degree of central bank independence, and use of external capital controls. Public and private researchers construct annual country rankings, which influence investor decisions (for example, Cihac, Demirguc-Kunt, Feyen, and Levine 2012; Heritage Foundation, 2012; World Bank, 2011). It is widely presumed that economies with superior fundamentals will perform better than those with weak fundamentals in resisting international financial contagion and crises. The IMF therefore conditions its assistance to a country experiencing a balance of payments, currency, or an associated domestic banking crisis on the country first promising to make specific economic policy reforms (Vreeland, 2007). To possess strong economic fundamentals—or sometimes even to be perceived by international lenders or investors to possess them (Haley, 2001)—thus is a useful form of international financial capability for a nation's leaders to have at their disposal.

A second type of international financial capability of states is a sovereign state's *economic and financial size* in comparison to other states. Policymakers and academics in many developing countries and smaller economies also long have argued that sheer size matters a great deal in withstanding imported financial crises, and that small countries with good neoliberal economic fundamentals nonetheless may be battered during periods of global or regional financial turmoil (Borensztein, Cowan, Eichengreen, & Panizza, 2008; Stiglitz, 2002). In this case, the implicit prediction is that, *ceteris paribus*, larger economies with bigger domestic financial sectors will be better able to withstand monetary storms. Moreover, we might expect that a government backed by extensive financial resources of its own will be less vulnerable to foreign political pressure from creditor or investor governments, firms, or other lenders such as the international financial institutions.

The next two types of financial capabilities may be especially relevant to national policy goals involving the projection of influence outwards, as through the use of "assertive" financial

statecraft (Armijo & Katada, 2014; Cohen, 2012a:2; Steil & Litan, 2006). Our third category of international financial capability is a country's *importance to global financial markets*. While the second category highlights asset ownership, the third concerns participation in transactions. Markets require actors on either side of significant international transactions—importers as well as exporters, and debtors along with their creditors. A country thus might acquire the potential for influence by becoming a very large borrower, one who can demand a debt rescheduling on favorable terms because otherwise its creditors will be ruined. In the words of Keynes (1979 [1945]), "The old saying holds. Owe your banker £1000 and you are at his mercy; owe him £1 million and the position is reversed." Another way for a country to be significant in global financial markets is for its currency to be widely used outside its own borders, whether as a store of value (as in official foreign exchange reserves) or for accounting or transactions purposes (as in international petroleum pricing or other trade invoicing). Cohen (2012b) identifies five different benefits accruing to a country whose home currency is used for global reserves, from lower transaction costs and seigniorage privileges to an enhanced global reputation (see also Eichengreen, 2011).

A fourth type of international financial capability derives from a country's *participation in global financial governance*, that is, its membership in bodies engaged in creating the rules and procedures regulating international markets, and also in shaping the informal but well-established norms and beliefs (conventional wisdom, best practices) that help channel the patterns of cross-border contracts and investments (Tabb, 2004). Global financial governance may be multilateral, occurring in international organizations whose members must be sovereign states, such as the IMF. International financial governance also may be transnational, taking place in public-private quasi-regulatory committees such as the Bank for International Settlements (BIS), International Organization of Securities Commissions (IOSCO), or Global Corporate Governance Forum (GCGF), or even within transnational trade associations such as the Institute for International Finance (IIF). The capabilities associated with national ownership of large quantities of international financial assets (the second category of financial "power") or a dominating presence in global financial markets (the third category) may allow countries to exercise influence directly, as in Baldwin's (2013) first face of power. Capabilities associated with participation in global financial governance would be more closely tied to the second and third faces of power, that is, to influence exerted via securing one's preferred institutional designs or discussion agendas (second face) or simply by shaping diffuse norms and expectations in the issue-arena (third face).

Of these four basic types of international financial capabilities, the first, possession of good macroeconomic fundamentals, already is well-measured by numerous indices and readily-available rankings. The fourth, participation in global governance, must be assessed mostly via qualitative judgments, although some quantitative indicators exist, such as a country's access to voting shares at the IMF. Nonetheless, it is difficult to imagine how to construct a quantitative ranking or index of a country's overall participation in world financial governance.

These considerations led us to the following research project. We began our empirical study by turning to the best-known "power" index—although "capabilities index" is a more precise description—used by scholars of international relations and security studies. As that index is based on control of resources that were more significant in the nineteenth century than today, we updated it with more contemporary components. Next we calculated three alternative financial indices, each emphasizing a different aspect of international financial capability. We used results from all five indices to evaluate the contemporary interstate distribution of global financial capabilities. We also examined the international financial profiles of certain key states.

4. Challenges of operationalization: assessing country shares of global material and financial capabilities

This section explains how we have operationalized each of the dimensions that we have hoped to assess. Our core research question asks whether country shares of international political and financial capabilities have in fact shifted away from the U.S. and other advanced industrial countries and toward a new set of emerging economies—perhaps China, perhaps the BRICS or others. **Table 1** summarizes the purposes and components of our five relative capabilities indices.

We began with the **CINC** (Composite Index Of National Capabilities), a traditional “power index,” drawn from the international relations and security studies literature. This standard, non-financial index serves as a baseline for this study, as our claim is that the addition of an explicit financial dimension to the analysis will *improve* our understanding of relative interstate capabilities in the current era of substantial economic and financial globalization. The Correlates of War (COW) Project directed by [Singer, Bremmer, and Stuckey \(1972\)](#) has calculated the CINC for a shifting set of “major countries” going back to 1870. It includes each country’s relative shares of the total group’s military manpower, military spending, iron and steel production, energy use, urban population, and total population. We also examined several newer capabilities indices, including the Elcano Global Presence Index (IEPG) calculated by a team of Spanish scholars, which allocates capability increments both for hard material resources (economy, defense) and softer ones, such as cultural production and attractiveness to immigrants ([Real Instituto Elcano, 2012](#)). Because our present focus is with material capabilities, we decided not to include the IEPG.

Recognizing that any flaws we might find with the CINC likely resulted from the fact that its authors had to employ indicators of national capabilities that would be applicable as far back as the late eighteenth century, we then calculated an alternative overall capabilities index of our own design, the **CCI** (Contemporary Capabilities Index). The CCI mimics the CINC in its construction, but substitutes specific components more relevant to the early twenty-first century. The CCI is computed as the mean of national shares in global totals of military spending, total population, national income (GDP in current US dollars), telephone subscriptions (both fixed and mobile), industrial value-added, and foreign exchange reserves.² In contrast to the CINC, therefore, the CCI incorporates the total size of the economy, two proxies for technology, and a measure of financial capability, and no longer assigns positive valence to high energy consumption or urbanization. The indicators for total population and military spending are common to both the CINC and CCI.

Next we constructed three indices relevant to assessing international financial capabilities. None focuses on macroeconomic fundamentals, the first variety of international financial capability discussed above, for two reasons. Many comparative indices of national financial health already exist (for example, [Cihac et al., 2012](#)). Moreover, measures such as credit growth rates or banks’ levels of non-performing loans are not easily included in an index measuring national shares of a global total. Nor do our indices evaluate a country’s influence in global financial and economic governance, the fourth dimension of global financial capability. Instead, each of our three indices represents an effort to assess the second and/or third dimensions of financial capability—size of assets and market presence—described above.

