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The Monetary and Financial Powers of States: Theory, Dataset, and Observations on the Trajectory of American Dominance

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ABSTRACT

This project transforms international financial statistics into a form useful for global political analysis. The authors first theorise four distinct faces of a sovereign state's monetary and financial power resources: its international Creditor, Network, Currency, and Governance Capabilities. Each of these capabilities implies resources that incumbent political leaders potentially may employ to persuade, induce, or coerce others in pursuit of their larger foreign policy goals. They thus provide the means of international financial statecraft. The paper next summarises a new dataset, the Global Monetary and Financial Profiles of States (GMFPS), which creates measures for each of these concepts. Covering 180 countries from 1995–2013, the GMFPS dataset reports each state's annual shares of global totals for 25 indicators and 5 composites, each corresponding to a national financial characteristic that leaders may choose to manipulate politically – albeit not without paying some costs, economic and/or political. The paper concludes with an initial analysis of global trends, which tend to confirm the slow relative decline of the reigning financial hegemon, the United States. The data also provide suggestive evidence of a typical financial life-cycle for major states, although one that is voluntaristic, not inevitable.

KEYWORDS

Financial power; financial statecraft; international finance dataset; monetary politics; monetary power

The ideology of neoclassical economics makes it difficult to 'see' state power in financial markets. Especially in the Anglo-American-Commonwealth countries, the rhetoric of governments, academics, and market actors suggests that apolitical, decentralised asset markets respond to impersonal imperatives of supply and demand. Neoclassical economists patiently explain that conceptualising large foreign exchange 'war chests', for example, as power capabilities encourages countries to ration capital and block its free flows, undermining potential efficiency gains (for example, Adler and Mano 2016). This is of course true.

Yet power pervades money and finance. There is competition among firms, but also among countries (Simmons 2001, Drezner 2007, Norrlof 2014, Cohen 2015). A large historical literature links domestic financial characteristics, particularly the sophistication and reliability of public (government) finance, to overall state capacity and success (Tilly 1992, Ferguson 2001, Calomiris and Haber 2014). Presidents and prime ministers readily assume that possession of large, respected banks, stock markets, or currencies gives them advantages, while heads of smaller, weaker states hope for monetary autonomy from richer, more powerful states or institutions they dominate (Cohen 2006, 2015). Today, although leaders of emerging powers want to join the status quo powers in shaping global

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financial governance, the incumbent major powers are reluctant to dilute their authority. The major advanced industrial states of the G7 only turned to the emerging and intermediate powers in the G20 in 2008, when the former realised that the latter's additional economic firepower would be needed to contain the spreading global crisis (Helleiner 2014, Kirshner 2014). A decade earlier, Japan, its G7 membership notwithstanding, was rebuffed by the United States when it tried to assert leadership in managing the Asian financial crisis (Laurence 2002, Lee 2006). Rising global multipolarity in the twenty-first century (Zakaria 2012) will increase state power competition across multiple arenas, as states jockey for position in emerging global orders.

When state leaders employ their direct, regulatory, or implicit influence over currency, credit, capital markets, and financial institutions in the service of their larger foreign policy goals – such as expansion of their territorial influence or to forge political partnerships abroad – they engage in 'financial statecraft' (FS). The burgeoning FS literature has introduced a number of useful typologies, distinguishing between 'individual state' and 'collective' initiators, 'offensive' and 'defensive' actions, and levers that 'induce' cooperation or 'sanction' rogues, in the service of 'influence', 'autonomy', and 'structural power' (Strange 1988, Andrews 2006, Cohen 2006, 2014, 2019, Steil and Litan 2006, Armijo and Katada 2014, Roberts *et al.* 2018, Chey 2018). Previous work has theoretically specified the *ends* towards which incumbent leaders might employ FS, relating them to the literature on state power. This project in contrast investigates the concrete *means* or *capabilities* that give states the option to engage in FS. Our intent is to conceptualise, and begin to assess, the international monetary and financial profiles of states, profiles that in turn either permit or inhibit their subsequent FS options.

The paper, which builds on but very significantly reconceptualizes Armijo, Tirone, and Muehlich (2014), proceeds in three major sections – concepts, measurement and initial findings, and then an illustrative application to the controversial question of the future of US financial hegemony. We begin by discussing financial power from a theoretical perspective and then define four distinct conceptual financial dimensions, or 'pillars', within a state's overall financial power capabilities: creditor, network, currency, and governance capabilities. Possession of large shares of any financial capability pillar enhances a state's options to exercise FS. Next, we introduce a new dataset to assess states' financial power potentials along each dimension and present data from each measure illustrating the means of FS available today to the United States, China, and a small set of other major powers. For comparison, we include an index composed of more traditional measures of state power, including economic and technological capabilities. Finally, we address an important contemporary discussion: the likely future of the US as the world's financial hegemon. By combining our data with historical evidence, we propose a possible financial life cycle of major states. To foreshadow our conclusions, we are less convinced than others of the inevitability of continued US financial hegemony. Both our concepts and our data, as well as the longer historical record, suggest the rise of future challenges, including from China, although the timing and nature of change cannot be known in advance.

Our paper also begins with an explicit caveat: we are not advocating the use by national leaders of financial aggregates, regulations, or other capabilities to achieve foreign policy advantage. Rather, we observe that many states in fact do pursue FS. We therefore analyse how each state's global financial profile shapes its options for FS.

Concepts: Theorising the capabilities for financial statecraft

What are the potential resources that states can use in the execution of FS, and what effects might they have? To answer we need to think briefly about power. In international relations there have been two dominant approaches to explaining the roots of power: the 'power as resources' (or 'elements of national power') approach, and the 'relational power' (or 'social power') approach (Baldwin 2013, Cohen 2015: 33–7). According to the 'power as resources' approach, power arises from specific possessions or properties of a state such as its population, territory, national resources, or military forces. This view is adopted in various indicators of national power built from lists of material attributes,

including the Composite Index of National Capabilities (CINC) (Singer *et al.* 1972). Meanwhile, the 'relational power' approach conceives of power as 'a relationship (actual or potential) in which the behaviour of actor A at least partially causes a change in the behaviour of actor B' (Baldwin 2013: 274; see also Dahl 1957: 202–3). In this 'relational power' approach, however, power can be identified or measured only when it has been exercised, giving rise to the analytical problem that power can then be examined only retrospectively.

A primary goal of this study is to construct indices measuring diverse facets of the *ex ante* financial power *potentials* of a state. It is thus interested in the *potential capacities* that will likely be called into use for FS, and adopts the 'power as resources' approach in the sense that the indices are built based upon certain financial possessions and properties of states. This approach has a significant analytical advantage in that the shifts in a state's relative power potential may be tracked over time, even though the state's actual exercise of its power will be episodic and dependent on the choices made by it and by other actors. To quote Nye (1990: 26), 'power in this sense means holding the high cards in the international poker games'. National leaders may choose to value (or ignore), hoard (or squander), and deploy (or refrain from politicising) four broad categories of financial and monetary resources for the conscious purpose of obtaining foreign policy advantages. We term these a country's credit, network, currency, and governance capabilities.

