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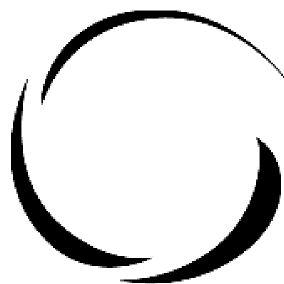

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The Concepts, Consequences, and Determinants of Currency Internationalization

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Abstract

The international statuses of currencies shape a fundamental characteristic of the international monetary system, which has significant impacts on the world political economy by affecting the political as well as economic relationships among states. The study of international currencies has been long dominated largely by economists, however, with political economy research in this area quite underdeveloped. However, the 2008/9 global financial crisis, the subsequent European debt crisis and the recent active Chinese promotion of renminbi internationalization have spurred new and considerable interest among political economists on issues surrounding international currencies. Political economy study of international currencies has thus been gradually growing of late, and making notable progress.

This study provides a comprehensive and systematic review of the literature on international currencies—covering both political economy and economics—with the primary aim of building a useful groundwork to help develop a better research framework for the political economy study of them. In particular, it discusses the international currency concept, the costs and benefits of international currency issuance, the determinants of currency internationalization, and the future prospects of the current dollar-centered international monetary system. This research in addition highlights a group of important issues that need further investigation by future political economy study of international currencies, by drawing special attention to the following issues: historical events, the political determinants of currency internationalization, government policy strategies, and the consequences of international currency choice.

Keywords: Currency internationalization, dollar, euro, international currency, Special Drawing Right, renminbi, yuan

I. Introduction

The international standings of currencies form a principal characteristic of the international monetary order, which shapes the world economic and political system by influencing the economic and political relationships among states. Despite their great impact on the world political economy, however, and with a few notable exceptions,[1] the political economy literature has until recently not paid much attention to the issues surrounding international currencies, and their discussion has as a result been long dominated by economists. Economists initiated extensive debate about the future of the US dollar (hereafter, "the dollar") as the dominant international currency as early as in the late 1960s, when the sustainability of the Bretton Woods system began to be questioned. And disputes among them about the dollar's future as leading international currency have emerged almost any time the dollar has lost substantial value, with particular intensification since launch of the euro in 1999.[2] The contrasting low interest in international currencies on the part of political economy scholarship is in fact a bit odd, considering that one of the founding studies for international political economy as an academic discipline, Susan Strange's 1971 *Sterling and British Policy: A Political Study of an International Currency in Decline*, dealt with the political economy of international currencies.

The outbreak of the global financial crisis of 2008/9 has reignited vibrant debate over the global monetary order, however, and finally now attracted substantial attention from the political economy as well as economics circles. The debate initially began with competing future prospects for the current dollar-centered international monetary system, as the financial crisis had originated from the United States and US crisis management policies had stirred strong concerns about the dollar's future as leading international currency. The subsequent European debt crisis, emerging from 2010, has extended the debate into one on the euro's future as well, with fears growing of a possible breakup of the single currency. In the meantime, the Chinese government has since the global financial crisis suddenly begun to push enthusiastically ahead with internationalization of its currency, the renminbi, generating intense debate over the feasibility of that objective.[3] Against this background, political economy research on international currencies has been gradually growing in recent years.

This study attempts a systematic review of the literature on international currencies, with the aim of providing useful foundations to help develop a better analytical framework for their study. It focuses particularly on the following issues: the international currency concept, the costs and benefits of issuing an international currency, the determinants of currency internationalization, and the future prospects of the current dollar-centered international monetary order. The discussion encompasses not only the political economy

[1] See, for example, Kirshner (1995) and Cohen (1998).

[2] Exchange rates are in fact only an imperfect indicator of a currency's international standing, since that depends fundamentally on the currency's use rather than its price (Cohen 2009a: 742).

[3] The renminbi is also known popularly as the yuan. The renminbi, meaning "people's money" in Chinese, is the official name of China's currency, while the yuan, which literally means "round" in Chinese, is its primary unit.

but also the economics (including economic history) literature, given that the latter has led the study of international currencies over the past decades and that much of the political economy research in this area relies on its findings. This research in addition highlights a group of issues salient to the future political economy study of international currencies. Given that political economy research on international currencies is still in its early stage, there are in fact a number of significant issues awaiting further investigation.

This study is organized as follows. It first discusses the concept of an international currency, and then examines the costs and benefits of issuing one. It next addresses the economic and political factors that affect currency internationalization. Following this it examines and assesses conflicting prospects for the futures of the dollar as well as its primary potential rivals, the euro and the renminbi. It then moves on to consider issues on which more research is needed for further development of the study of international currencies, before providing conclusions in the final section.

II. Conceptualization of international currencies

An international currency is usually defined as a currency that is used elsewhere beyond its home country. The concept can be further elaborated for more systematic analysis, however, through either of two broadly distinct ways. One is to conceptualize an international currency in terms of its functions, and the other to categorize international currencies in accordance with the natures of the factors supporting their international use. The former approach is widely adopted in economics research, while the latter is used increasingly in political economy study.[4]

Functional conceptualization

Conceptualizing international currencies on the basis of their monetary functions is the most widely used practice. This method was proposed by Benjamin Cohen (1971) in his writings in the early 1970s about the British pound sterling, and subsequently refined by Peter Kenen (1983), Paul Krugman (1984) and others. Just like a domestic currency, an international currency performs the three functions of money—as a medium of exchange, a unit of account, and a store of value. It does so at two distinct levels, however, for private and public transactions, and accordingly plays six roles in total. As a medium of exchange, it is used by private actors to settle international economic transactions or by governments as a foreign exchange market intervention currency. As a unit of account, at the private level it denominates international economic transactions while at the public level playing the role of an anchor to which governments peg their currencies. As a store of value, it is used as an investment asset at the private level or as a reserve currency at the public level.

[4] Meanwhile, Christian Thimann (2009) suggests a new concept, the "global" roles of currencies, which encompasses both the cross-border and the domestic uses of currencies to reflect their overall importances in the world economy.

Each of these six functions can be interrelated with the others to some extent, although not inevitably (Cohen 1971).[5]

This functional conceptualization of international currencies contributes significantly to their study by providing an analytical framework for evaluating currency internationalization in terms of the scope of the monetary functions of the currency concerned.[6] Cohen (1971), for example, divides international currencies into two broad groups: "fully developed" international currencies, which perform all six money roles, and "partial" international currencies, which perform only some of them. In a later study (Cohen 1998), he goes further to classify currencies into seven categories—according to not only the scopes of their monetary functions but also the geographical ranges of their use.[7]

The number of currencies that perform all six roles of an international currency on a truly global scale is obviously very limited, with the dollar currently the only one that does so. Some currencies such as the euro and the yen also perform all of those roles, but only within more limited geographical regions. Other currencies usually perform only some of the six money roles.

Political economy conceptualization

As mentioned earlier, the political economy approach in the study of international currencies was pioneered by Strange (1971), who like Cohen (1971) considered sterling in the early 1970s. Directing attention to the *politics* of international currencies, Strange raised the following two questions: "Under what political, as distinct from economic, circumstances do people start to use—either for all or for only some monetary purposes—a currency which is either issued or controlled by a state other than their own?"; and "What political consequences can be expected to follow, for both parties, from this international

[5] For example, a currency's role as an anchor currency or a reserve currency may increase the private sector demand for it, given that currency ties tend to encourage trade links, capital flows and economic integration between economies (Posen 2008: 86-87).