The **CMCI** (Correlates of Monetary Capability Index) brings together components theorized in the literature to represent the potential of a country’s money to become an international reserve

² Data on GDP, population, telephones, and industrial value-added are from [World Bank \(2012b\)](#), WDI. Data on foreign exchange reserves are from [Lane and Milesi-Ferretti, 2007](#). Data on military spending from [Singer et al. \(1972\)](#).

Table 1
Components of five “power” indices.

Index name	Index type	Components/(share of world total)													
		Military manpower	Iron & steel production	Energy use	Urban population	Military spending	Population	Telephones	Industrial value added	GDP, market rate (EW)	Foreign exchange reserves (FWFX)	Current account surplus (CAS)	Trade transactions (TST)	Domestic financial assets (FWD)	Net foreign financial assets (CWI)
Composite Index of National Capabilities (CINC)	Traditional “Power”	X	X	X	X	X	X								
Contemporary Capabilities Index (CCI)	Traditional “Power”				X		X	X	X	X	X				
Correlates of Monetary Capabilities Index (CMCI)	Financial “Power” (currency)								X			X	X		
Share of Financial Stocks Index (SS)	Financial “Power” (assets)								X	X			X	X	
Share of Financial Transactions Index (ST)	Financial “Power” (markets)										X			X	X

and transactions currency, one dimension of a country's weight in global financial markets. Subramanian (2011) reports that three economic variables were the best predictors of the likelihood of a country's national money being or becoming a global reserve currency: large GDP, share of global trade transactions, and current account surplus. We therefore calculate the CMCI as the unweighted annual mean of EW, TST, and CAS. **EW** (economic weight) is the country's share in global GDP. **TST** (transactions share, trade) reports the national share of the world sum of the absolute values of imports and exports: the indicator thus assesses the country's importance as both an international buyer and a seller, rather than giving information on its trade balance. **CAS** (current account share), in contrast, reports on a country's *net* payments situation.³ The world total sums the net current account surpluses of all surplus countries, then allocate shares of the global total to each of them. Countries with net deficits are scored as controlling 0 percent shares, but do not incur any additional penalty for their trade deficits. As with our other indices, the CMCI runs from 1 to 100 percent, with the latter figure representing the world total.

We built two additional indices to measure the interstate distribution of financial capabilities. The **SS** (share of stocks) composite assesses a country's global weight as an owner of financial and closely related assets, in other words, its economic and financial size, the second type of financial capability discussed earlier. Its components are EW, FWD, CWI, and FSFX. **EW** (economic weight) is the same measure utilized in CMIC. We recognize that GDP technically is an annual flow, not a stock, but consider it the best available indicator of a country's overall asset position (wealth). **FWD** (financial weight, domestic) sums a country's domestic deposits with banks and other financial institutions, stock market capitalization, and private and public bond market capitalization, then assigns individual countries shares of the global total of all domestically-held financial assets. **CWI** (creditor weight, international) is our label for a country's net foreign financial asset position, excluding foreign exchange reserves, which we assess separately. CWI represents assets less liabilities in the categories of portfolio equity, foreign direct investment, portfolio debt and other investments, and financial derivatives. As with the current account measure included in the CMCI composite, countries whose net foreign financial holdings are negative are allocated a zero percent share. We sum the world total of gross foreign financial assets, then take each country's net assets as a share of that. Finally, **FWFX** (financial weight, foreign exchange) reports a country's share of world official foreign exchange reserves.⁴ The SS also is calculated as the annual sum of its indicators, then presented on a scale of 0–100. We note that our decision to report official foreign exchange holdings separately, rather than as simply another type of international financial asset, effectively gives them a higher weight within the SS than they otherwise would have. Our theoretical justification recognizes the importance of foreign exchange reserves in preventing or defending against imported financial contagion, as well as their prominence in contemporary perceptions of national financial prowess. Future research could lead to adjustments in these relative weights.

Our final index, the **ST** (share of transactions) follows a similar pattern. Designed to approximate a country's importance in global markets, the third basic type of financial capability profiled above, the ST is an unweighted average of three indicators: TST, MSIF, and CDSR.⁵ **TST** (transactions share, trade) is as in the CMCI. The rationale for its inclusion is that many financial

³ GDP data for EW and trade data for TST are from [World Bank \(2012b\)](#), WDI. Current account surplus data for CAS are taken from [Lane and Milesi-Ferretti \(2007\)](#).

⁴ Components of FWD are from [World Bank \(2012a\)](#), GFDD, and are based on [Cihac et al. \(2012\)](#). Data for CWI and FWFX are from [Lane and Milesi-Ferretti \(2007\)](#).

⁵ Components of MSIF are from [Lane and Milesi-Ferretti, 2007](#). CDSR is from [IMF \(2012a\)](#), COFER.

transactions, such as trade credits, grow directly from trade relations, while others are linked indirectly, as with trade that subsequently generates foreign direct investment. **MSIF** (market share, international finance) is constructed similarly to the trade transactions measure. Drawing on the same data on a nation's foreign financial assets and liabilities as the CWI indicator (and again excluding official foreign exchange holdings), the MSIF sums the absolute values of all of the outstanding financial ownership links at year's end, then takes each country's share of the world total. While the CWI in the SS index is a net figure, representing asset ownership, the MSIF in the ST index records the size of a country's total footprint in all outstanding cross-border financial contracts, irrespective of the country's net position.

The ST index's third component, **CDSR** (currency denomination share, reserves), tracks the national money in which official reserves are held. While the FWFX indicator that forms a piece of the SS index focuses on the relative value of the foreign exchange reserves owned by a nation's central bank, the CDSR in contrast suggests that country A's potential international influence increases when foreign country B chooses to hold B's official reserves in A's currency. The majority of countries worldwide have a 0 percent share on the CDSR measure, because their national monies are not "hard" currencies. We deal with the transition to the euro as follows. For the period from 1995 to 1998 the reserves allocated in Deutsche marks were, on average, approximately eight times as large as those denominated in French francs, while the share of other European countries which would join the eurozone were largely negligible. Therefore, for the period beginning in 1999 Germany was allocated 89 percent of euro holdings, with France assuming the remaining 11 percent.

Our overall dataset, limited by the availability of several of the financial indicators, covers approximately 180 countries over the years 1995–2010. In some cases, internally missing data on some measures for specific countries or years either prevented calculation of particular indicators for our aggregated categories (e.g., euro-17 or BRICS), or meant that the number of countries in our calculation was substantively different for these years than others. In these cases, we interpolated the missing values using preceding and following observations, as well as data on each country aggregate's share of global income (EW) during the missing years, when available. We only interpolated values for aggregated categories of countries, and not individual countries, with the exception of the United States. Missing data typically clustered in the years 1999 or 2010, presumably due to the introduction of the euro in the former and the global financial crisis in the latter. The latest CINC observations are available through 2007. Given that our CCI index includes two components drawn from the CINC, it also ends in that year.