Although this study employs a 'power as resources' approach in constructing its financial capability indices, it does also identify how the four financial capabilities could affect the power relationships among states. In doing this, we consider diverse dimensions and 'faces' (or modes) of power (see Baldwin 2013, Cohen 2015: 29–43), going beyond the notion of power as mere direct influence which is often called the 'first face' of power. They include 'autonomy,' 'structural power' and 'soft power'. 'Autonomy' means the ability to operate independent of pressures from others (Cohen 2006, 2015: 29–33). 'Structural power,' which is close to the concept of the 'second face' of power, is the power to shape and determine the structure within which actors operate (Strange 1988). It results in the extraction of advantages through making possible the favourable writing and rewriting of the rules of the game. It may be exploited proactively, but can be exercised unintentionally as well simply 'by being there' (Strange 1996: 26). 'Soft power' refers to the ability to get others to do what one wishes through attraction rather than the use of payment or coercion (Nye 2004). Finally, there is the so-called 'third face' of power, the ability to shape or alter actors' own preferences. Although space prevents full elaboration here, we highlight connections between power theory and state financial capabilities throughout.

Creditor Capability

In most cases, a creditor state is one whose firms, private individuals, and government run a collective surplus with the rest of the world: a state becomes an international creditor by first experiencing a persistent surplus on the current account of its balance of payments (BOP). A current account surplus necessarily implies an equivalent capital account deficit (that is, net capital exports and/or accumulation of foreign exchange reserves).[1] A current account surplus thus provides a country's citizens and/or government the freedom to export capital voluntarily, through outward foreign direct investment (FDI), loans to foreigners, citizens' purchases of foreign portfolio assets (stocks and bonds), and deposits in foreign banks. Although a BOP surplus is generally necessary in order for a state to become a creditor, one exception exists: the state issuing a leading international currency can create credit and provide it to foreign actors simply by printing its currency, so long as foreign actors are willing to hold such assets. For decades, the US has been in this favourable position. However, it is unclear how actively a key currency state can utilise this ability without causing others to mistrust the future solidity of its currency.

In international relations, as in local social networks, money talks. A creditor state may deploy investible funds, which others may desire. If the incumbent government of a creditor state is able, whether via regulation or via direct allocation, to control how, when, and whether its surplus flows

abroad, this will augment that state's structural power in the world political economy. A state with credit capability can thus either extend or restrict the range of options available to other states (Strange 1988: 24–32). For instance, the rapid economic reconstruction of Europe after World War Two was greatly aided by US lending, mainly through the Marshall Plan (Strange 1988: 102). More recently China's Belt and Road Initiative (BRI), first mooted in 2014, is already bringing about meaningful changes in the global distribution of credit.

A country with heavy reliance on foreign credit and investment is susceptible to political influence from its creditors. China, India, and others invest in Africa today to win friends and access secure future streams of valued natural resources (Kumar and Stanzel 2016). Similarly, China and Japan engage in investment competition in Southeast and South Asia. In Latin America, China's trading and creditor capabilities, often explicitly linked via tied loans, have made its ships the second largest users of the Panama Canal, and China a larger provider of new credit than the US (Jiang 2018, Jin 2018, Pavoni 2018). A creditor state may increase its soft power. Thus China's image has improved in many, if not all, countries that have received financial support from it. Debtor states also may adjust their international diplomatic positions to flatter and support potential lenders (Kuziemko and Werker 2006, Dreher *et al.* 2008). Conversely, a state with less reliance on foreign capital is more autonomous. Large holdings of official FX reserves therefore constitute an important defensive FS capability, as they provide insurance against financial crisis and reduce the borrower's susceptibility to the influence of the creditor.

Market Centrality and Network Power

A second component of a state's international financial profile is the degree to which its home financial markets occupy a central position within complex financial networks, providing relatively frictionless transactions and reliable adjudication of contract disputes (on network power see Kahler, ed. 2009). A state with international financial network capability attracts foreign citizens to transact business in its home capital markets. For example, American Depository Receipts (ADRs) allow foreign corporations to list their shares on the New York Stock Exchange or NASDAQ, where they are quoted, traded, and settled in US dollars. Firms from two different countries also may choose to transact in a third, because of a belief (by one or both of the direct parties to the exchange) that the legal and judicial environment in the booking country is exceptionally fair, clean, predictable, or otherwise advantageous.

Functioning as an essential node for others implies that the domestic financial markets are themselves large. Most economists accept that financial 'depth', defined as a sizable and diversified domestic financial sector in comparison to the overall national economy, is a necessary if insufficient component of economic growth (Rajan and Zingales 1998, Kalra 2010).[2] Moreover, if a government is perceived by the markets as a 'good' borrower, then it need never repay the principal of the debt, but only the interest, as investors will be willing to continue lending indefinitely. Even a home financial market that is not especially transparent, liquid, or open to global investors can – if it is large and intermediates significant savings – provide an important power capability in the form of autonomy from the volatility and contagion that periodically devastate global financial markets.

Inhabiting a central position in the global financial network may enhance a state's direct influence over foreign actors (Kahler, ed. 2009). The US government can impose financial sanctions simply by creating and publishing online blacklists, denying foreign governments, banks, and citizens access to their US bank accounts and the right to transact business in the US. Governments with high financial network capabilities may also extend their sanctions to third country financial institutions doing business anywhere in the world with sanctioned parties (Biersteker *et al.*, eds. 2016). A state's status as a central financial node also strengthens its structural power, as shown by foreign banks' compliance with US financial regulations when doing business in the US markets, and foreign regulators' emulation of US rules (Simmons 2001, Drezner 2007, Chey 2014). Germain (2016) thus suggests that the US, together with Britain, whose jurisdiction is also a central financial node, played the

leading roles in constructing the resolution regimes for Global Systemically Important Financial Institutions. A state's reputation as a safe haven may reinforce its soft power, allowing it to weather international panics that devastate others (Oatley *et al.* 2013, Oatley 2015).

Dominant Currency Status

Currency power is among the most-analysed dimensions of a state's international monetary and financial profile (Kirshner 1995, Cohen 1998, 2015, Eichengreen 2008, 2011, Subramanian 2011, Chey 2012, Cohen and Benney 2014, Norrlof 2014). An international currency is a currency that foreign citizens, firms, and governments wish to use or hold. It serves the three functions of money – as a medium of exchange, a unit of account, and a store of value – at two levels, for private and public transactions, and accordingly plays six roles in total (Cohen 2015). The issuer of a globally-dominant currency possesses currency capability.

Policymakers in the key currency country enjoy a significant increase in their state's policy autonomy. Foreigners' willingness to accept and hold a currency enhances the issuing state's de facto borrowing capacity, which in turn amplifies its ability to delay BOP adjustments, reducing its macroeconomic constraints. The US, for example, has run current account deficits for over three decades thanks to the status of the dollar as the dominant international currency.[3] The relaxed payment constraints indirectly help to strengthen the state's potential for direct influence by making it easier for it to utilise its economic resources in pursuing diverse foreign policy goals – whether diplomatic, economic or military (Cohen 2015: 77–101, Oatley 2015).