[6] Empirical studies of international currency choice have nevertheless focused usually on the currency compositions of foreign exchange reserves as the main indicator of the international use of currencies—due largely to the high availability of the data, which has been publicly provided by the IMF, and to the expectation that the factors determining the reserve currency role are similar to those affecting the other international currency functions. The IMF data has several drawbacks, however. It for example does not cover China, holder of the largest amount of foreign exchange reserves in the world. Currency compositions can also change owing to fluctuations in value of the currencies held, rather than changes in central bank choice. Recently, studies examining variables other than foreign exchange reserves as indicators of currencies' international uses have been increasing. Goldberg and Tille (2005), for instance, analyze the choice of currency in invoicing international trade transactions, while Meissner and Oomes (2008) examine the determinants of anchor currency choice. Research such as Cohen (2005), Flandreau and Jobst (2009) and Habib and Joy (2008) address currency choice for international bond security denomination and the circulations of currencies in the foreign exchange markets. Meanwhile, Truman and Wong (2006) present changes in the quantity share of the dollar in foreign exchange reserves reported in the IMF data, to thereby eliminate valuation effects.

[7] The seven categories are "top currency," "patrician currency," "elite currency," "plebeian currency," "permeated currency," "quasi-currency" and "pseudo-currency."

use of currency?" In addressing these questions, Strange classified international currencies into four categories: "master currencies," "top currencies," "negotiated currencies" and "neutral currencies," highlighting how both economic *and* political factors shape currencies' international uses.

A master currency is the currency of a hegemonic or imperial state that coerces its use by other states. It thus always derives its status from the political relationships between the issuing and the subordinate states. Sterling in the sterling area and the French franc in the franc zone in the past were examples. A top currency, in contrast, is one that is most favored by the world market for various monetary purposes due to its economic superiority. Its status is therefore determined primarily by economic factors, and it tends to be the currency of the predominant state in the world economy. The dollar in the 1950s was one example. A negotiated currency meanwhile occurs when the issuing state bargains or negotiates politically with other states for their use of its currency, offering inducements such as military and diplomatic support or economic benefits. Examples of negotiated currencies include sterling in the postwar period and the dollar in the 1960s.[8] Finally, a neutral currency is a currency whose international use stems primarily from the strong, but not necessarily dominant, economic position of its issuing state, which has no interest in promoting its international use. Examples include the Swiss franc and the deutschmark during the postwar period (Strange 1971). Importantly, Strange emphasizes that this typology of international currencies is not entirely mutually exclusive, and that some currencies can be of more than one type at the same time. Even if a certain currency is a top currency for some users, for example, it can also be a master, neutral or negotiated currency for others.

This political economy typology of international currencies provides a useful framework for analyzing the effects of political as well as economic factors on international currency status, to thereby expand our understanding of the mechanisms through which a currency is used internationally. And although this typology had in fact been neglected for a long time, Eric Helleiner (2008) has shed new light on it recently, and since then a growing number of political economy studies of international currencies use it, paying particular attention to the top currency and negotiated currency concepts.[9]

III. Consequences of international currency issuance

An international currency benefits the world economy by facilitating cross-border trade and investment in a way similar to that through which a national currency contributes to the national economy. Yet the costs and benefits of an international currency to the issuing

[8] Strange (1971) characterizes a negotiated currency primarily as a currency in decline, that is, one that has lost or is losing its political dominance as a master currency or its economic dominance as a top currency. As Helleiner (2008) points out, however, a negotiated currency can also be a currency on the rise, if its increasing international use owes partly to the political relationships between the state issuing it and others, as well as to its economic attractiveness.

[9] See, for example, Helleiner and Kirshner (2009b).

state itself are more ambiguous. The state issuing an international currency may enjoy significant benefits, but it may also bear substantial costs, making aggregate net cost-benefit calculation complicated. Indeed, some states have endeavored to facilitate internationalization of their currencies in pursuit of the benefits, while others have deliberately held back from it for fear of the costs. What are the major costs and benefits of issuing an international currency? The main economic benefits consist of international seigniorage, macroeconomic flexibility, reduced currency mismatch problems, business gains by financial institutions, lower exchange rate risks for firms and growing purchasing power for consumers. The major economic costs in contrast include constraints on macroeconomic policy autonomy and decreasing competitiveness of the export and import-competing sectors. Meanwhile, there is also a significant *political* benefit—of an increase in the issuing state's international power.[10]

The economic perspective

One of the most familiar benefits of issuing an international currency may be seigniorage, which refers to the revenue or profit derived from printing currency. Seigniorage is generated at the international level when foreigners hold the domestic currency, or financial claims denominated in it, in exchange for traded goods and services. In more detail, seigniorage from issuing an international currency can emerge in two different forms. Firstly, foreign holdings of cash—bank notes and coins—are equivalent to interest-free loans from foreigners to the issuing state, as no interest is paid for it, and the issuing state can enjoy interest savings as a result. According to one estimate, about 60 percent of all US Federal Reserve (hereafter Fed) notes are circulating outside the United States, and at a borrowing cost of 4 percent the ensuing interest savings for the US government amounts to about 0.1 percent of GDP (some $18 billion a year). Seigniorage also arises in the form of reduced borrowing costs for the issuing state, measured as the difference between the (higher) returns on foreign assets acquired by the issuing state and the (lower) cost of its foreign liabilities. These gains arise, in part, as increased demand for assets denominated in the home currency tends to reduce the required return on them by increasing their liquidity. The US seigniorage deriving from this source is estimated to amount to from one to three percent of GDP (Cohen 2012a: 16-17).[11]

A more significant benefit accruing to the state issuing an international currency may be its ability to finance balance of payments deficits with its own currency, and the resulting expansion in its macroeconomic flexibility.[12] In this regard, the US ability to run

[10] It should be noted, however, that despite the long list of the costs and benefits of international currency issuance, many studies recognize only a limited set of them. Most economics research generally neglects the political ones, focusing on those with high data availability. For examples of such analyses, see Cohen (2012a: 25-26).

[11] According to one estimate, the annual return on US investments overseas is 1.2 percent higher than its payments on overseas debt (Chinn and Frankel 2007: 289). Cooper (2009), however, argues that such US gains stem from US investors' risk taking, rather than seigniorage, pointing out that the share of equities in US foreign assets is higher than that in US foreign liabilities.

[12] See Cohen (1971: 34-43; 2012a: 17-18), Kirshner (2008: 424) and Salant (1964).

balance of payments deficits by printing extra dollars was once criticized as US "exorbitant privilege" by Valéry Giscard d'Estaing, a French finance minister in the 1960s (Eichengreen 2011a: 4).[13] Much emphasis has been traditionally placed on this ability of the issuing country to run balance of payments deficits. Recently, however, greater attention is being paid to its ability to evade the effects of market discipline on its macroeconomic policies in general. It is also increasingly stressed that the ability to borrow internationally in the domestic currency reduces the problem of currency mismatches, from which many emerging market economies have suffered severely during financial crises including the recent global one (Dobson and Masson 2009: 125; Genberg 2010: 66-67).

In addition, domestic financial institutions, firms and consumers may benefit from currency internationalization. The domestic banking sector may gain in business through its competitive advantage in dealing in the home currency, particularly as it has privileged access to the resources of its country's central bank and can thus create monetary liabilities denominated in the currency more easily (Cohen 2012a: 15-16; Swoboda 1968: 14). Swoboda (1968: 14) calls these gains "denomination rents." Both banks and non-bank financial institutions may also benefit from higher foreign demand for a broad set of financial services (such as in trade finance, the foreign exchange business, or investment services) from the financial markets and institutions in the issuing state, due partly to their familiarity with the currency and partly to the financial markets' breadth and depth for that currency. These gains can also be considered denomination rents in a broad sense (Helleiner and Malkin 2012: 35-36). And the resultant more profitable financial sector may in turn benefit the domestic non-financial sector as well, through the lowering of costs of capital in the economy (Kenen 2009: 6).