What we set out to do, then, was to see how these five alternative capabilities indices—CINC, CCI, CMCI, SS, and ST—mapped the shifting patterns of the underlying "true" distribution of material capabilities relevant to international financial influence among all countries. Our overall hypothesis was of rising multipolarity—that is, a redistribution of global capabilities in the direction of the BRICS and other emerging powers—though we were unsure at whose expense this predicted rebalancing might occur. We anticipated that the CINC composite might give some odd results, simply because its categories arguably were anachronistic in the age of computers and climate change, and hoped that the CCI would correct these shortcomings. We also imagined that both the CINC and the CCI would tend to overcount the shares of emerging economies, because much of the continuing global influence of the major advanced industrial democracies rests on "soft" capabilities. Even the CCI, while more up to date than the CINC, still lacks an indicator of really high-technology production, such as patents filed or research and development spending. Moreover, its single financial component (FWFX) discriminates against the U.S., which has less need to hold official reserves. We anticipated that the three financial indices (CMCI, SS, ST)

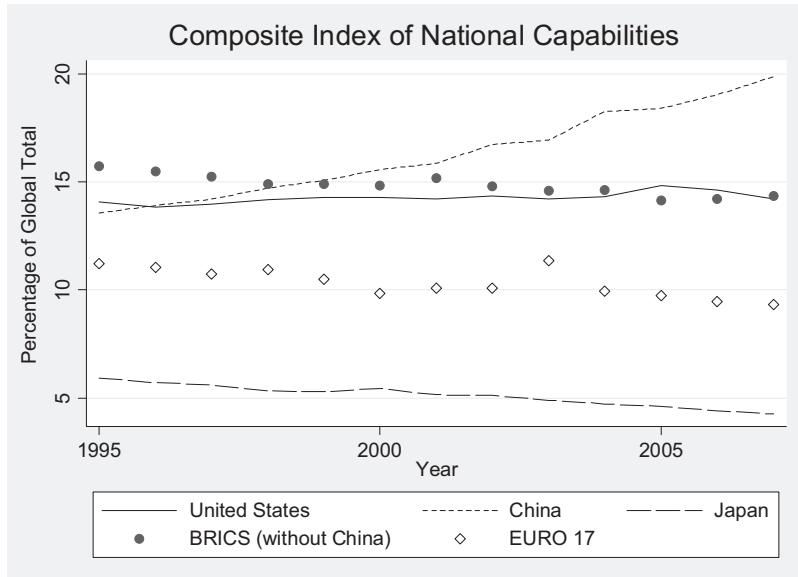


Fig. 1. Composite Index of National Capabilities (CINC).

would show the U.S. and other advanced industrial countries as enjoying relatively *larger* shares of global capabilities than did the two traditional “power indices” (CINC, CCI), as monetary and financial clout should be concentrated in the core capitalist economies. Overall, we hypothesized that all five indices, if valid, would track roughly similar trends, with the same countries and groups rising or falling over time, even if these patterns unfolded at differing speeds and levels within each index.

5. Data analysis

The results of our data analysis confirmed some expectations and confounded others. The first analytical task was to ascertain if our indices made sense, that is, if they were consistent with broad patterns that we anticipated from our previous knowledge of international affairs. Figs. 1–5 show similar trends over time, which suggests that they all are measuring the same underlying phenomena. The display shows the three countries that place in the top five in all five indices—the United States, China, and Japan—as well as two aggregates, the Eurozone-17 and the BRICS (excluding China). We note that the BRICS share neither a common currency nor a contiguous economic region, and that some scholars have dismissed the grouping as ephemeral or trivial (Kahler, 2013). Yet since their first leaders’ summit in early 2009 the BRICS have consistently made common cause in pressing for increased influence in global governance (Armijo & Roberts, *in press*). We therefore assess the BRICS’ relative capabilities both singly and jointly.

The trends show the U.S. holding steady (CINC, CMCI, SS, ST) or slightly down (CCI). China rises either dramatically (CINC, CCI, CMCI, SS) or gently (ST). The pattern of the other BRICS is similar to China’s although less dramatic: their shares increase in four indices (CCI, CMCI, SS, and ST), falling slightly in the fifth (CINC). Japan falls dramatically in every index, revealing a pattern of declining capability, while the Euro-17 pattern parallels that of Japan, albeit more incrementally, falling slightly (CINC) or precipitously (CCI, CMCI) in three indices, while

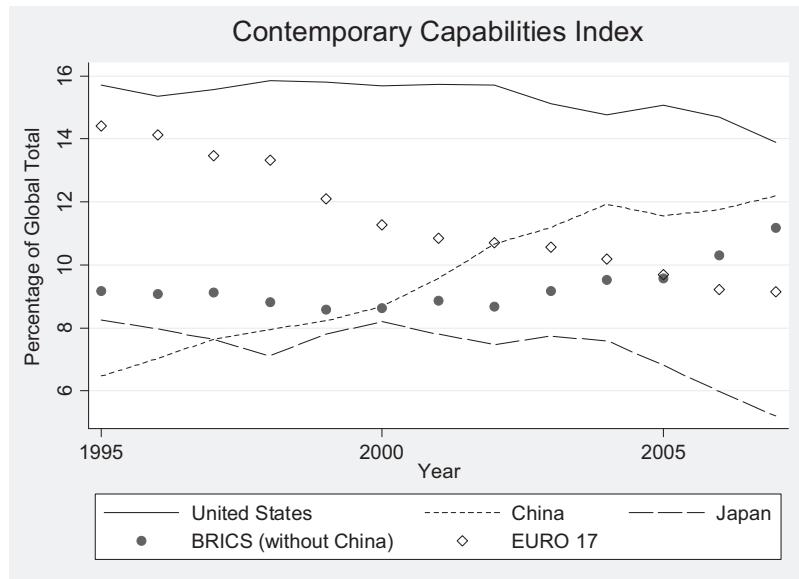


Fig. 2. Contemporary Capabilities Index (CCI).

holding steady in two (SS, ST). Overall, both the two traditional “power” indices and the three financial indices confirm our expectation of a gradual shift of material capabilities away from the advanced industrial countries and toward the emerging economies, especially China.

However, while the *trends* in all five indices performed as anticipated, the *levels* are more puzzling and, in some cases, less credible. Thus our first traditional index, the CINC, suggests

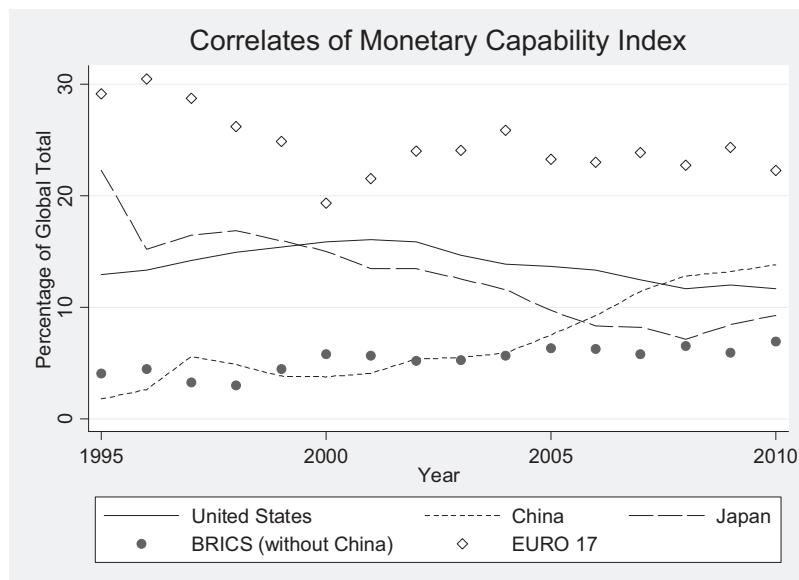


Fig. 3. Correlates of Monetary Capability Index (CMCI).