Furthermore, its issuance of a leading international currency tends to heighten the issuing state's structural power. Thus, although some observers worry that the US is increasingly vulnerable to China, which now holds the largest foreign share of US Treasury bonds, China cannot significantly reduce its holdings without fear of sparking a US Treasury bond selloff, which would hit the value of its remaining assets (Eichengreen 2011: 135). This also illustrates the third face of power of the state issuing the key currency: those who use the dollar tend to develop vested interests in dollar stability or may support their countries' maintenance of close ties with the United States (Helleiner and Kirshner 2009: 6).

Governance Capabilities

The fourth core FS capability accrues to states wielding clout in global or regional economic and monetary governance regimes. Those countries that were powerful when institutions such as the IMF and World Bank were first created continue to be favoured by their rules, procedures, and ideologies, even long after their initial power advantages have waned (Strange 1988, Kirshner 1995, 2014, Gruber 2000, Stone 2001, Chwieroth 2010). In addition to formal and multilateral international governance organisations (IGOs), substantial global 'governance' emerges from less formal processes such as the regularly-scheduled leaders' summits of the G7, G20, and so forth, despite their lack of a physical address or permanent staff. A similar outsize and slowly-evolving ('sticky') global financial governance capability for the home states of their original organisers inheres in transnational (non-state or sub-governmental) actors, processes, and institutions. Actors from advanced industrial countries continue to play a disproportionate role in public-private financial regulation and governance, even as these countries' relative hard power capabilities decline (see Wade 2011, 2013, Porter, ed. 2014, Helleiner 2016). Moreover, in times of stress and crisis, major powers unhesitatingly assert their authority over transnational financial processes and actors, just as they do over minor powers (Simmons 2001, Drezner 2007).

The primary mode of power that the major players in international governance regimes exercise thus is clearly structural, given their historic dominance in writing and altering the rules of the game in international finance, as well as in setting the related reform agendas. Today's status quo powers also exercise their soft power by promoting certain financial and monetary ideas, as seen for example

in the significant contributions of the IMF and the World Bank to the worldwide diffusion of the 'Washington Consensus' ideas about economic reform (Williamson 1990).

Measures: The GMFPS Dataset and Initial Findings

The preceding section identified four dimensions of a country's global financial profile that incumbent political leaders might employ as direct or indirect levers of foreign policy. This section quantifies these dimensions, tracking their relative increase or decrease among a set of countries over time. Our original dataset, the Global Monetary and Financial Profiles of States (GMFPS), includes 27 indicators and 4 composite indices for 180 countries, currently covering 1995–2013. The dataset reports each country's annual share of global totals for each indicator and composite, and GMFPS users may also compare regional or other subgroups.[4] Most publicly-available international financial data have not been presented with a FS perspective in mind, although the work of Lane and Milesi-Ferretti (2007), on which we draw, comes closest. Online appendices provide additional details on data construction, sources, and values. The GMFPS dataset is available online at https://sites.google.com/site/danielctirone/datasets.

An important criticism of comprehensive power indices observes that actual power is multidimensional and issue-specific. Critics accordingly suggest identifying power structures directly relevant to different issue-arenas (Baldwin 2013). We sympathise with this view. Accordingly, we hope to illuminate *diverse* dimensions of state financial capabilities by constructing multiple indicators. Empirical support for variation among our indicators and pillars may be found in the Appendix table detailing correlations among the measures. While there is, as expected, some degree of positive correlation, the range in values suggests that each measure reflects a distinct aspect of financial capabilities. We hesitate to create a single index of state financial capability, which would require clearer theoretical assumptions about the relative importance of each of the four pillars than we are prepared to make. If desired, another researcher easily could create such an index.

The remainder of this section introduces the main included indicators, reporting values for theoretically-interesting countries. We focus on shifts between the beginning and end of the series, having observed clear trends (increasing, stable, or diminishing) for major countries and country aggregates.

Overall Material Capabilities

As a check, and in recognition that country financial profiles evolve slowly, we first calculate a straightforward material capabilities ('power') index (*MCI*). Modelled on and constructed similarly to the well-known composite index of national capabilities (*CINC*),[5] but with updated indicators, our MCI averages a country's shares in the world economy, military spending, population, industrial technology, and trade. The hard power capabilities tracked should be understood as *necessary yet by*

Table 1. Material capabilities: key countries and aggregates (% of global totals)[a].

		Economy (EW)	Population	Trade (TST)	Technology	Military expenditure	Material capabilities (MCI)
US	1995	24.9	4.7	13.9	21.3	39.2	20.8
	2013	22.3	4.4	11.4	16.8	37.1	18.4
G6	1995	41.8	7.2	35.7	45.4	28.7	31.8
	2013	24.0	6.0	23.9	26.5	15.5	17.9
China	1995	2.5	21.1	2.3	2.3	1.8	6.0
	2013	12.6	18.9	9.5	19.7	11.1	14.4
Other G20	1995	6.6	8.2	7.6	5.3	7.4	7.0
	2013	9.6	8.3	10.2	12.6	9.7	10.1
Full G20	1995	81.6	64.1	63.5	81.4	83.4	74.8
	2013	77.4	61.1	61.7	81.5	83.2	71.7

[a]Abbreviations in parentheses represent the labels used in the GMFPS dataset.

no means sufficient for a country to exercise international influence or preserve its autonomy. Table 1 and the other tables track the shares of the major advanced industrial economies of the G7 (the US, Germany, Japan, UK, France, Italy, and Canada), along with the other members of the large economies club, the G20, which also includes the emerging economies of the BRICS group (Brazil, Russia, India, China, and South Africa), Australia, and six additional emerging or recently-emerged economies (Argentina, Indonesia, Mexico, Saudi Arabia, South Korea, and Turkey).

Several trends jump out. First, the combined global MCI share of these nineteen countries is both large and fairly constant, representing about ¾ of the world in both 1995 and 2013, and implying that rising multipolarity is not wholesale global redistribution, but instead redistribution among a smaller set of major and/or regional powers. Second, the relative position of the US is fairly stable, accounting for almost 21 per cent of global hard power resources at the beginning of the study period, and 18 per cent at its end. Moreover, part of the apparent US drop reflects the limited options available for assessing 'technology', measured here as the mean of a country's annual share of total world industrial value-added and new patents granted to residents: true high technology capabilities likely are under-represented, so the actual US share may be larger.[6] In addition, it bears emphasising that this index ignores the soft power capabilities of the US: English is the language of global business and research; American popular cuisine, brands, and movies are ubiquitous; democracy and free markets remain global aspirations (Nye 2004). Third, the combined MCI share of the remaining major advanced industrial countries, the G6, falls dramatically in this relatively short period, from 32 to only 18 per cent. Fourth, the share of China rises dramatically, from 6 to over 14 per cent, while that of the remaining G20 countries, overwhelmingly emerging economies, also increases 4 percentage points. Foreshadowing trends discussed below, we observe that none of the financial dimensions mapped by the GMFPS dataset reveals this large an intercountry shift, although their directions of change mimic that of the traditional hard power capabilities. We conclude that state financial capability shifts reflect, but tend to lag, changes in more traditional hard power capabilities.