Meanwhile, domestic firms, and particularly those heavily engaged in cross-border activities, may benefit by the shifting of exchange rate risk to their foreign counterparts (Tavlas 1991: 12); although the development of derivatives has increased the ease of hedging against exchange rate risk, hedging is costly. Moreover, domestic consumers may also profit, as their purchasing power grows with the rise in the currency's value due to its broad acceptability (Kannan 2009; Wright and Trejos 2001).

However, as noted, there can also be substantial costs involved in issuing an international currency. Indeed, it is widely indicated that Japan and Germany were in the past reluctant to push internationalization of their currencies due to such costs. Among the main costs are the constraints on domestic monetary policy due to foreign holdings of the currency, which compromise the gain in macroeconomic flexibility through international currency issuance. Foreign holdings of a currency may render demand for the currency less stable, and where the main focus of a central bank's monetary policy is on control of the monetary aggregates therefore complicate setting of the appropriate target rate for money supply growth. Where the central bank's main monetary policy tool is the setting of short-term interest rates, meanwhile, internationalization of the domestic currency may limit its ability to affect rates through open market operations, by broadening the scope for purchase and sale by residents and nonresidents of financial instruments denominated in the currency

[13] The term "exorbitant privilege" is often misattributed to French President Charles de Gaulle, but it was in fact coined by Giscard, his finance minister (Eichengreen 2011a: 4).

(although this limitation tends to decrease for countries with large domestic government debt markets, such as the United States) (Genberg 2010: 64-65; Kenen 2009: 7).

The domestic policy of the state issuing an international currency is also constrained due to its accompanying international responsibilities. This problem is best illustrated by the so-called Triffin Dilemma, presented by economist Robert Triffin in 1947: that the country issuing the major reserve currency must supply it to the world in order to lubricate world trade and growth, but that unlimited supply of the currency will eventually erode confidence in its value, exposing the country to the risk of foreigners abruptly reducing or liquidating their holdings of its currency (Eichengreen 1996: 113-135; 2011a: 49-62). In order to keep foreigners using the currency, especially when their incentives to do so weaken, the issuing state may have to compromise its domestic policy goals. The Triffin Dilemma was originally described in reference to the fixed exchange rate system under Bretton Woods, but is applicable to any country issuing a consequential international currency including the contemporary United States.

Additionally, where other states peg their currencies to an anchor currency, the state issuing that currency loses its ability to use the exchange rate as a macroeconomic policy tool (Cohen 1971: 42). Appreciation of the domestic currency due to its increasing international acceptability may also hurt the economy's export and import-competing sectors.

The political economy perspective

Meanwhile, political economy study emphasizes that the international use of a currency enhances the issuing state's *power*—in particular its international monetary power, which exists when its monetary relationship with another state influences that state's behavior (Andrews 2006: 1).

In greater detail, the international use of a currency boosts the issuing state's policy autonomy, which is the internal aspect of its power, in two different ways. Firstly, the state's policy autonomy strengthens as the international use of its currency increases its ability to avoid the burdens of adjustment of its external imbalances—either by "delaying" adjustment or by "deflecting" these burdens onto others (Cohen 2006; 2012a: 17-18). It is able to delay adjustment since it can finance its deficits effectively with its own money, as discussed above (Cohen 2006; 2012a: 17-18). It can also "deflect" its adjustment burdens onto others via its ability to depreciate its currency, in which its debt to foreigners is denominated, or by using the exchange rate as an instrument to pressure foreign countries to adopt expansionary macroeconomic policies to help improve its external balances without adjustment (Helleiner and Kirshner 2009a: 6; Henning 2005).[14] The policy autonomy of the issuing state in this case, enhanced through either delay or deflection of adjustment, is autonomy from the markets. Yet its autonomy from other states is likely to increase as well, as its use of its own currency in international economic activities reduces

[14] Cohen (2006) argues that a lower degree of economic openness and a higher degree of economic adaptability increase the ability to deflect such adjustment burdens.

its dependence on foreign currencies, lowering foreign states' capacities to influence it.[15] Meanwhile, given that autonomy is the essential precondition for influence over others, the rise in the state's policy autonomy also boosts its potential for such influence, which comprises the external aspect of its power (Cohen 2006; 2012a: 17-18).

Moreover, going beyond mere provision of insulation from foreign influence, a currency's international use is actually likely to increase its issuing state's coercive power—its "hard power"—to influence other states in direct ways, as their dependence on the currency for international economic activities may confer substantial political leverage or advantages on the issuing state (Cohen 1998: 127-128; 2012a: 18-19; Kirshner 1995). For instance, the United States took advantage of other states' dependence on the US-based dollar clearing network as a foreign policy instrument during the Panama crisis of the late 1980s, and also in its international initiative to strengthen anti-money laundering regulation in the 1980s and 1990s (Helleiner 1999: 72-73; Kirshner 1995: 159-166).[16] The dollar's status as the world's key currency also renders the United States capable of exercising substantial influence over international financial crisis management, as the country has unequalled ability to provide dollars for foreign governments and private financial institutions (Helleiner and Kirshner 2009a: 6).[17]

There may of course be limitations on the use of coercive power by the state issuing an international currency, as excessive application of such power may ultimately lead other states to seek ways of escaping dependence on the currency. However, the wide international use of a currency may also reduce the issuing state's need to exercise coercive power, by enhancing its "soft power" and also its "structural power."

The international use of a currency may strengthen the issuing state's soft power—its ability to get others to do what it wants through cooption or attraction rather than use of coercion or payment—in a symbolic manner, since currencies have long been regarded as core, tangible symbols of sovereignty and their extensive cross-border uses as highly visible signs of the elevated ranks of the issuing countries (Cohen 1998: 121; 2012b: 19; Helleiner 2006: 82).[18]

Meanwhile, structural power in relation to currency internationalization may operate in two distinct ways (Kirshner 2008: 424-425). On the one hand, it may shape the framework within which actors relate to each other, which is close to Strange's (1988) concept of structural power. For example, the dollar's primary international status helps to ensure that discussions of the international monetary system take place within the context of dollar primacy. On the other hand, foreign actors' dependence on an international currency may

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[15] It will be discussed soon in detail how the state issuing an international currency can increase its influence over foreigners using its currency.

[16] In fact, one of the origins of the eurodollar market was the Soviet Union's placement of dollar deposits in London, which made it harder for the United States to freeze them (He and McCauley 2010: 4).

[17] During the recent global financial crisis, for example, the Fed provided dollar liquidity to major foreign countries through its currency swap lines, playing a critical role in helping to stabilize their economies. Such ability of the United States to support foreign countries in crisis may enhance its capacity to influence their policies in its favor in return. For further discussion of this issue, see Chey (2012b).

[18] Acknowledging this function of an international currency, Nobel laureate economist Robert Mundell (1993) noted: "Great powers have great currencies."

transform their perceptions of their own interests, something in line with Albert Hirshman's (1980) concept of structural power, and which Kirshner (1995) calls "entrapment." For instance, those who use the dollar tend to develop a vested interest in dollar stability, or may support close ties with the United States (Helleiner and Kirshner 2009a: 6).