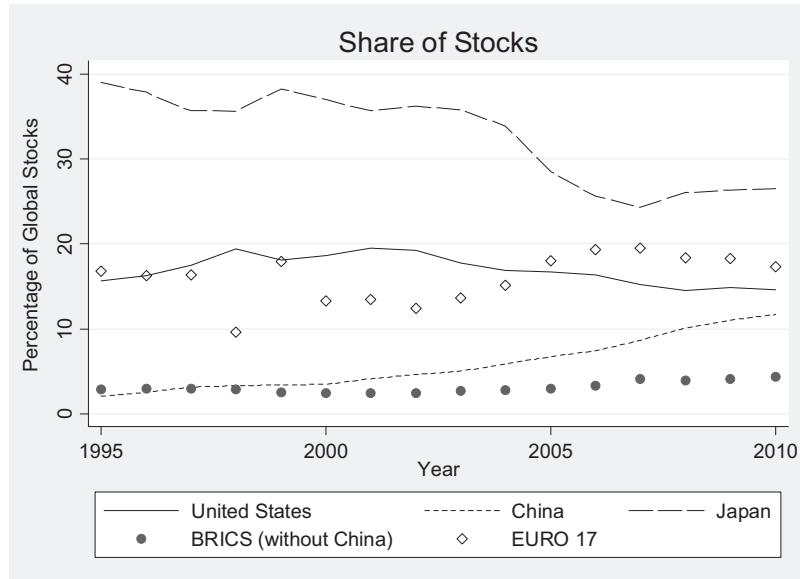


Fig. 4. Share of Stocks Index (SS).

that China has held a greater share of overall capabilities than the U.S. since the late 1990s, which is implausible. Even the CCI shows China drawing level with the U.S. at the end of the period, which we attribute to the index's omission of any measures of soft power or very high technology, as noted earlier. Results for the CMCI are similarly puzzling, as they suggest the euro is almost twice as likely as the U.S. dollar to constitute the global reserve currency, which clearly has not

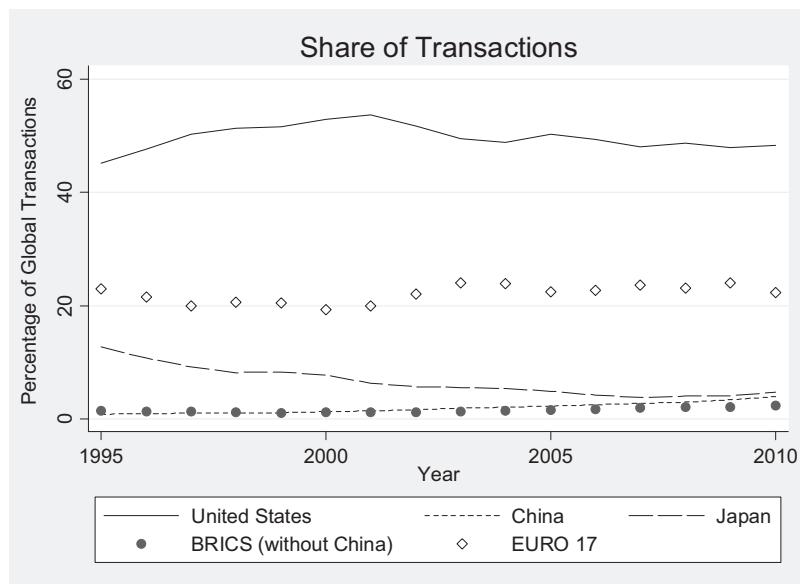


Fig. 5. Share of Transactions Index (ST).

Table 2

Fifteen top-ranked countries in descending order, five indices.

CINC 2007	CCI 2007	CMCI 2010	SS 2010	ST 2010
China	USA	China	Japan	USA
USA	China	USA	USA	Germany
India	India	Japan	China	UK
Japan	Japan	Germany	Germany	Japan
Russia	Russia	Russia	France	China
Brazil	Germany	Netherlands	UK	France
Germany	UK	France	Brazil	Italy
So. Korea	Brazil	UK	India	Netherlands
UK	France	Switzerland	Italy	Canada
France	Italy	S. Arabia	Switzerland	So. Korea
Italy	So. Korea	So. Korea	So. Korea	Spain
Turkey	S. Arabia	Italy	Canada	India
Pakistan	Indonesia	Norway	Spain	Russia
Indonesia	Mexico	Canada	Netherlands	Singapore
Iran	Spain	India	Australia	Belgium

come to pass.⁶ Thus we have somewhat greater confidence in the trends than the levels shown by our indices. While we analyze the results we found, we do so with the *caveat* that two indices, the CINC and CMCI, surely underestimate the U.S.' share of world resources.

Next we explore our individual country results in greater detail. Table 2 lists the top fifteen countries for each measure at the end of our study period (2007 for CINC and CCI, and 2010 for the financial indices), while Table 3 displays clusters of countries. Even bearing in mind the roughness of some of these indices, they display remarkable consistency in identifying important clusters of countries. At the end of the period, nine countries were top-ranked in every measure. Six of the G7, not unexpectedly, are in this set: the United States, Japan, Germany, the United Kingdom, France, and Italy. Of course, China also appears in the list. Perhaps more surprisingly, so do India and South Korea. The second cluster shows countries that appear in the top fifteen in at least one traditional and one financial index. Here we find Russia and Brazil, the other two large BRICS, along with Saudi Arabia and Spain. A third group, containing only Indonesia, shows countries that are top-ranked in overall capabilities, but not in financial power. A fourth cluster, containing Canada and the Netherlands, shows countries whose financial capabilities overshadow their overall power profiles. All of the countries in Table 3 except Spain and the Netherlands are members of the financial G20.

Table 3 also indicates movement over time for each of these major and emerging financial powers. As most countries' trends were relatively linear, we calculated the mean change over time for each country in the dataset on all five indices, then constructed a probability distribution from the results. Looking at the three most important world financial powers (in the top five on every index), we see three patterns. China's share expanded a lot, averaging a gain of 7.36 percent on all indices at the end of the period as compared to 1995. Japan was much the largest loser, albeit from a very high initial position: its mean index share at the end was –7.63 below its beginning level.

⁶ This result is due to the fact that all intra-eurozone trade (shown in the indicators TST and CAS) shows up as international trade, while the same is not true of intra-U.S. trade.

Table 3

Major and emerging powers in global finance, end of period.