Creditor Countries

Neoclassical economists encourage countries to pursue balanced trade in the medium run, and in principle consider both external deficits and surpluses problematic (Rajan 2010, especially pp. 46–67, 202–24). Much recent discussion in Western policy circles and the financial press thus has focused on 'global imbalances', a framing implying that both chronic creditor and persistent debtor countries possess equally troublesome BOP conditions (Wolf 2008: 58–110). Nonetheless, in practice most governments prefer to run trade and current account surpluses, if they can, believing that this enhances their freedom of action (autonomy), for example, by enabling the continuation of crucial food or energy imports during a crisis. We therefore identify international creditor status as a political capability – and international debtor status, fundamentally, as a liability.

The GMFPS dataset includes three measures of potential or actual creditor status. We report each country's annual current account share (*CAS*), calculated as each surplus country's total of the global BOP surplus for that year. Countries without a surplus have 0 per cent. However, since CAS represents *potential* but not actual creditor power, it is *not* included in our composite measure. Instead we combine two measures of actual creditor status. Foreign exchange share (*FXS*) shows each country's share of total official reserve holdings, excluding gold, in a given year. International investment share (*IIS*) assesses a country's net holdings of foreign financial assets, excluding official reserves, in a given year.[7] The creditor capability pillar (*Creditor_P*) is then calculated as the mean of FXS, representing relatively liquid assets, and IIS, reflecting holdings of longer-term assets such as bank loans, debt securities, and foreign direct investment. Table 2 reports initial results.

A few observations suffice. We begin with the advanced industrial economies. In 1995, the world's largest current account surpluses belonged to the G7, but mainly to Japan, with about 42 per cent of the global BOP surplus, even a decade after the Plaza Accord of the mid-1980s, whose goal was to 'talk down the US dollar', making US exports more competitive and Japanese ones less so (Bergsten

Table 2. Creditor capabilities: key countries and aggregates (% of global totals)[a].

		Current account share (CAS)[b]	Foreign exchange share (FXS)	International investment share (IIS)	Creditor pillar (Creditor_P)
US	1995	0.0	5.4	0.0	2.7
	2013	0.0	1.1	0.0	0.6
G6	1995	54.9	28.1	50.7	39.4
	2013	21.0	13.3	41.7	27.5
Japan	1995	41.5	13.3	47.3	30.3
	2013	2.3	10.5	23.1	16.8
Germany	1995	0.0	6.2	3.3	4.8
	2013	17.2	0.6	18.6	9.6
UK	1995	0.0	3.1	0.0	1.5
	2013	0.0	0.8	0.0	0.4
China	1995	0.6	5.5	0.0	2.7
	2013	12.5	32.6	0.0	16.3
Other G20	1995	0.0	8.0	3.7	5.8
	2013	14.6	13.0	4.5	8.7
Full G20	1995	58.1	53.2	54.3	53.8
	2013	50.4	69.8	46.2	58.0

[a]Abbreviations in parentheses represent the labels used in the GMFPS dataset.
[b]Not included in the calculation of Creditor_P. Reported for informational purposes only.

and Green, eds. 2016). However by 2013 Japan's CAS had shrunk to only about 2 per cent of the global total, still substantial but very much reduced. Yet Germany's 2013 share was even larger: just above 17 per cent, a statistic that explains some of Germany's influence within the EU – as well as the resentment against Germany felt by other EU members. Advanced economies in a position to become global creditors transformed their payments' surpluses into the longer-term, less liquid assets tracked in our IIS variable. We note that neither of the historically-dominant creditor countries, UK and US, has been a surplus country in recent years, retaining only relatively small shares of global foreign exchange holdings for transaction purposes.

A different picture emerges from the major emerging powers. China's trading power is reflected in the growth of its current account share to about an eighth of the world's total by 2013. However, most of this surplus was cautiously deployed in liquid assets, especially foreign exchange reserves (see FXS), rather than in the more remunerative, but less-flexible, international investment assets (shown by IIS). Chinese behaviour, echoed by other emerging economies, reflects these countries' recent experiences of emerging market financial crises, in which central banks burned through large amounts of reserve assets defending their national currencies. As of the end of this version of the dataset, none of the BRICS had accumulated a net stock of foreign financial assets, but this may change. After 2013, and thus outside the years covered in this version of the dataset, Chinese policymakers began to transition to a more assertive deployment of their national surplus. With the rise of its sovereign wealth funds and the BRI, China has begun to transform its structural payments surplus into global wealth and influence, especially in the world's East and South (Gallagher 2016, White and Case 2018). China's growth as a creditor state suggests that the next round of emerging market crises could begin with defaults to Chinese state banks, not Western private lenders (Hurley *et al.* 2018).

Also intriguing, although not shown in the table, is the ratio of a country's share of Creditor_P to its importance in global GDP, an indicator of the country's likely capability for punching above its overall political and economic weight in global financial governance councils. As of 2013, standouts on Creditor_P/GDP included Singapore, whose creditor status exceeded the size of its economy by almost *nine* times, Saudi Arabia, Switzerland, and Norway. Is it any wonder that tiny Singapore was, along with Hong Kong (a proxy for China), the only emerging economy initially invited into the Financial Stability Forum, founded in 1999 to discuss reforms of the 'global financial architecture' in the wake of the Asian financial crisis? And are we surprised at the inclusion of Saudi Arabia – in 2016 ranked only 20th globally in market rate GDP and 41st in population – as the sole Arab member

of the G20? Clearly the status quo advanced industrial countries, who have controlled access to these exclusive clubs, pay attention to middle-income countries with outsize creditor capabilities.

Network Managers

Countries may enjoy large network financial capabilities for one or more of three reasons, which may not move together. First, their home financial markets are perceived as easy, competent places to do business. Second, countries with long-enduring political and economic stability are viewed as safe havens for foreign savings. Third, as countries become more central to global trade, others will hold funds in their home markets for convenience. We assess network capabilities via two indicators: the sheer size of the domestic financial market and its centrality to global financial flows. The first data column of Table 3, labelled 'home financial weight', shows a country's domestic financial sector (bank deposits + corporate shares + corporate and government bonds), assessed in USD terms at market exchange rates, as a share of all countries' financial markets combined in that year. The next column, international transactions share, reports the size of annual financial flows into and out of a national economy as a share of all international financial transactions in that year, showing a country's importance to global investors as a jurisdiction for trading securities, parking funds, and purchasing financial services. The network capability pillar (*Network_P*), is the mean of the two.