Relevant issues

With regard to the consequences of international currency issuance, there are, among others, three noteworthy points. First, given the diverse monetary functions of international currencies, one salient question is how each of the international monetary functions is related to the specific costs and benefits of international currency issuance. Cohen (1971: 43-51; 2012a: 22-24) provides an analysis of this issue, arguing that the international uses of a currency as a medium of exchange and as a unit account at both the public and private levels generate some microeconomic benefits—such as denomination rents or reduced transaction costs—while its use as a store of value at both levels creates substantial macroeconomic gains—such as seigniorage or macroeconomic flexibility. And among the two store of value roles, he also claims, it is the reserve currency role, rather than the private investment asset role, which enhances the issuing state's capacity to exercise leverage over other states, because pressure can be exercised directly on foreign governments, unlike on decentralized financial markets, and because fewer currencies compete for the reserve currency than for the private investment asset role.[19]

Another point to stress is the domestic distributional effects of the costs and benefits of international currency issuance, since they affect the domestic politics of currency internationalization by influencing the formations of its domestic supporters and opponents (implying that national consensus on the net aggregate costs or benefits of currency internationalization is likely to be very rare). One of the first systematic attempts at analysis in this regard was Broz's (1997) study of the origins of the Federal Reserve. Partly based on Frieden's (1991) analysis of exchange rate regime choice, Broz for example identifies financial institutions whose international activities are substantial, to which denomination rents will accrue specifically, as the strongest advocates for currency internationalization. Individuals and firms whose economic activities are heavily domestically-oriented will meanwhile have the weakest preferences for currency internationalization, as they gain little if anything at all from it. Broz argues that large US financial institutions did indeed play leading roles in the internationalization of the dollar, strongly supporting the 1913 creation of the Fed, an essential institutional arrangement for the development of US financial markets that boosted dollar internationalization.[20] Recently, however, Chey (2012a: 69) and Helleiner and Malkin (2012) raise doubts about the generalizability of Broz's analysis beyond the US case, and argue instead that the specific preferences of

[19] In this regard, Cohen (2012a: 29) suggests that a government's strategies for facilitating internationalization of its currency be adjusted in accordance with its specific policy objectives in pursuing currency internationalization.

[20] British financial interests also strongly supported the international use of sterling, in expectation of denomination rents from it (Helleiner and Malkin 2012: 36-37).

domestic groups regarding internationalization of their country's currency are highly context specific.[21]

Finally, it should be emphasized that a currency's superior international standing can never be permanent, and that the balance between the costs and the benefits of international currency issuance also changes over its lifetime. Foreign demand for a currency usually rises in the early stages of its international use, while declining over time as its supply expands beyond the point of its need. The costs of issuing an international currency are as a result likely to increase over time, and the benefits to decline (Cohen 1998: 124-129; 2012a: 24). The experience of sterling is a good illustration of this tendency. Sterling's status as the primary international currency before World War Two allowed Britain to finance its huge military expenditure during the war. After the war, however, as sterling's international position was permanently taken over by the dollar, its debt overhang from the war became a vexing problem for the country, complicating management of its economic decline and exacerbating its chronic financial crises during the 1960s (Eichengreen 1996: 103; 2011a: 40-42; Kirshner 2008: 426).

IV. Determinants of currency internationalization

Although the net aggregate consequence of international currency issuance is not apparent, certain states have attempted to promote internationalization of their currencies—aiming to grasp its potential benefits while being willing to bear its potential costs. They have not always succeeded, however.[22] A critical question that follows, then, will be what factors ultimately determine currency internationalization. And economists have long endeavored to address this question, presenting a list of possible economic factors while generally neglecting political factors.[23] Political economists have in recent years also begun to pay growing attention to this issue, fortunately, and provided a complementary analytical framework.

Economic factors

The various economic factors cited as the major determinants of competitiveness for international currency status can be largely grouped into two categories—confidence and convenience—with those that affect convenience subject to additional division into the two subcategories of liquidity and transactional network.[24]

[21] In fact, the constituents of the domestic supporters and opponents of currency internationalization in the United States, Japan and Germany all differed. For further details on this issue, see Helleiner and Malkin (2012).
[22] One example is the Japanese government's drive for yen internationalization from the late 1990s. See Grimes (2003) and Katada (2008).
[23] Mundell, for example, anticipates that: "The RMB [renminbi] is likely to become a reserve currency in the future, even if the government of China does nothing about it" (Barboza 2011).
[24] Helleiner (2008) provides a trichotomy of the economic determinants of international currency status. He however neglects the property common to liquidity and transactional network, of convenience—perhaps

Confidence in the stability of a currency's value is critical to its international use, as instability in a currency's value raises the risk of holding it, thus diminishing its attractiveness as a store of value. The confidence in a currency can be affected by diverse factors, including the monetary and fiscal policies of the issuing country government, and its current account and net debtor positions—all of which affect its solvency risk (Lim 2006: 7; Tavlas and Ozeki 1992: 19).

Liquidity is another primary economic attribute of an international currency, as users normally hold their international money in the form of liquid, interest-bearing assets rather than currency balances. The existence of well-developed and open financial markets in the issuing country, which lower the currency's transaction costs, is accordingly important for its international use (Lim 2006: 7). Indeed, the dollar's rise as an international currency took place only after creation of the Fed in 1913, which as mentioned earlier contributed significantly to US financial market development (Broz 1997). Sterling's position as the leading international currency was also supported by the London financial markets. In contrast, meanwhile, the tightly regulated financial markets in Japan and Germany were frequently indicated as the principal obstacles to internationalization of the yen and the deutschmark (Aliber 1964; Tavlas 1991).

The international use of a currency is affected by the scale of the issuing country's transactional network in the world economy as well, since the benefits of using a particular currency increase with the number of other parties using it due to network externalities, just as with the global use of English as a *lingua franca* (Kindleberger 1967). Factors determining the issuing country's integration into the world economy, such as its economic size and its world trade share, thus influence the currency's international use. Yet network externalities also give rise to inertia and path dependency in the choice of use of an international currency, thus creating incumbency advantages for the dominant international currency and implying that the international use of a currency is not linearly related to the issuing state's mere numerical share in the world economy (Chinn and Frankel 2007; Krugman 1984).[25] And, importantly, the power of network externalities suggests that the use of a single international currency is more efficient than that of multiple ones, implying monopoly by a single international currency as a natural consequence (Kenen 2002; Lim 2006).

The effect of network externalities on international currency choice is in fact, however, more controversial than those of the other two major economic determinants of currency internationalization. Some recent studies argue that it is weaker than those who take a single international currency system for granted expect, emphasizing the feasibility of a

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because the factors that affect liquidity and those that influence transactional network are quite different from each other. In fact, prior to Helleiner, Cohen (1998: 96-97) also identified three essential economic attributes of international currencies. His classification is slightly different from Helleiner's, however, in that, while both indicate confidence and transactional network as two of the three attributes, Cohen considers both liquidity and predictability of asset value as two aspects of his remaining attribute.

[25] Indeed, while the dollar accounts for more than 60 percent of the world's foreign exchange reserves today, the US share of gross world product is only slightly higher than 20 percent. The slower erosion of sterling's international standing than that of actual British economic hegemony is another example widely referred to in this respect. See Chinn and Frankel (2007), Flandreau and Jobst (2009) and Krugman (1984).

multiple international currency system in contrast.[26] They show, for instance, contrary to the conventional account that sterling did not lose its dominant international currency status until the end of World War Two, that the dollar first took over sterling's international position (as the reserve currency and also as the major source of trade credit) in the mid-1920s, when it shared leading international currency status with it, although sterling subsequently regained that position in the 1930s (Eichengreen and Flandreau 2008; 2012). In response to these findings, those regarding a single international currency system as natural point out that even the 1920s was decades after US emergence as the world's greatest economic power, and so the strength of the incumbency advantages enjoyed by sterling remain clear (Cohen 2012a: 25). This counterargument does not disprove the feasibility of a multiple international currency system, however, even though it reemphasizes the effect of inertia in international currency use.