Top-ranked in all five indices	Top-ranked in at least one traditional and one financial index	Top-ranked in both traditional but no financial indices	Top-ranked in all financial but no traditional indices
United States	Russia	Indonesia	Canada
China ^a	Brazil ^b		Netherlands ^c
Japan ^d	Saudi Arabia ^b		
Germany ^b	Spain		
India ^b			
United Kingdom ^c			
France ^c			
Italy ^c			
South Korea ^b			

Notes: (1) Country rank calcul Mean for Russia and Saudi Arabia based on 4 indices only (no SS). Data for Indonesia begin in 1997. (2) We also calculated an overall rank (based on mean of all five indices) for countries at the beginning and end of the study period. Superscripts indicate countries whose relative positions shifted notably.

^a Large rise, 95th percentile (1.06) or above.

^b Moderate rise, between 75th (0.14) and 95th (1.06) percentile.

^c Moderate fall, between 5th (−1.13) and 25th (−0.19) percentile.

^d Large fall, 5th percentile (−1.13) or below.

The U.S. retained its dominant share mostly unchanged, as did its close and economically intertwined neighbor, Canada, as well as Spain, Indonesia, and Russia. Modest gainers included three emerging (India, Saudi Arabia, and Brazil) and one recently emerged economy (South Korea), and the eurozone's lynchpin: Germany. The remaining advanced industrial countries—the UK, France, and Italy—logged modest losses of between −0.2 and −1.13 percent. Other large newly industrialized countries, including Mexico, Turkey, South Africa, and Malaysia, also held steady or increased their shares of global resources. Overall, our initial expectations were confirmed, and *a fortiori* in the case of China.

Our final but perhaps most intriguing analytical task is to distinguish among *types of international financial power* via a more detailed analysis of the differing distribution across key countries of the main components of our share of stocks (SS) and share of transactions (ST) indices. Fig. 6 shows the placement of five theoretically interesting countries and two aggregates on both the SS and ST. Figs. 7 and 8 show stacked displays of the global totals of each component of SS and ST (thus Fig. 7's vertical scale runs from 0 to 400 percent and Fig. 8's from 0 to 300 percent). There are four broad patterns. The first is that of the United States and Britain. The U.S. has a large presence in our SS index, about 16 percent of these world assets in 1995 and 15 percent at the end of the study period. As shown in Fig. 7, the U.S.' large share of stocks is entirely due to its large domestic economy (EW) and domestic financial system (FWD). The U.S.' domestic financial sector during our study period consistently constituted between a third and half of the world total. Since the mid-20th century, financial services also have contributed an increasing share to the U.S. GDP, rising from about 3 percent of GDP in 1950 to nearly 9 percent today (Philippon, 2007). The United States lost its longtime trade surplus in the early 1970s, and its current account surplus in the early 1980s. Its *net* international creditor position, measured by our CWI indicator, also has been negative since the early 1990s. The U.S.' official reserves (FWFX) are small, because its home money is the world's reserve currency. Overall, the U.S.' share in our SS indicator is about the same as that of the Euro-17 and less than that of Japan.

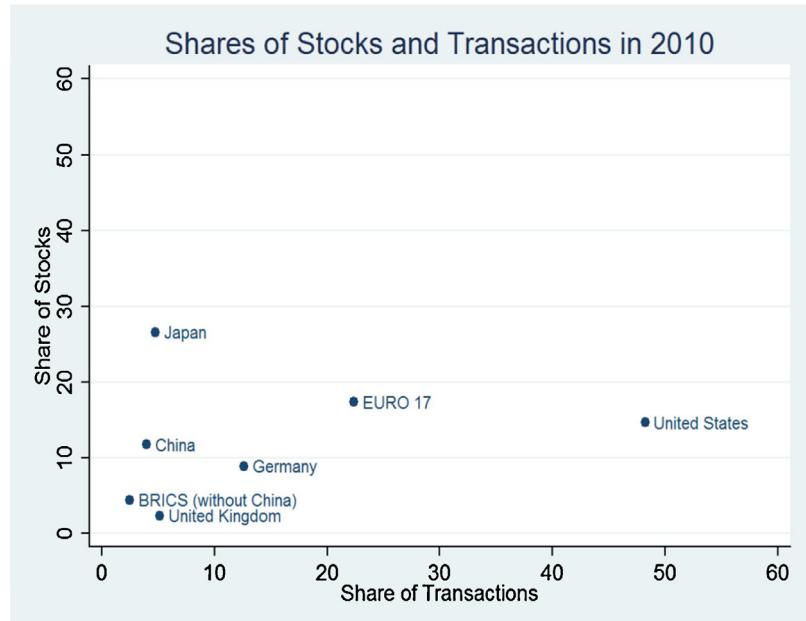


Fig. 6. Financial Profiles—Key Countries and Multilateral Clubs. *Note:* Germany is shown twice, once separately, and also as included in the Euro-17 aggregate.

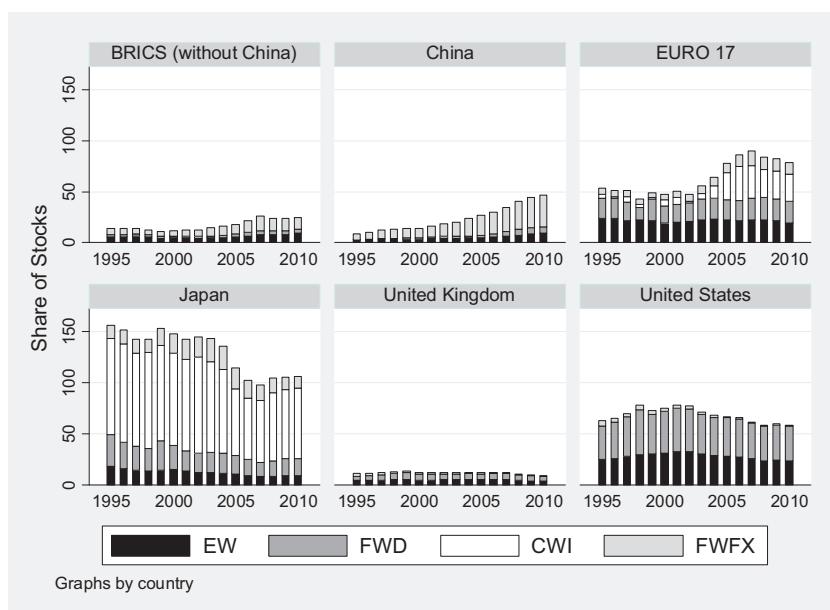


Fig. 7. Share of Stocks (SS), Component Indicators.