If we compare countries' shares of Network_P and Creditor_P, we see that the global distribution of network and creditor capabilities differs markedly. Neither the UK nor the US is today a creditor state: both lack a CAS, have modest FX holdings, and foreigners now own more of their home financial assets than the reverse. Their ability therefore to entice foreign policy cooperation by dangling offers of cheap loans or FDI is quite limited – even if their gross capital outflows are partially funded by the willingness of foreign central banks to accumulate USD and sterling as insurance against the next crisis. In contrast, as of 2013, the US accounted for fully a quarter of global network capability and the UK for a tenth, and both countries' shares had marginally *increased* from 1995. The large and enduring network capabilities of both countries reflect the widespread belief that these countries have credible domestic financial laws and regulation, and that they are safe havens during crises – and both governments have made conscious efforts to maintain this reputation. There were even large capital inflows to the US during and after the global crisis of 2007–9, despite the fact that the crisis began in US financial markets (Kirshner 2014, Winecoff 2015, Wolf 2015).

Table 3. Network capabilities: key countries and aggregates (% of global totals)[a].

		Home financial weight (FWD)[b]	International transactions share (MSIF)	Network pillar (Network_P)[b]
US	1995	28.2	18.0	23.1
	2013	28.8	20.6	24.7
G6	1995	54.5	42.7	48.6
	2013	35.5	34.1	35.2
Japan	1995	31.4	10.6	21.0
	2013	17.2	4.2	10.8
Germany	1995	8.2	7.8	8.0
	2013	4.7	6.8	5.9
UK	1995	4.3	12.0	8.1
	2013	5.0	12.4	9.8
China	1995	0.9	0.9	0.9
	2013	9.6	2.5	5.8
Other G20	1995	2.7	4.0	3.1
	2013	5.9	3.8	4.7
Full G20	1995	88.3	67.5	77.4
	2013	86.4	63.2	74.8

[a]Abbreviations in parentheses represent the labels used in the GMFPS dataset.
[b]Latest data are from 2011.

However, the global Network_P share of the remaining five advanced democracies of the G7 declined strikingly over the study period, falling from about 41 to 25 per cent, while in sharp contrast, the share of China swelled from 1 to 6 per cent of global totals, reflecting foreigners' needs to do business with China. As with the Creditor_P, the combined G20 share of Network_P was stable at around ¾ of the world total, with a redistribution of over 9 percentage points in favour of the other emerging economies, especially the remaining BRICS. The data thus reveal a persistence of financial network power among the major economies of the G20, with continued dominance by the traditional financial hegemons, the US and UK. Within the G20 countries, we observe a marked recent rise in China's Network_P score, achieved at the expense of the remaining G5 advanced industrial democracies.

Dominant Currency States

Currency capability represents yet a different face of international financial power. The GMFPS dataset tracks, first, a currency's share of all official FX reserves, and second, a currency's importance as a denomination for globally-traded corporate bonds. We anticipated some divergence between our two currency indicators. Central banks, who allocate a country's official reserves, have a fiduciary responsibility to invest conservatively. They also will avoid actions that could provoke a run on a currency in which either the central bank or private citizens are heavily invested. In contrast, the private investors who purchase globally-traded corporate bonds, have clear incentives, in the case of any fears about the value of a given currency, to exit first, dumping assets quoted in that currency. The currency composition of central banks' portfolios therefore should be more stable than those of private investors. We calculate the composite pillar for overall currency capability (*Currency_P*) with a 60 per cent weighting for a currency's importance in official reserves and a 40 per cent weighting for its share as a currency for denominating international bonds, reflecting our judgment that central bank choices may be intrinsically more politically significant. However, as global corporate debt markets ($18 trillion in 2015:Q4) are close to twice the size of official FX reserves ($11 trillion), dataset users could implement a different weighting.

Table 4 demonstrates that the G7 countries hold massively dominant shares of currency capability, accounting for almost 99 per cent of global FX reserves and 85 per cent of international debt issues. Over the study period, the USD had a slightly decreased share in other countries' official reserves, but increased its weight in global corporate debt issues. The UK's position is intriguing and somewhat contradictory. Sterling continues to be held as an official reserve asset, approximately mirroring Britain's estimated overall share in global material power capabilities. Nonetheless, the global share of

Table 4. Currency capabilities: key countries and aggregates (% of global totals)[a].

		Official reserves (CDSRA)	Global bond denominations (CDSD)[b]	Currency pillar (Currency_P)[b]
US	1995	68.1	48.9	62.9
	2013	62.8	54.9	59.7
G6	1995	31.2	36.6	31.2
	2013	35.0	28.8	32.5
Japan	1995	7.8	16.0	10.3
	2013	3.9	3.5	3.8
Germany	1995	18.2	18.3	17.0
	2013	22.3	22.5	22.4
UK	1995	2.4	0.0	1.8
	2013	4.1	0.0	2.5
G7	1995	99.3	85.5	94.1
	2013	97.9	83.7	92.2
G20 (without G7 or China)	1995	0.0	0.0	0.0
	2013	1.9	0.0	1.1

[a]Abbreviations in parentheses represent the labels used in the GMFPS dataset.
[b]Series begins 1999.

sterling-denominated business borrowing, as measured by international corporate bonds, is negligible, and the Brexit turmoil is decreasing both the UK's network and currency roles. We assess Germany's currency clout initially with shares for the German mark, and after 2000 with shares for the Euro divided between Germany and France in the ratio of their respective shares of official reserve holdings in 2000. Global preferences for both Euro-denominated reserves and corporate debt increased to 2013. In that year, 'Germany's' Currency_P share was 22 per cent, although the subsequent rise of the populist and nationalist right in Western Europe likely poses threats to both the single currency and common market (Germain and Schwartz 2014). Finally, although the yen remains significant, Japan's relative share collapsed from 10 to 4 per cent of total Currency_P capability.

Through 2013, none of the emerging market currencies had made a dent in world currency demand. The elephant in the room is of course China. Much has been written on the likely future expansion of the renminbi (RMB) (Subramanian 2011, World Bank 2011: 125–59, Chey 2013, Helleiner and Kirshner, eds. 2014, Rabinovitch 2016, McNally and Gruin 2017). In a move with great symbolic significance although smaller immediate practical consequences, the IMF announced that, beginning in October 2016, it would collect data on RMB holdings in order to include it in the currency basket of the IMF's own quasi-currency, the Special Drawing Right (SDR), initially allocating it a weight of 10.9 per cent (IMF 2016). Since then, the IMF also has published the RMB share in total official FX reserves. As of late 2017, the RMB accounted for a mere 1.2 per cent of total allocated reserves.

Governor Institutions and Clubs – And the Countries That Dominate Them

Multiple international financial governance organisations exist. First, there are the two Bretton Woods institutions, the International Monetary Fund (IMF), the leading global institution for monitoring global payments and emergency balance of payments lending, and the World Bank (WB), the premiere multilateral development lending institution. Although their direct influence is limited to their crisis-hit borrowers, the Fund and Bank also exercise enormous ideational sway over international views on currency and financial crisis management, macroeconomic policymaking, and economic development. Meanwhile, since its inception as the G5 in the 1970s, the current G7 has been the informal steering group for economic coordination among the major advanced industrial democracies (Bergsten and Henning 1996, Keohane and Nye 2001). Since the American subprime-lending crisis went global with the September 2008 crash of American investment bank Lehman Brothers, the larger club of G20 nations has also played an essential role in global financial crisis management (Kirshner 2014). There also exist numerous important regional multilateral banks, such as the Asian Development Bank and new Asian Infrastructure Investment Bank, along with standard-setting or regulatory bodies, including the Basle Committee on Banking Supervision (BCBS), the International Organization of Securities Commissions (IOSCO), and the Financial Stability Board (FSB). Conceding the actual institutional complexity, we sought to build an index that was succinct, global in coverage, and a reasonably accurate indicator of states' power in international monetary and financial governance.