Alongside the three major economic attributes of an international currency, there is one more important economic issue related to currency internationalization that merits discussion. This is the question of how the currency is to be supplied to the rest of the world, given that foreigners have to first accumulate it before they can use it. A currency can be supplied to the world through either the current account or the capital account channel. A country's running of a current account deficit is one path through which its currency can be supplied to foreigners, as shown by the US in running its huge current account deficits over the past decades.[27] A current account deficit of the issuing state may on the other hand also negatively affect international use of its currency, however, by weakening foreign confidence in the currency. Yet a currency can be also supplied to foreigners through capital account intermediation, in other words by borrowing short and lending long. Indeed, both the United Kingdom and the United States supplied their currencies to the world through this channel in the past—prior to World War One and in the mid-twentieth century, respectively—while running persistent current account surpluses (Cohen 2012a: 26-27; Despres et al. 1965: 526; Eichengreen 2005: 13-14).

Political factors

Meanwhile, there has in recent years been a growing number of political economy studies drawing attention to the question of how politics influences currency internationalization. Helleiner (2008) provides a useful framework for approaching this question, identifying two discrete channels through which politics can impact a currency's international use: a direct and an indirect one. Through the indirect channel, politics affects the currency's international use by impacting its economic determinants, which were discussed above. Through the direct channel, it does so more directly, without regard to these economic determinants.

[26] See, for example, Eichengreen (2005; 2010; 2011a), Eichengreen and Flandreau (2008; 2012) and Schenk (2010).
[27] Fratianni (2012: 7) shows that the increase in dollar-denominated reserve assets in foreign countries since the 1980s has been associated with the US current account deficit.

Concerning the indirect channel, Walter (2006) argues that domestic policies and institutional arrangements affect a currency's international use by influencing the confidence in it and its liquidity, noting conservative monetary policy, central bank independence, limited government and pro-creditor legal frameworks as favorable factors. Meanwhile, Eichengreen and Flandreau (2012) stress that the Fed played a central role in promoting dollar internationalization during the 1910s and 1920s by actively building the market for dollar-denominated trade credit (known as "bankers' acceptances"), growth of which was crucial to the success of dollar internationalization.[28] It is also noteworthy, regarding sterling's dominant international position prior to the dollar's rise, that from the early eighteenth century on the UK government adopted deliberate measures in its colonies aimed at enhancing the liquidity of the London financial market (Eichengreen 2005: 5-6).

In connection with the direct channel, on the other hand, Helleiner (2008) elucidates the ways in which politics affects international currency standing by revisiting Strange's (1971) concept of international currencies. He notes that politics matters in particular for master and negotiated currencies, as discussed earlier, while top and neutral currencies derive their international standings mainly from their inherent economic attractiveness with the role of politics being relatively limited. For a master currency, the issuing state plays the primary role, as it exercises coercive power over subordinate states. For a negotiated currency, however, both the issuing state and the foreign states supporting the currency, and their interactions, influence its international use.

The issuing state's decision on whether to promote or hinder the international use of its currency hinges on various political factors at both the domestic and the international levels, including the domestic political struggle between those who benefit and those who lose out from the currency's internationalization, policymakers' perceptions of the costs and benefits of internationalization, the political and economic relationships between the issuing state and other states, and the actions of the states issuing other international currencies. A state's decision on whether to support a foreign currency's international use can also be affected by diverse political economy factors at both of these levels—for example its political, security and economic relations with the issuing state, the pressures from private domestic interests with close ties to the issuing state, the ideational beliefs of key policymakers, and other states' choices concerning whether or not to support the currency's international standing (Helleiner 2008: 365-366).

There are also a few studies that provide more systematic analyses of how such political factors directly impact currency internationalization. One group focuses on the domestic politics of the issuing state. For example, Broz (1997) and Helleiner and Malkin (2012) address the domestic distributional effects of currency internationalization and the resulting formations of domestic coalitions with conflicting preferences related to it. As mentioned earlier, however, these two studies differ in that the latter opposes "comprehensive" generalizations of sectoral interests regarding currency

[28] When the Fed withdrew from the market in the 1930s, it collapsed almost completely (Eichengreen and Flandreau 2012).

internationalization, emphasizing that the specific preferences of domestic groups change in accordance with the contexts involved.[29]

Meanwhile, contrary to the domestic approaches, another group calls attention to systemic factors. Chey (2013), for instance, argues that the international political power of the issuing state—which operates in diverse forms, including hard, soft and structural power—directly increases foreign actors' incentives to use its currency. Posen (2008) and Momani (2008) also highlight the impact of the security relations between the issuing and other states upon international use of its currency. Helleiner (2003) notes in addition that when the dollar was emerging as an international currency in the early twentieth century, US policymakers actively employed "dollarization diplomacy" in many Latin American countries, through the growing US military, political and economic influence in the region, to encourage their use of the dollar.[30] Pittaluga and Seghezza (2012) stress the role of the issuing state's international power in its currency's international use as well, but from a somewhat different perspective, arguing that its ability to invest in costly currency internationalization and pay for this by taxing foreigners through international seigniorage gains is necessary for the currency's international use.[31] These studies commonly suggest that a currency's internationalization—especially at the public level—depends significantly upon the issuing state's foreign policy.

Relative weights of determinants

One of the key issues regarding the various determinants of currency internationalization is their relative importances. This issue remains controversial, however, and is in fact the very point at which the different theoretical perspectives conflict with each other. Different perspectives or theories put different weights on various of these determinants, depending upon which type of factor—political or economic—they assess as more critical, and also upon which individual political or economic factors they emphasize.

There are some noteworthy points that may help in considering this vital issue, however. First, when a currency is either on the rise or in decline internationally, the weight of political factors is likely to increase and that of economic ones to decrease. The currency's intrinsic economic properties tend in such times to be insufficiently strong to secure its status as a top currency, and its characteristics as a negotiated currency are accordingly likely to strengthen. Indeed, for instance, the prolonged use of sterling as a major international currency since World War Two is frequently attributed to political rather than economic factors—for example its use in the sterling area.[32]

The balance between states and markets in the global economic system may also affect the relative importances of the political and the economic determinants of international

[29] They indicate, for instance, that financial interests in Japan and Germany opposed internationalizations of their currencies, in contrast to the case with the dollar.
[30] A major US domestic group that strongly supported dollarization diplomacy was financial institutions, who were motivated to earn denomination rents (Helleiner 2003).
[31] This research thus suggests that the use of a certain international currency is not the outcome of coercion by the issuing state, but that of a political exchange between it and other states.
[32] See, for example, Eichengreen (2011a) and Schenk (2010).

currency standing (Helleiner 2009: 87). Given such recent noticeable trends as the substantial rise in states' holdings of foreign exchange reserves, and the emergence of sovereign wealth funds as new major global investors, states' influences in the global economy appear to have strengthened relative to those of the markets, implying a growing weight of political factors in the determination of international currency status (Helleiner 2009: 77-78).

There is of course still need for further study of other potential determinants of international currency standing, and this issue will be discussed in a later section.

V. Future prospects for the international monetary order

As noted earlier, one of the central debates in the wake of the global financial crisis is whether the current dollar-centered international monetary system will persist. In this regard, different perspectives with different theoretical backgrounds present conflicting outlooks. A key area in which the optimistic and the pessimistic views of the dollar's future conflict is their contrasting assessments of the *relative* strengths and weaknesses of the dollar as an international currency, compared to its rivals—the euro being the strongest at the moment but the renminbi also in the longer term. The sanguine view emphasizes that the dollar's attractiveness remains relatively strong vis-à-vis its alternatives, largely due to their own defects as international currencies, while the negative view implicitly assumes the opposite, highlighting the dollar's own weaknesses.[33]

The positive view of the dollar

The sanguine view of the dollar's future holds that the dollar's economic attributes as an international currency remain strong and/or that political conditions are in its favor.