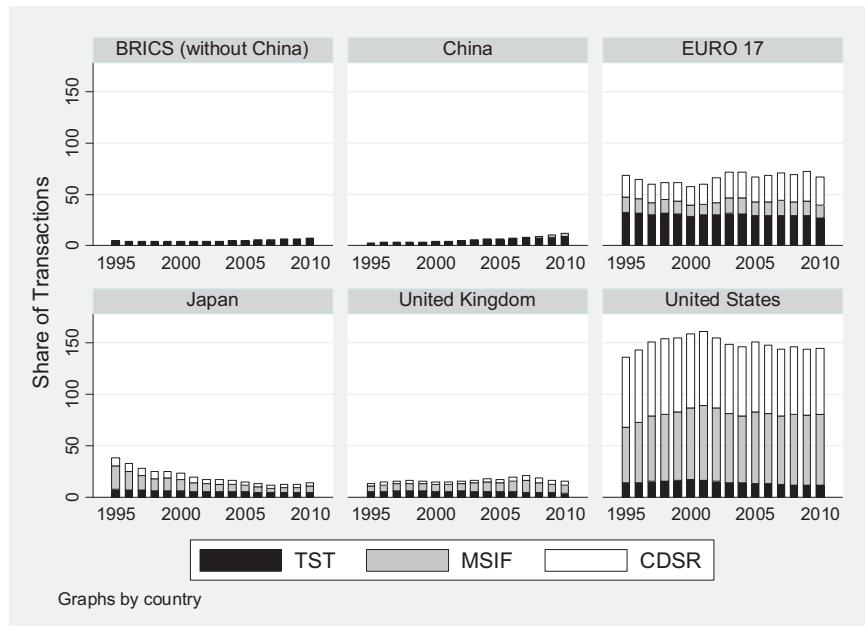


Fig. 8. Share of Transactions (ST), Component Indicators.

On the other hand, the U.S. remains overwhelmingly dominant in global financial market transactions. Its share of transactions (ST) rises from 45 to 48 percent of the world over the study years. Here the U.S.' capability reflects its role as a large trading state: U.S. citizens participated as either buyer or seller in about 12 percent of all international trading contracts (STS) in 2010. Moreover, U.S. investors and corporate borrowers dominate global financial transactions, shown in our MSIF indicator. In 2010, Americans were on either one or the other side in an astonishing 68 percent (up from 54 percent in 1995) of all outstanding cross-border financial contracts worldwide, excluding holdings of official foreign exchange reserves. Finally, the U.S. dollar remains overwhelmingly the currency of choice for global foreign exchange holdings (CDSR). Although down from its high of about 73 percent of allocated reserves during the creation of Europe's single currency, the U.S.' share remains well above 60 percent. Yet the U.S.' enormous financial resources in significant measure represent retrospective capabilities, not forward looking ones. Where it once had a trade surplus, and later was a net international creditor, it no longer holds either position. Moreover, the U.S.' enormous presence in world financial markets is related to its reserve currency hegemony, the underlying basis for which gradually is eroding. This is the financial profile of a mature, not a relatively rising, state ([Subramanian, 2011](#); [Schwartz, 2010](#); [Frieden, 2007](#)).

Britain today is much smaller than the United States, but has a similar financial profile. Its strengths as an owner of financial assets, assessed via the SS index, are entirely due to its large economy (EW) and sophisticated domestic financial sector (FWD). It cannot accumulate foreign exchange (FWFX), even if it wished to, as it also lacks a current account surplus (CAS), and is no longer a net foreign investor (CWI). In the 1990s the UK made the decision not to join the single currency, but instead to open up its domestic financial markets and to promote itself as an international financial center. Its presence as both an international investor and a recipient of

foreign funds (MSIF) is considerable for a single country, and rose over our study period, reaching almost 11 percent in 2007, although falling back to about 7 percent subsequently. However, Britain's decision not to join the Eurozone has meant that a shrinking share of international reserves are held in pounds (CDSR). Some eurozone officials, including in December 2012 French central bank governor Christian Noyer, have demanded that eurozone governments employ regulatory levers to move euro-denominated financial trading back to the continent (Scott, 2012). Such policies would severely impact Britain's twenty-first century financial ambitions.

The second pattern is that of Western Europe. The Euro-17 group logs a substantial and slightly rising share of financial and related stocks, our SS index, shown in Fig. 7. The eurozone is a large economy (EW) and most countries have large home financial sectors (FWD). Its growth since 1995 is entirely due to a dramatic increase in its net foreign creditor position (CWI), which is partly an artifact of the way we constructed our index. Almost all of the increase is due to Germany, which had no net international financial surplus until 2002, but by 2010 had about 23 percent of the global share of outstanding cross-border financial obligations. But most of Germany's loans and investments are intra-European; if the Euro-17 were to be considered as a single economy, most of these transactions would become domestic financial contracts, counted in our FWD indicator instead. The Euro-17's SS profile also is the most balanced, with strengths in the size of their domestic economies (EW), domestic financial sectors (FWD), and international financial stocks (CWI). In terms of its share of transactions, ST, the Eurozone held steady, at least through the end of our data in 2010, its substantial global share dependent on being important traders (often with one another) (TST), on extensive cross-border financial links (MSIF), and on growing international use of the euro (CDSR).

Japan's international financial profile represents a third pattern of a mature economy. Its' share of the world's financial and related stocks (SS) is impressive. After the U.S., Japan has the world's largest and deepest domestic financial sector (FWD). Although its relative size shrunk by half during our fifteen year study period, Japan's domestically held financial assets still represented about 17 percent of the global total in 2010. In other respects, it has an opposite profile from the U.S. Japan is the world's creditor, bar none, accounting for an astonishing 96 percent of global holdings of net financial assets (CWI) in 1995 and retaining a still remarkable 70 percent share in 2010, despite two decades of very slow growth. Japan was the largest single holder of reserves (FWFX) until China passed it in the early 2000s, and retains a huge share. But Japan presents an anomaly, as its profile in global financial *markets* is thin (see Fig. 8). Japan's significance as a player in international financial transactions (MSIF) always has been much smaller than that of the U.S., at least partly because Japan has never really opened its domestic financial markets to foreign investors. Japan's share of global financial contracts (MSIF) plummeted from about 23 percent of the global total in 1995 to only 6 percent in 2010. Although Japan remains the largest international creditor, its public debt is among the highest in the world—but is almost all held domestically.⁷ Overall, Japan possesses ample foreign exchange resources (FWFX) to shield itself from direct external financial contagion. Yet it maintains a surprisingly low profile in both world financial markets and global financial governance.

Finally we consider the pattern of the BRICS and other major emerging powers. As noted, China has expanded its shares in all five indices, as have India, Brazil, and Russia (although data on the size of Russia's domestic financial sector, FWD, are unavailable, anecdotal evidence

⁷ In 2012 Japan's gross domestic public debt was 237 percent, and net debt 135 percent, of GDP (IMF, 2012a, 2012b).

suggests that it is expanding, if erratically so). Fig. 7 reveals that, although each of the four original BRICs is among the top fifteen in either or both of our SS or ST indices, their domestic financial sectors (FWD) remain small compared to those of the U.S., the Euro-17, or Japan. They are not yet net international creditors (CWI). What the BRICS, especially China, do possess are rapidly expanding economies (EW) and enormous and growing foreign exchange reserves (FWFX). These reserves help them defend against currency crises, but also represent an enormous opportunity cost, as many of these reserves are held in investments, including U.S. treasury securities, earning very little interest. These are assets that may be accumulated quickly, and are the counterpart of large current account surpluses. China's share of the global current account surplus (CAS) grew from 0.6 percent in 1995 to about 23 percent by 2010.