We therefore track memberships in what we judge to be the four chief bodies for global monetary ideas and international economic and financial governance: the IMF, the WB, the G7, and (from 2009 only) the G20.[8] Leadership exercised via these four institutions has been central to the spread of ideas about fundamental international policy problems including exchange rate regimes, capital controls, and sovereign debt relief, as well as to the management of both individual country and global financial crises. As a practical matter, membership in more technical organisations such as the BCBS, IOSCO, and FSB has closely tracked the parallel expansion and rebalancing within the IMF, WB, and G7/G20, and it is primarily within the latter that overt tussles over political representation have occurred (Roberts *et al.* 2018: 72–87). Within the Bretton Woods institutions, countries' capital contributions largely determine their voting rights. Thus, our financial governance pillar, *Governance_P*, includes, first, each country's statutory contributions ('quotas') to the IMF, and second, its

official contributions ('capital subscriptions') to the WB. A third indicator reflects a country's membership in the major 'G' clubs, which we define as the advanced industrial countries' G7 from 1995 through 2008, and an equally-weighted mix of the G7 plus G20 thereafter, reflecting our judgment that the G20 became empirically significant in international crisis management only in late 2008, while still without fully replacing the G7. The resulting composite allocates a 1/3 weight to each component: the IMF, WB, and the average of the G7/G20. As with our other composites, the GMFPS dataset makes it easy for another researcher to recalculate the pillar, as needed.

The authors acknowledge that Governance_P may well understate the continuing structural financial power exercised by the US. The US retains de facto veto power over major decisions in both the Fund and the Bank, and both institutions maintain their headquarters in Washington, DC, creating the geographic basis for an epistemic community linking Fund and Bank staff, American government officials, and the US private financial community: the so-called 'Washington Consensus' (Williamson 1990). However, as any data bias against the US should be constant, one can be reasonably confident in trends over time. Table 5 reveals a modest shift of global financial governance capabilities away from both the US and G6. The shares of emerging powers in the IMF and WB increased, and Japan also received an increase at the Bank. The shift from global crisis management by the US and G7 to including the G20 as a necessary partner drives the overall result. The 19 countries of the full G20 accounted for around 3/4 of all Governance_P capabilities throughout.

An Illustrative Application: The Future of American Financial Hegemony

This paper proposes that we can better understand states' capacities for exercising FS by recognising that their international financial profiles are not all of a piece. We defined, then comparatively assessed, four different faces of a country's global monetary and financial power potentials: creditor, network, currency, and governance capabilities. So what? What are the implications for enduring puzzles of international relations and political economy? These preliminary findings speak to four consequential issues: first, the comparison of traditional power capabilities with specifically financial ones; second, the possibility of a financial life-cycle for states; third, the nature of change in financial markets; and fourth, the question of the solidity and staying power of the United States as the global financial and monetary hegemon.

Diverse Financial Capabilities and the Interstate Balance of Power

How do shifts over time in the four financial pillars, and in a more traditionally-conceptualised material capabilities index, compare to one another? Table 6 reproduces the shares of major countries and groups on all five composites. It first suggests that movement toward greater global multipolarity in the distribution of traditional hard power capabilities (our MCI) is underway. Three

Table 5. Global financial governance capabilities: key countries and aggregates (% of global totals)[a].

		IMF quota (IMF_Share)	WB capital subscription (WB_Share)	G7 & G20 weight (PES_Share)	Governance pillar (Governance_P)
US	1995	19.8	17.5	14.3	17.2
	2013	17.7	16.1	9.8	14.5
G6	1995	30.0	27.0	85.7	47.5
	2013	25.0	27.8	58.6	37.2
China	1995	2.5	3.1	0.0	1.9
	2013	4.0	5.8	2.7	4.1
Other G20	1995	10.2	9.2	0.0	6.5
	2013	9.6	9.4	18.4	12.5
Full G20	1995	67.3	65.5	100.0	77.6
	2013	63.8	67.3	100.0	77.0

[a]Abbreviations in parentheses represent the labels used in the GMFPS dataset.

Table 6. Relative power capabilities compared: key countries and aggregates (% of global totals)[a].

		Material capabilities (MCI)	Creditor pillar (Creditor_P)	Network pillar (Network_P)[b]	Currency pillar (Currency_P)[c]	Governance pillar (Governance_P)
US	1995	20.8	2.7	23.1	62.9	17.2
	2013	18.4	0.6	24.7	59.7	14.5
G6	1995	31.8	39.4	48.6	31.2	47.5
	2013	17.9	27.5	35.2	32.5	37.2
China	1995	6.0	2.7	0.9	0.0	1.9
	2013	14.4	16.3	5.8	0.0	4.1
Other G20	1995	7.0	5.8	3.1	0.0	6.5
	2013	10.1	8.7	4.7	1.1	12.5
Full G20	1995	74.8	53.8	77.4	94.1	77.6
	2013	71.7	58.0	74.8	93.3	77.0

[a]Abbreviations in parentheses represent the labels used in the GMFPS dataset.
[b]Latest data are from 2011.
[c]Earliest data are from 1999.

actors – the US, a relatively declining but also thus far politically cooperative Western Europe, and a rapidly rising China – may be approaching a future rough tripolar balance. Trends over time in relative material capabilities point to China's rise (Wike *et al.* 2017). Meanwhile, observations of contemporary international relations suggest that the major countries surrounding China – including Japan, Russia, India, and Australia – find themselves selecting international partners on the basis of an awkward mix of natural inclination and pragmatic balancing, as would be predicted by such a redistribution of hard power capabilities (Ikenberry 2016).

The four financial composites, however, suggest that different international capability distributions evolve on their own tracks. In terms of overall hard power resources (MCI), the US retained in 2013 about the same fifth of global capabilities it possessed in the mid-1990s. Yet for such a large economy, the US had very little creditor power as our study period opened, and had lost most of that by its end. US network capabilities held steady at about 1/4 of global totals, while US currency capabilities remained massive, hovering around 60 per cent of world aggregates throughout. The other major advanced industrial countries, the G6, assessed collectively, retained their 1/3 share of global currency capability – but dropped in terms of overall (MCI), creditor, and network capabilities. The G7 countries jointly fell from overwhelming dominance of multilateral financial governance to wielding a simple majority of these institutional capabilities. Meanwhile, China's share increased dramatically in all categories except currency. The other BRICS, as well as the remaining emerging or recently emerged (South Korea) economy members of the G20, also increased their shares of MCI, Creditor_P, Network_P, and Governance_P. An undeniable capabilities shift, away from the North and West, and towards the South and East, is in process – including in the realms of overall hard power, credit, financial networks, and global economic governance institutions. However, there is as yet little redistribution in international currency power.