In more detail, with regard to the dollar's economic attractiveness and its political underpinnings, a good number of studies emphasize the United States' global supremacy in political and military power as the ultimate source of confidence in the dollar, with the absence of financial markets in other currencies that can match the US Treasury market in terms of liquidity and scale, and the likelihood of network externalities and inertia also helping the dollar to preserve its dominant position.[34]

In connection with the direct political determinants of currency internationalization, on the other hand, a group of studies stresses that the international political power of the U.S. remains far greater than those of other states, including both the eurozone countries and China, and that this will contribute greatly to the dollar's maintenance of its status as

[33] Helleiner and Kirshner (2009a) divide the conflicting perspectives as to the dollar's future into three categories: the "market-based," the "instrumental," and the "geopolitical" perspectives. However, this study classifies them simply into two broad groups, of the positive and the negative outlooks, as doing so enables clearer demonstration of the differentiated assessments of the dollar and its major rivals in terms of the various determinants of currency internationalization, and also as there are some studies that do not fit well into any of Helleiner's and Kirshner's three categories.

[34] See, for example, Chey (2013), Cooper (2010), Helleiner (2009), James (2009) and McNamara (2008).

leading international currency.[35] Moreover, foreign states may have voluntary incentives of their own to use the dollar. For instance, the so-called Bretton Woods Two thesis claims that East Asian countries have supported the dollar's value by accumulating massive amounts of dollar reserves to keep their own currencies undervalued and thereby boost their exports (Dooley et al. 2004; 2009). Emerging economies may also peg to the dollar for the sake of domestic price stability (McKinnon 2009).

In contrast to the case with the dollar, the absence of a central political authority in the eurozone adversely affects confidence in the euro and the development of euro financial markets. Europe is moreover unlikely to assume the role of "importer of last resort," as the United States has, which would expand other countries' opportunities to obtain euros. European policymakers appear in addition to have actually discouraged expansion of the eurozone, through measures such as imposition of strict requirements for eurozone entry and opposition to unilateral pegging to the euro, out of worries about euro appreciation, constraints on monetary policy, etc. The possibility of the active promotion of euro internationalization causing direct conflict with the United States is also likely to discourage efforts in this direction. Indeed, the euro's international role has a strong regional character, as it is largely limited to the eurozone and its hinterland.[36]

Meanwhile, despite China's strong economic growth, low inflation, exchange rate stability, etc., a large number of studies express doubt as to the feasibility of renminbi internationalization, at least in the near future.[37] Much research notes the low capital account convertibility of the renminbi and the underdevelopment of Chinese financial markets as critical economic factors that hinder renminbi internationalization. Many observers moreover see the Chinese government as unlikely to adopt aggressive measures to remove these problems, as that would require abandonment of the Chinese development model whose main instruments include credit controls and export-led growth. The authoritarian nature of the Chinese political regime has also been often indicated as a political factor inimical to financial market development and confidence in the renminbi, as it may raise foreign doubts about the Chinese commitment to a market economy. Furthermore, China's economic size is still much smaller than that of the United States, and will remain so for a quite some time.[38] All of these factors are expected to reduce the likelihood of the renminbi posing a serious threat to the dollar in the foreseeable future.

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[35] See, for example, Chey (2012a; 2013), Pittaluga and Seghezza (2012) and Posen (2008).

[36] See Cohen (2009a; 2009c), Cooper (2009; 2010), D'Arista (2009), ECB (2009), Helleiner (2009), McNama ra (2008), Pittaluga and Seghezza (2012) and Posen (2008). All of the countries that peg their exchange rates to the euro are EU membership candidates, for instance, with the exceptions of those in the CFA franc zone whose pegs to the euro are based on their foreign policy relations with France, their former colonizer (Posen 2008: 92).

[37] See, for example, Chey (2012a; 2013), Cohen (2009c; 2012b), Cooper (2009; 2010), Dobson and Masson (2009), Eichengreen (2009a), Helleiner (2009), Helleiner and Malkin (2012), IMF (2010), Lee (2010), Wu (2009) and Wu et al. (2010).

[38] Chey (2013) points out that the US economy was more than twice as large as that of the UK in the early 1910s, when the dollar began emerging as a consequential international currency, and had grown to more than four times as big by the late 1920s when the dollar replaced sterling for the first time as leading international currency.

The negative view of the dollar

In contrast, the pessimists about the dollar's future expect its dominant position to erode due to a decline in its economic attractiveness and/or retreat of foreign, as well as possibly domestic, support for it.[39] Many holding this view, notably, do not expect a single currency to replace the dollar as the dominant international currency. There are a few more radical views, such as Chinn and Frankel (2008a; 2007; 2008b) who predicted the euro's overtaking of the dollar as early as in the mid-2010s.[40] But a majority of the studies in this camp tend to instead anticipate emergence of a multiple international currency system, generally one based on the dollar, the euro and the renminbi. And in this view, therefore, while the dollar will no longer be dominant as before it will not lose its international status entirely but remain one of the major international currencies.

Firstly, with regard to the dollar's economic attractiveness, this view considers the huge US current account deficit and loose US fiscal and monetary policies since the global financial crisis as likely to damage foreign confidence in the dollar. The fall in US import capacity since the crisis may in addition reduce foreigners' motivations for holding dollars. At the same time, trade patterns in many East Asian countries, major holders of dollar reserves, have increasingly shifted away from the United States to the intraregional and European markets. Skeptics of the dollar's future also stress the limitations of network effects and inertia in international currency use.[41]

The political foundations of foreign support for the dollar appear to have weakened as well, as China, a geopolitical rival of the United States, has become the biggest dollar holder (Helleiner 2009: 81; Kirshner 2009: 195-196).[42] Serious observers of course usually deny the likelihood of China dumping its enormous dollar holdings; the resulting abrupt dollar depreciation would be very much against its own interests, due to not only the substantial decline in value of its dollar holdings that would ensue but also the consequent loss of Chinese export competitiveness.[43] Yet it is still possible that China will eventually diversify its reserve portfolio away from the dollar, moving to alternatives such as the euro.[44] Traditional US allies like Western Europe and Japan are moreover no longer bound to the United States with the end of the Cold War, and have in fact become rather wary of US unilateralism, although such concerns appear to have weakened to some extent since Barack Obama gained the US presidency in 2009.[45]

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[39] See, for example, Bergsten (2011), Chinn and Frankel (2008b), Cohen (2009b; 2009c), Eichengreen (2010; 2011a; 2011b) and Kirshner (2009).

[40] This research, which was conducted prior to the European debt crisis, has significant drawbacks in that its analysis included only a very limited set of economic determinants of currency internationalization.

[41] See Chinn and Frankel (2008a: 51), Eichengreen (2005; 2010; 2011a) and Ferguson (2009).

[42] China is estimated to possess about one-half of all US Treasuries held by official foreign holders (Eichengreen 2011a: 135). Russia, meanwhile, another geopolitical rival of the US, is the world's third largest foreign exchange reserve holder.

[43] See Cooper (2009: 5-6), Eichengreen (2011a: 135-136) and Kirshner (2009: 198).

[44] See Bowles and Wang (2008), Eichengreen (2011a: 51) and Kirshner (2008: 429; 2009: 198).

[45] See Calleo (2009: 185), Eichengreen (2011a: 122), Helleiner and Kirshner (2009a: 16-17) and Kirshner (2009).