None of the BRICS, China included, yet bulks large in global market transactions. Their trade (TST) is substantial and growing rapidly. They are participating more in global investments, but together totaled only about 3 percent of outstanding cross-border contracts (MSIF) in 2010. Nor are their currencies used by others to hold official foreign exchange reserves—yet. China, however, openly has committed itself to a strategy of promoting the renminbi/yuan as an international currency for both reserve and transactions uses, and explicitly understands this plan as a means of garnering capabilities that will be useful not only to protect itself from future financial crises but for projecting international political influence (Cohen, 2012a). For the moment, the other BRICS countries remain willing to perceive their political and financial interests as parallel to those of China's leadership (Armijo & Roberts, *in press*). China, and to a lesser extent other emerging economies such as the other BRICS, presents the classic financial profile of a relatively rising state.

South Korea and Saudi Arabia, the non-BRICS, but non-traditional powers with strong profiles in our data, appear in the top ranks of financial powers due mainly to their strengths as large trading states (TST) with large current account surpluses (CAS), enabling them to accumulate significant foreign exchange reserves (FWFX). South Korea, in addition, demonstrates the pattern of a state that has transitioned from a developing to a high income, industrialized economy. It is today a small net foreign investor (CWI), and also has expanded its domestic financial sector (FWD), now about half the size of Canada's.

6. Conclusions and plans for further research

In all, our results suggest the virtues of augmenting traditional indices of interstate capabilities with new indices assessing financial capabilities. The paper profiled five alternative indices. We found that—for studies focused exclusively on the current period—our new “power” index, the Contemporary Capabilities Index (CCI) probably improves on the older Composite Index of National Capability (CINC), although it also is far from perfect. Three financial indices revealed mutually consistent trends over time. However, the Share of Stocks Index (SS), measuring national control over financial and economic assets, and Share of Transactions Index (ST), measuring national presence in various financial and closely related markets, more plausibly estimated the relative position of major countries vis-à-vis one another than did the third financial index we constructed, the Correlates of Monetary Capability Index (CMCI).

Somewhat to our surprise, the share of global capabilities available to the United States has hardly budged during this recent period—no matter which of the five alternative indices one consults. Four of the five indices each suggest that the U.S.' share of total world material and financial resources has been between about 12 and 20 percent. Only the ST, which tracks a country or group's significance in world financial markets, evaluates the U.S. at a significantly different

level: here the U.S.’ share consistently has hovered at around half of the global total. In terms of its financial and monetary profile, the U.S. dominates in particular due to the size of its domestic financial market (FWD), its centrality to global financial trading (MSIF), and as the home country of the world’s major reserve currency (CDSR). Our findings with respect to the U.S. confirm the judgment of [Ikenberry, Mastanduno, and Wohlforth \(2009\)](#) that the interstate distribution of capabilities remains unipolar (with one country displaying a significantly larger share of capabilities than any other single country), though by no means hegemonic (defined as a single country whose share of resources is approximately equal to those of all of the other major players). Germany, perhaps the world’s fourth financial power (after the big three of the U.S., China, and Japan), has increased its relative position modestly, though this might no longer be true should the eurozone collapse. The relative capabilities of the other major advanced industrial countries are eroding—most rapidly in the case of Japan, which nonetheless remains a top financial power, although one that has been relatively unassertive in global economic and financial governance.

Although China and the other emerging economies are rapidly increasing their share of relevant global capabilities, they have thus far primarily obtained “defensive” capabilities such as high foreign exchange reserves, intended to protect against financial contagion, not those potentially “assertive” financial resources, such as a strong net creditor position or a dominant position in global financial governance, that may be most useful for supporting a country’s larger foreign policy goals ([Armijo & Katada, 2014](#)). Nonetheless, the direction of international change clearly is toward growing multipolarity across a wide spectrum of financial capabilities.

Our research project constitutes a work in progress. We see two immediate directions for future work. One direction will be to apply this type of analysis to theoretically compelling subsystems of the global political economy in order to understand the relative financial capabilities of groups of related states, such as the states within a world region, whether defined by geographic or cultural proximity or other types of ties. We may thus gain insight into topics such as the contribution of regional capability distributions to regional monetary arrangements.

A second future research direction will be to improve the indices and components themselves. For example, we believe we have undercounted the actual international financial capabilities of the major advanced industrial democracies, including the U.S. For example, we lack any measure of the global systemic importance of a country’s banks and other transnational financial institutions. Intriguingly, the belated realization by this paper’s authors of the importance of assessing financial institutions, alongside financial assets and markets, mirrors the recent trajectory of global regulators. In November 2011, and as a direct result of the global crisis of 2008–9, the Basle Committee on Banking Supervision and the Financial Stability Board (successor to the FSF) jointly issued a report identifying 29 banks worldwide as “global systemically important financial institutions” (GSIFIs), in other words, banks too big to allow to fail ([FSB, 2011](#)). Not surprisingly, only one GSIFI so far is headquartered outside the historic OECD: the public sector Bank of China. In the future, governments of faster-growing emerging economies may be expected promote their own institutions, as national ownership of such important institutions accords states tremendous *de facto* influence in transnational and even multilateral global financial governance.

In closing we turn again to the challenges with which we began. We wanted to understand whether the world was becoming more multipolar, and if so, when and how. We also wished to investigate the degree to which one could think about the relative capabilities of sovereign states in financial rather than strictly military political terms. To do this we began with a brief inquiry into concepts of “power” in international politics and finance. While we agree with those who claim that “power” per se is inherently a relational concept, we think that an inquiry into the interstate distribution of capabilities, which in turn provide the potential for the subsequent

exercise of influence, is inherently a valuable exercise. We hope that this paper has contributed to demonstrating that it can be.