A Financial Life-Cycle for Major States?

Turning to a longer historical record, we could conceptualise these patterns as indicating a voluntaristic life-cycle for the international financial capabilities of some countries. The existence of such a cycle would permit independent regulatory and behavioural choices by incumbent state leaders, yet these choices would be exercised within real resource constraints. Considering only countries which would be termed great or major powers within their time period and relevant international system, two tentative hypotheses seem plausible. First, an initial creditor capability appears as a necessary, although not a sufficient, condition for the subsequent development of significant international financial network, currency, and governance attributes. Second, the choice to develop these other capabilities may tend to undermine the hegemon's creditor abilities, and thus the basis for its initial ascendance. We briefly examine Britain, Japan, the US, and China.

Many historically-dominant financial centres, including Amsterdam, London, and New York City, originally emerged as a consequence of their states' credit-exporting activities. From the late eighteenth century, Britain displaced the Netherlands as the primary international trader, imperialist, and creditor, site of the most important financial market, and issuer of the major world currency (Ferguson 2001, Eichengreen 2008, Schwartz 2010). For a period in the mid through late nineteenth century, Britain was hegemonic across all four types of international financial capabilities, its governance power being represented by its position as the centre of the international gold standard, emulated throughout Europe and the Americas. The expansion of British financial network and currency power, however, tended to erode Britain's creditor power. In the later nineteenth century, Britain's once large trade surplus gradually disappeared, although London slowed its erosion by manipulating the exchange rate and trade-pricing policies of Britain's colonial possessions (de Cecco 1975).

Britain lost first its creditor power and then, progressively, most of its currency power to the rising US in the first half of the twentieth century, although the UK struggled to retain its currency power in the interwar period by dogged pursuit of the ultimately impossible goal of reestablishing sterling's prewar gold parity (Frieden 2006: 173–93). During the Second World War, the US became the creditor to its Allies, including Britain, securing American dominance in the postwar financial, economic, and political settlements. Nonetheless, the UK government's conscious prioritising of the needs of London's financial sector ('the City') under most successive governments has allowed the UK to retain substantial financial network power into the early twenty-first century. Britain's position as a major victor of the Second World War, and closest ally of the US, also provided it with significant structural financial governance capabilities within the Bretton Woods twins, an advantage that has shrunk more slowly than most of its traditional material capabilities.

The US has followed a somewhat similar arc. During the early Cold War decades the US was overwhelming dominant in the full range of hard power capabilities, and also ran enormous trade and current account surpluses, accumulating a large net stock of foreign financial assets. As US network and currency capabilities expanded, however, creditor capabilities declined. By 1971, the US had lost its trade surplus, provoking the so-called 'Nixon shocks,' as the US president suddenly took the country off the US dollar-exchange standard, unilaterally relieving the US of its obligation to exchange any quantity of USD held by foreign central banks for gold, and imposed an across-the-board trade surcharge on rivals and close allies alike (Frieden 2006: 339–51). The US' overall current account surplus disappeared around 1981, and its net positive stock of foreign financial assets around 1991, giving rise to subsequent years of efforts by US and sometimes other G7 policymakers to correct these 'global imbalances' by convincing other governments to intervene in markets to reduce their trade surpluses with the US (Mann 1999, Truman 2005, Ahuja *et al.* 2012). By the mid-1990s, when our dataset commences, the US' small creditor capability relied on foreigners' willingness to hold dollars, although not necessarily to spend on US goods. At the end of the second decade of the twenty-first century, the strong US presence within global financial networks and governance, and its overwhelming currency power, endure. Yet based on historical precedent, we anticipate that the US network, governance, and even currency capabilities will be increasingly challenged in the future.

States that are major but not great powers also experience shifts through different stages of their financial life cycles. Not all states with a strong creditor position choose to (or are able to) build on this initial financial capability, even via the establishment of regional financial networks. Japan, for example, emerged as a major trader and current account surplus state in the 1970s and 1980s, amassing large stocks of foreign financial assets. However, although Japan's home financial markets constituted 30 per cent of the world in 1995, government policies tended to discourage foreign participants. Japan deliberately stepped back from further financial globalisation, leading its share of all international financial transactions to decline from almost 11 to only 4 per cent and world use of the yen to shrink in tandem. In the Asian financial crisis of the late 1990s, the US also blocked Japan's more active leadership in global financial governance (Laurence 2002).

Chinese political leaders are now deciding how to play their hand. By 2013, China accounted for 12.5 per cent of the global current account surplus. In 2014, President Xi Jinping announced the massive BRI, now quoted as representing intended FDI worth upwards of $900 billion. Increasingly confident announcements of government intentions to promote internationalisation of the Chinese currency imply that the authorities have decided to loosen domestic and cross-border financial regulations, allowing China's international financial network capabilities to develop. Nonetheless, ruling elites still fear that foreign inflows and foreign trading activity will bring loss of domestic political control (Vermeiren 2013, Volz 2014). As more years of data for all countries become available, the GMFPS dataset will allow users to track the course of China's likely emergence as an important network and currency power. China will not move in this direction, of course, without ensuring itself commensurate increases in global financial governance capabilities.

Observations on the Nature of Change in International Finance

Whether or not there is anything as predictable as a life cycle for financial hegemons, one may anticipate change in the relative positions of actors in financial markets. Change may be incremental and gradual, or the result of an unexpectedly acute crisis that tips a previously stable, even static, social system into rapid change, even chaos, until emergence of a new equilibrium. Financial markets are social systems. They may be stable over long periods, evolving slowly. However, collective perceptions and beliefs play a large role in constructing and maintaining value in such markets. 'Reputation' is everything in currency, credit, and capital markets – in which everything is fine, wonderful, until suddenly it isn't (Kindleberger 1973, Kirshner 2003). Financial crises very often involve sudden shifts in beliefs. The popularity of a currency for FX reserves, trade invoicing, and transactions ultimately rests on that ephemeral quality: market sentiment. Crises, panics, and sudden stops are endemic to financial markets.

Given the already strong tendency of financial and monetary arrangements to react to new or unexpected events with panics, one should never assume that any given interstate distribution of global monetary and financial capabilities will endure. Today's overarching international financial order may be particularly sticky and resistant to evolution, because change could be extremely disruptive to almost every actor, including all of the major states. However, just because this has been true thus far is not a sufficient reason to assume that it will continue to be so. Consider the intensely interlinked character of financial institutions. The assets of one player are typically liabilities of the others, so that the failure of a medium-sized player – such as Lehman Brothers in September 2008 – may spread contagion rapidly around the world. That this has not happened, and continues to appear extremely unlikely, is testament to the willingness of the governments of major economies worldwide to cooperate in preventing a crisis that would benefit none. Even so, G20 cooperation was greater in the heat of the crisis than it has been in adopting subsequent reforms of the world's financial architecture (Wolf 2015, Chordor 2017). Even a widely agreed 'need' for regulatory modernisation or greater inclusiveness may not generate a coalition for serious reform. When and if a crisis in the regime should appear, it could be fierce and difficult to contain.