Meanwhile, it is also possible that the willingness of the US itself to defend the dollar's international role might falter. Indeed, C. Fred Bergsten (2011), director of the major US think tank the Peterson Institute for International Economics, argues that the dollar's role as the leading international currency is no longer in the US national interest. The dollar's prominent international position, he asserts, encourages huge inflows of foreign capital to the United States, with detrimental macroeconomic effects on its economy as shown in the global financial crisis, while also impeding the currency's substantial depreciation against the renminbi and other currencies which he argues is necessary for US economic recovery. Helleiner's and Malkin's (2012) political economy study meanwhile analyzes US domestic groups, even including financial interests, as unlikely to strongly push for vigorous government defense of the dollar's international status. If domestic support for the dollar's international role weakens, US policymakers may be reluctant to offer the inducements necessary to encourage continued foreign backing of the currency's international position.

The negative view of the dollar's future also stresses that the dollar's dominant position has been supported by the absence of rivals, and that their emergence—that of the euro most likely, and also of the renminbi in the longer term—will increase the likelihood of foreigners' withdrawal from the dollar.[46]

Assessment of the competing prospects

Which prospect is more convincing? It is of course very difficult for any social science research to predict the future accurately. Nevertheless, given that many of the existing prospects stand on narrow analyses focused on only a limited set of currency internationalization determinants, it may be worth contemplating this question here by providing a more synthetic, or balanced, view through joint consideration of all of the various determinants discussed. There in fact appears little doubt that the dollar's intrinsic economic attractiveness as an international currency has weakened since the global financial crisis, even though it still did play the role of safe haven currency during that time.[47] Yet the key question is whether the dollar's potential rivals will ever actually be able to achieve greater attractiveness than the dollar, in relative terms.[48]

As for the euro, the European debt crisis, which started from Greece in the spring of 2010, spread thereafter to Ireland and Portugal, and most recently reached Spain in 2012, has highlighted how the peculiar characteristic of the euro as a currency without a state can be a serious problem for it. In the absence of a central authority, eurozone countries' cooperative management of the crisis has been clumsy, damaging the credibility of

[46] See, for example, Eichengreen (2011a: 135-136).
[47] Indeed, in August 2011 Standard and Poor's, the world's second largest credit rating agency, downgraded the US long-term sovereign rating by one notch from triple A to double A plus, questioning the validity of the US fiscal consolidation plan. Immediately after the US rating downgrade, however, prices of US Treasuries ironically surged, revealing the market sentiment that there was still no alternative to the dollar as safe haven currency at a time when worries about the euro's future had grown prevalent.
[48] Meanwhile, Posen (2008: 96) warns that even in the absence of strong alternative currencies a significant decline in the dollar's inherent attractiveness as an international currency can lead it to lose its dominant international status, inducing fragmentation of the world monetary system.

eurozone governance and accordingly market confidence in the euro. Many observers, including Noble laureate economist Krugman (2010a; 2010b), have indeed even postulated a possible breakup of the euro, warning that debt-ridden countries may choose instead of painful and politically costly austerity to exit the eurozone, to make devaluations of their own national currencies possible. And many euro-skeptics in fact criticize the lack of a central eurozone political authority as ultimately meaning that euro adoption took place before member countries were even ready for a single currency.

Although disintegration of the eurozone may thus be no longer absolutely unthinkable, however, its possibility does not seem high. Most of all, the political will for European integration, in creating and preserving the euro, should not be underestimated. The euro has in fact been a fundamentally political, rather than a mere economic, project, and its collapse would threaten the very existence of the European Union (Eichengreen 2009b: 20; 2011a: 70, 94; Wolf 2011). Indeed, as the crisis has deepened eurozone governments have strengthened cooperation to save the euro, introducing diverse significant measures.[49] It should be noted, in addition, that if a country chooses to exit the eurozone and reintroduce a national currency, the cost to it may actually greatly surpass its benefits, at least in the short run. And indeed, Greece has decided to stay in the eurozone despite virulent domestic protests against the painful austerity measures attached to its rescue packages.

It may thus be reasonable to anticipate likelihood of the euro managing to survive, despite the European debt crisis. Its international use may even increase to some extent as the links between the eurozone and non-eurozone members of the EU and aspiring candidates to it deepen, leading them to increase their use of the euro in transactions with the eurozone (Cooper 2010). In fact, with Estonia's accession at the beginning of 2011, the eurozone has actually expanded during the crisis. Moreover, there is a view that departure of weak economies from the eurozone might not in fact trigger a euro collapse, but rather strengthen the currency in the long run (*The Economist* 2011). Barring a substantial strengthening of the political foundations of the euro, however, its international use is likely to be still limited largely to the eurozone and areas nearby.

As to the renminbi, as part of its strategy to reduce China's dependence on the dollar, and also perhaps to enhance its influence in the world,[50] the Chinese government has since the global financial crisis begun to actively promote the currency's internationalization. As a result, and despite many obstacles, internationalization of the renminbi has accelerated over the recent few years, although its degree does still remain low.[51] And alongside this

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[49] In May 2010 the eurozone governments created the European Financial Stability Facility, a temporary eurozone rescue fund which together with the IMF has bailed out the four crisis-hit countries, and in September 2012 replaced it with the European Stability Mechanism, a permanent bailout fund with a maximum lending capacity of 500 billion euros. In December 2011, they signed a new fiscal rule with an automatic correction mechanism. And then in June 2012 they agreed to introduce a new system of European banking supervision via the European Central Bank (ECB), a move deemed as a first step toward a full banking union, as well as to allow the eurozone's rescue fund to recapitalize troubled banks directly. The ECB has in addition also actively provided liquidity to the eurozone.

[50] For analyses of the Chinese government intention with regard to renminbi internationalization, see Cohen (2012b) and Mallaby and Wethington (2012).

[51] For details on the Chinese government policies for reminibi internationalization, and recent developments related to renminbi internationalization, see Chey (2013).

phenomenon the number of positive views about the feasibility of renminbi internationalization has in fact been recently increasing.[52]

It should be noted, however, that most studies with strongly positive expectations for renminbi internationalization tend to consider economic factors only, and even worse actually just a very limited set of economic factors. In contrast, those that take into account political conditions, either domestic or systemic, tend to suggest more negative outlooks for renminbi internationalization.[53] Such a tendency of political economy research to produce views more favorable for the dollar is in fact found in the discussions related to the euro's future as well.

In actuality, and for the foreseeable future, a more realistic question regarding renminbi internationalization may be that of whether the renminbi can evolve into a regional currency in Asia. The prospect for this appears brighter than that for renminbi replacement of the dollar at the global level, as Asia is the region where China's political and economic influences are strongest in the world (Chey 2013). And the Chinese government in fact appears to have set a goal of developing the renminbi into a regional currency in Asia first, and to have been adopting deliberate policies toward this end.[54]

It should be noted, however, that the development of the renminbi as a regional currency in Asia will not mean complete disappearance of the dollar from the region. Geopolitical factors seem likely to help slow reduction in the dollar's influence in Asia. Although smaller countries may have stronger incentives to accommodate China more as its power strengthens, rivals of China such as Japan and India may not wish to depend solely on the renminbi if there is an alternative, which the dollar may continue to be for the foreseeable future (Chey 2013).

Meanwhile, the idea of enhancing the role of the Special Drawing Right (SDR)—a synthetic unit of account of the International Monetary Fund (IMF)—has attracted great attention in the wake of the global financial crisis. There are a number of significant economic and political problems hindering realization of this idea, however. Most of all, there is no private market in which SDRs can be traded, and creation of one is a difficult task. Also, the governance structure of the IMF hinders timely and sufficient SDR creation (Eichengreen 2011a: 138-141; Kenen 2010). Indeed, even many proponents of a strengthening of the SDR's role anticipate that the SDR would be able to play only a modest role, mainly as a reserve asset subsidiary to the international currencies issued by national governments.[55]

Ultimately, the dollar is in the foreseeable future thus likely to maintain its status as the leading international currency. Its international standing is likely to decline, however, due largely to a rise of the renminbi in Asia, while the euro's international role does not change considerably. The system will therefore be an *uneven* multiple currency system, in which the euro and the renminbi play significant roles as regional currencies in Europe and in

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[52] One remarkable example is a study by the ECB (Fratzscher and Mehl 2011) that sees the international monetary system as a tripolar system already, with the renminbi making up one pole alongside the dollar and the euro.