References

- Armijo, L. E., & Katada, S. (2014). *Theorizing the Financial Statecraft of Emerging Powers*. New Political Economy (in press).
- Armijo, L. E., & Roberts, C. (2013). The emerging powers and global governance: Why the BRICS matter. In R. Looney (Ed.), *Handbook of emerging economies*. New York: Routledge (in press).
- Bachrach, P., & Baratz, M. S. (1962). Two faces of power. *American Political Science Review*, 56, 947–952.
- Baldwin, D. A. (1985). *Economic statecraft*. Princeton: Princeton University Press.
- Baldwin, D. A. (2013). Power and international relations. In W. Carlsnaes, T. Risse, & B. A. Simmons (Eds.), *Handbook of international relations* (2nd ed., pp. 273–297). Thousand Oaks, CA: Sage Publications.
- Bank for International Settlements (BIS). (2010). *Triennial central bank survey: Report on global foreign exchange market activity in 2010, December*. Basle: BIS.
- Barnett, M., & Duvall, R. (2005). Power in international politics. *International Organization*, 59, 39–75.
- Bergsten, C. F. (2008). A partnership of equals: How Washington should respond to China's economic challenge. *Foreign Affairs*, 87, 4.
- Borensztein, E., Cowan, K., Eichengreen, B., & Panizza, U. (Eds.). (2008). *Bond markets in Latin America. On the verge of a Big Bang?* Cambridge: MIT Press.
- Chiu, E. M. P., & Willet, T. D. (2012). Quantitative measures of economic and financial power and the rise of East Asia. In *Paper prepared for conference on "Power in a Changing World Economy: Lessons from Emerging Asia"* University of California, Santa Barbara, March 30–31.
- Cihac, M., Demirguc-Kunt, A., Feyen, E., & Levine, R. (2012). Benchmarking financial systems around the world. In *World Bank policy research working paper (6175)*.
- Cohen, B. J. (2012a). *Background paper for conference on "Power in a Changing World Economy: Lessons from Emerging Asia* University of California, Santa Barbara, March 30–31.
- Cohen, B. J. (2012b). The Yuan tomorrow? Evaluating China's currency internationalization strategy. *New Political Economy*, 17(3).
- Economist. (2012). Goodbye Europe: What would happen if Britain left the EU? *Economist*, 8(December), 23–26.
- Eichengreen, B. (2011). *Exorbitant privilege*. Oxford: Oxford University Press.
- Etzioni, A. (1961). *A comparative analysis of complex organizations: On power, involvement, and their correlates*. Glencoe, IL: Free Press.
- Financial Stability Board (FSB). (2011). *Policy measures to address systemically-important financial institutions*. Basle: Financial Stability Board. November 4. Consulted December 2012 at www.financialstabilityboard.org
- Frieden, J. A. (2007). *Global capitalism: Its fall and rise in the twentieth century*. New York: W.W. Norton.
- Garrett, G., & Tsebelis, G. (1999). Why resist the temptation to apply power indices to the European union? *Journal of Theoretical Politics*, 11, (3), 291–308.
- Gramsci, A. (1971 [1920s]). In Q. Hoare, & G. N. Smith (Eds.), *Selections from the prison notebooks*. New York: International Publishers.
- Haley, M. A. (2001). *Freedom and finance: Democratization and institutional investors in developing countries*. New York: Palgrave Macmillan.
- Heritage Foundation. (2012). *2012 Index of Economic Freedom*. At www.heritage.org, consulted December 2012.
- Ikenberry, G. J., Mastanduno, M., & Wohlfarth, W. C. (2009). Unipolarity, state behavior and systemic consequences. *World Politics*, 61, 1–27.
- International Monetary Fund (IMF). (2012a). *Currency composition of official foreign exchange reserves (COFER)*. Washington, DC: IMF. At www.imf.org
- International Monetary Fund (IMF). (2012b). *World Economic Outlook Database (WEO), October*. IMF. Consulted December 2012 at www.imf.org
- Kahler, M. (2013). Rising powers and global governance: negotiating change in a resilient status quo. *International Affairs*, 89(May (3)), 711–729 (Special Issue on Negotiating the Rise of New Powers).
- Keynes, J. M. (1979 [1945]). Overseas financial policy in stage III (15 May). In E. Johnson, & D. E. Moggridge (Eds.), *The collected writings of John Maynard Keynes* (Vol. XXIV) (pp. 256–295). London: Macmillan.
- Lane, P. R., & Milesi-Ferretti, G. R. (2007). The external wealth of nations: Mark II. *Journal of International Economics*, 73, 223–250. Data updated to 2010.

- Mearsheimer, J. (2001). *The tragedy of great power politics*. New York: W.W. Norton.
- Morgenthau, H. J. (1996 [1948]). Political power: A realist theory of international relations. In J. A. Vasquez (Ed.), *Classics of international relations*. Boston: Pearson Publishing. (3rd ed., pp. 24–27).
- Nye, J. S. (1990). *Bound to lead: The changing nature of world power*. New York: Basic Books.
- Nye, J. S. (2004). *Soft power: The means to success in world politics*. Public Affairs Press.
- Organski, A. F. K., & Kugler, J. (1981). *The war ledger*. Chicago: University of Chicago Press.
- Philippon, T. (2007). Why has the financial sector grown so much? The role of corporate finance. In *NBER working paper (1304)*.
- Prasad, E., & Sorkin, I. (2009). *Assessing the G-20 economic stimulus plans: A deeper look*. Washington, DC: Brookings Institution.
- Real Instituto Elcano. (2012). *Elcano global presence index*. Madrid: Real Instituto Elcano. Consulted March 2012 at <http://www.realinstitutoelcano.org>
- Roxburgh, C., Lund, S., & Piotrowski, J. (2011). *Mapping global capital markets 2011: Updated research*. McKinsey Global Institute, August. Consulted December 2012 at www.mckinsey.com
- Sarkees, M. R., Whelon Wayman, F., & Singer, J. D. (2003). Interstate, intra-state, and extra-state wars: A comprehensive look at their distribution over time, 1816–1997. *International Studies Quarterly*, 47, 49–70.
- Schwartz, H. M. (2010). *States versus markets: The emergence of a global economy* (3rd ed.). New York: Palgrave Macmillan.
- Scott, M. (2012). In euro zone, challenging london as the continent's financial capital. *New York Times*, December 11, at www.nytimes.com
- Singer, J. D., Bremer, S., & Stuckey, J. (1972). Capability distribution, uncertainty, and major power war, 1820–1965. In B. Russett (Ed.), *Peace, war, and numbers* (pp. 19–48). Beverly Hills: Sage, as updated by CINC dataset Version 4, at: www.correlatesofwar.org
- Steil, B., & Litan, R. E. (2006). *Financial statecraft: The role of financial markets in American foreign policy*. New Haven, CT: Yale University Press.
- Stiglitz, J. E. (2002). *Globalization and its discontents*. New York: W.W. Norton.
- Subramanian, A. (2011). *Eclipse: Living in the shadow of China's economic dominance*. Washington, DC: Peterson Institute.
- Tabb, W. K. (2004). *Economic governance in an age of globalization*. New York: Columbia University Press.
- Tammen, R. L., Kugler, J., Lemke, D., Stam, A. C., III, Asharabati, C., Abdollahian, M. A., Efird, B., & Organski, A. F. K. (2000). *Power transitions: Strategies for the 21st century*. New York: Chatham House Publishers of Seven Bridges Press.
- Thelen, K., & Steinmo, S. (1992). Historical institutionalism in comparative politics. In S. Steinmo, K. Thelen, & F. Longstreth (Eds.), *Structuring politics: Historical institutionalism in comparative analysis*. Cambridge: Cambridge University Press.
- Vreeland, J. R. (2007). *The politics of conditional lending*. New York: Routledge.
- Waltz, K. N. (1979). *Theory of international politics*. New York: McGraw-Hill.
- Williamson, J. (1989). What Washington means by policy reform. In J. Williamson (Ed.), *Latin American adjustment: How much has happened?* Washington, DC: Institute for International Economics.
- Williamson, J. (2004). A short history of the Washington consensus. In *Paper presented at conference "From the Washington Consensus towards a new Global Governance* Barcelona, September 24–25.
- World Bank. (2011). *Doing business 2012, October 18*. Washington, DC: The World Bank.
- World Bank. (2012a). "World Development Indicators" (WDI). Washington, DC: The World Bank. Consulted November 2012 at www.worldbank.org
- World Bank. (2012b). "Global Financial Development Data" (GFDD). Washington, DC: World Bank. Consulted November 2010 at www.worldbank.org