The Future of the Current Financial Hegemon

Many of our colleagues conclude that US financial dominance is unchanged, or perhaps even greater than in previous decades. Norrlof (2014: 25) writes that 'pessimism about the durability of dollar hegemony is built on faulty premises'. Cohen and Benney (2014: 1038) observe that 'even today there is only one true pole in the [global currency] system – namely, the US dollar'. Fichtner (2017: 28) finds that 'Anglo-America exerts dominant structural power in global finance', while Oatley *et al.* (2013: 148) believe that 'the US is more firmly ensconced at the centre of the global financial system than commonly appreciated'. Babones (2017: np) goes even farther, observing that 'the centrality of the U.S. in the global economy makes it a new kind of sanctions superpower'. Oatley (2015)

observes that the normal rules of international economic interactions do not apply to the US. In his view, America's large public debt, a considerable share of which is held abroad, reflects, and in turn becomes an enduring source of, America's global power. For other countries, massive foreign debts are a source of weakness – but for the dominant currency country they reveal and even amplify its power. Neo-Marxist scholars also judge American financial hegemony as enduring and tough to challenge (Panitch and Gindin 2013).

This view has dissenters, among whom we number ourselves. Sceptics include Subramanian (2011), who focuses on structural shifts in the balance of payments, as well as Kirshner (2014) and Layne (2012, 2018), who conclude that the US' relative decline and China's rise are inevitable and relatively imminent. This article's analysis suggests that, if one examines a single financial/monetary pillar such as Currency_P, or combines this pillar with other hard power indicators such as GDP or military might, then the result will demonstrate continuing American monetary hegemony. However, if one instead disaggregates monetary and financial capabilities, then some financial dimensions reveal a clear decline. We know, moreover, that financial markets are riven by subjective perceptions ('irrational exuberance'), and prone to crises and blowups, which may rapidly alter the relative situations of financial institutions, markets, and even countries. Is the US immune to such sudden change, associated with a crisis?

Recently, the US has been careless of its enormous monetary and financial capabilities. For example, under US President Trump financial sanctions have been imposed on a number of rising powers, over causes ranging from proxy wars (Russia), to regional aggression (Russia, China), to disarmament disagreements (Iran), to trade conflicts (China), denying these countries access to American-headquartered financial networks. When the US president announced financial sanctions on China for buying Russian military jets, Russian foreign minister Sergei Lavrov responded that the sanctions 'discredit the dollar system', while a Chinese spokesperson accused the Americans of violating 'the basic norms of international relations' (Foy 2018). Every such use of the US' network and currency capabilities encourages both those countries sanctioned directly – and also third party states inconvenienced by US and Western sanctions, including important allies such as Germany, France, and India – to construct or employ alternative financial networks, diminishing the future network centrality of the US in global payments and contracts.

Moreover, the claim that the US can run a current account deficit as long as it likes – since it will always be funded by the voluntary capital inflows of foreign central banks and private investors wanting to hold USD-denominated Treasury debt and other USD assets – surely is fallacious. At some point (which we cannot know in advance), this dynamic will shift and the USD-centric global financial system could experience a crisis. We note the observations of a prominent financial journalist on the ten year anniversary of the crash of Lehman Brothers:

> It is time to admit that [in September 2008] I … deliberately withheld important information from readers. … There was a bank run happening, in New York's financial district. The people panicking were the Wall Streeters who best understood what was going on. All I needed was to get a photographer to take a few shots of the well-dressed bankers queueing for their money, and write a caption explaining it. We did not do this. Such a story might have been enough to push the system over the edge. (Authers 2018)

That financial crisis was, of course, managed, although not without significant costs. Yet other stresses inevitably lie ahead. How country leaders choose to employ the FS capabilities implicit in their monetary and financial profiles remains crucial to their subsequent evolution. Arguably the inability (although not the unwillingness) of Britain to provide international monetary and financial leadership in the 1920s and 1930s, coupled with the unwillingness (despite a growing ability) of the United States to assume such leadership, played important roles in spreading and deepening the Great Depression (Kindleberger 1973, Frieden 2006, Eichengreen 2008). Following the Second World War, the US chose to lead. Yet since January 2017, the US has demonstrated a markedly adversarial and dismissive view of global governance institutions and achievements, taking actions that may tend to undercut its financial network and global governance capabilities. Meanwhile the Chinese,

sometimes assisted by other emerging powers, have been eager to expand their influence and structural power in global governance, including by deploying their rising creditor capability.

Conclusions: State Capabilities and the Means of International Financial Statecraft

This article makes three significant contributions to our understanding of the intersection of global finance and international relations. First, we have expanded theoretical understanding of financial statecraft (FS) by showing that the monetary and financial power potentials of countries are not best understood as a single uniform quality, but rather as an *array* of financial qualities, each of which offers the potential for distinct types of international influence. State leaders may find the means to exercise international FS, should they so wish, by manipulating their country's capabilities as: an international creditor, a nexus for others' financial transactions, a key-currency issuer, and/or a possessor of structural influence in global financial governance.

Second, the article provides an original dataset to measure these four types of state monetary and financial capabilities, and includes an updated hard power index as a comparator. The available data thus far cover only about 18 years. Nonetheless, our analysis demonstrates that national shares in the four financial pillars, as well as the combined shares of groups of states that have on important occasions acted collectively in the realm of FS (including the G7, G20, and the BRICS), move relatively independently. It is not only conceptually important to distinguish, for example, international creditor from international currency capability. As an empirical matter, these capabilities are often possessed by different countries or country groups – as they increasingly are today.

Third, we have further theorised on the basis of these findings, observing that the status of being the international political economy's financial and monetary hegemon is not eternal. The article speculates on the financial life-cycles of major states, while reminding us of the occasionally rapid nature of systemic shifts in both global financial markets and the closely-related interstate distribution of monetary and financial resources. Last but not least, we conclude that assertive and imprudent use of FS could return to bite the user, even the US, as other countries, including longtime allies, delicately move to reduce their future vulnerability by diversifying their current international financial links and options.

Notes

1. The country accumulating FX reserves has a capital outflow. When foreign central banks hold your currency, you have a capital inflow.
2. The relationship probably is curvilinear, as beyond a certain point further increases in the financial sector may be destabilising (Arcand *et al.* 2012, Sahay *et al.* 2015).
3. Hardie and Maxfield (2016) argue, however, that the considerable increase in US indebtedness since 2008 has led to a decline in its autonomy vis-à-vis financial market actors, suggesting that a loss of creditor capability generates negative implications for currency capability.
4. The multicountry groups included in the dataset are offered for illustrative purposes. As the global share in each indicator is calculated only at the country level, the inclusion of these groups has no impact on the calculation of individual measures or aggregates.
5. Available at http://correlatesofwar.org/data-sets/national-material-capabilities.
6. For further discussion on assessing technology, see the implicit debate between Starrs (2013) and Lee (2018).
7. Countries without net foreign assets receive a share of 0 per cent. See Appendix A for details.
8. We do not count the European Union, which holds collective membership in the G20.

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No potential conflict of interest was reported by the authors.

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