[53] For a domestic study, see Helleiner and Malkin (2012), and for a systemic study see Chey (2013).

[54] For further details on the Chinese policies, see Chey (2013).

[55] See, for example, Kenen (2010) and Ocampo (2010).

Asia, respectively, but are unable to compete with the dollar at the global level, leaving it first among the three of them.

VI. Issues for further consideration

Although the previous section presents an assessment of the future prospects for the international monetary order, it is only tentative. The study of international currencies—especially in the political economy realm—is still in an early stage of development, and a number of important issues actually demand further investigation to improve our understanding of international currencies. Among others, this study draws special attention now to the following issues: historical events, the political determinants of currency internationalization, government policy strategies, and the consequences of international currency choice.

Historical events

Firstly, political economy research tends to rely on the study of economic history to a large extent, in examining historical "facts." This tendency is certainly understandable, given the limited time for research as well as the dominance of economic history research in the literature. It should be stressed, however, that many historical events in fact do still remain controversial. As discussed above, for instance, there is on-going debate among economic historians at present over the time when the dollar first overtook sterling as the leading international currency. Also, while it is typically understood that the dollar's replacement of sterling as the dominant international currency was complete by the end of World War Two, a recent study (Schenk 2010) shows that sterling still accounted for 87 percent of world foreign exchange reserves in 1947, and more than 50 percent even during the 1950s, and that the share of reserves held in dollars exceeded that held in sterling only after 1955 (following a 30 percent devaluation of sterling). The controversies surrounding historical events thus suggest a need for political economy studies to be cautious and critical in dealing with historical "facts."

The political determinants of currency internationalization

There is also a strong need for further development of political theories of the determinants of currency internationalization. Although the literature has noted a list of such political determinants, in many cases it only touches slightly on them and more systematic research concerning many of them is necessary. A few recent studies—for example Chey (2013), on the international political power of the issuing state, and Helleiner and Malkin (2012), on domestic sectoral interests in the issuing state—have made significant progress in this regard. Yet these studies cover only a small portion of the diverse political determinants of currency internationalization, while many of their arguments remain debatable and in need of further clarification.

For instance, in measuring and portraying the international power of a country, a widely-used indicator is its economic power, which is measured by its economic size, share in world trade, etc. These factors are in fact also those that coincidently affect the economic attractiveness of the country's currency, however, complicating judgment of whether their impacts on currency internationalization run through political or economic channels. With regard to domestic sectoral preferences concerning currency internationalization, meanwhile, the changing balance between the costs and benefits of issuing an international currency over its lifetime may significantly impact these preferences, further complicating their identification.

There are in addition a good number of potentially significant political determinants of currency internationalization to which the literature has as yet paid slight attention. One example is the role of transnational private interests, whose powerful influence in the world political economy has been recognized by much political economy research in other issue areas such as international financial regulation.[56] Transnational private interests may play a significant role with regard to the international use of certain currencies as well, as shown by the way in which financial institutions in the London eurodollar market have influenced global use of the dollar. It is also noteworthy that the Chinese government at present allows only a small prestigious group of foreign financial institutions to participate in the renminbi business, a policy that may provide them opportunities to preempt the market for the international renminbi business and capture rents from renminbi internationalization, and thereby encourage their powerful and effective promotion of renminbi use overseas. Indeed, a group of prominent international banks, among them HSBC, Standard Chartered, Citigroup and JPMorgan, have recently been holding international roadshows to promote use of the renminbi by their corporate customers for trade deals with China, instead of the dollar. Some of them have moreover offered financial incentives, such as discounted transaction fees, to firms opting to settle their trades in renminbi (Cookson 2010). It moreover bears noting that British financial institutions have recently pressed for London to become an offshore renminbi trading center (Blitz 2011a; 2011b).[57]

To turn attention to domestic factors, the political institutions of the issuing state may also impact its currency's internationalization. Similar to the case with the sectoral interests approach, the institutional study of currency internationalization may draw useful insights from the institutional theories of exchange rate regime choice.[58] In this regard, one interesting question may be whether and how the Chinese authoritarian system has affected and is affecting internationalization of the renminbi. Yet institutional study may also be applied to compare the rises of sterling and the dollar as the leading international currencies, given for example the much more limited extent of the democratic institutions in existence in the case of sterling.

[56] See, for example, Porter (2005).

[57] As a result, in February 2013 the British and Chinese governments agreed to establish a renminbi-sterling currency swap agreement in the near future (Kuchler et al. 2013).

[58] For the institutional study of exchange rate regime choice, see for example Bernhard and Leblang (1999), Broz (2002) and Hallerberg (2002).

Government policy strategies

It is also worth identifying specific government policy strategies that influence the internationalization of a currency, and the mechanisms through which they work. One remarkable strategy in this regard, especially in connection with renminbi internationalization, is China's strategy of promoting renminbi internationalization through development of the offshore renminbi market in Hong Kong. This issue is actually related to the crucial question of whether financial liberalization, including capital account convertibility, is necessary for internationalization of the currency. A majority of studies of currency internationalization, including those of renminbi internationalization, tend to presuppose financial liberalization as one of its preconditions.[59] The relationship between financial liberalization and currency internationalization is an issue that needs to be elaborately tested, however, rather than presupposed. Indeed, contrary to the common perception, a recent study by He and McCauley (2010) suggests full capital account liberalization to be neither a necessary nor a sufficient condition for currency internationalization, and that promoting the development of offshore markets can help currency internationalization while allowing the issuing country to retain control over its capital account.[60] Thus, as Subacchi (2010) notes, China's experiment of trying to achieve renminbi internationalization mainly through its offshore market in Hong Kong, with limited liberalization on the mainland, should not be judged *ex ante* as doomed to fail simply because of the lack of historical precedents.[61]

Another potential policy deserving greater attention regarding renminbi internationalization, especially in Asia, is China's purchases of Asian countries' sovereign debt, which would be a form of direct exercise of China's power. Such a policy might place upward pressures on the values of these countries' currencies, thus increasing their incentives to buy Chinese debt in response, if allowed, to prevent the values of their own currencies from rising and in turn defend their exports. And that would of course ultimately also help renminbi internationalization in Asia. In this regard, the Chinese government did actually purchase large amounts of Japanese and South Korean government bonds briefly in the fall of 2010, causing the yen and the Korean won to rise significantly and leading the Japanese finance minister to complain about how China's closed capital account prevented Japan from reciprocating (*Financial Times* 2010). It is also worth noting that diversification of China's foreign exchange reserves portfolio is one of the main goals in its 12th Five-

[59] The underlying logic is that limits on liberalization raise the transaction costs of the currency concerned, and that competition among alternative currencies will lead to abandonment of those with higher transaction costs (Genberg 2010: 66).
[60] The study emphasizes how the significant US capital controls in the 1960s and early 1970s did not in fact undermine the dollar's international role, but in some ways rather contributed to growth of the eurodollar market, without which the dollar may not have obtained the dominant international currency standing it enjoys today.
[61] The strategy may allow China to push internationalization of the renminbi gradually under conditions of financial stability, providing it an opportunity to learn from Hong Kong's experience of renminbi internationalization.

Year Plan (2011-5), as such diversification might be realized through growing purchases of Asian government bonds and help facilitate renminbi internationalization in the region.[62]

The consequences of international currency choice

Finally, from a practical viewpoint, comprehensive analysis needs to be undertaken of the consequences for countries of their uses of particular foreign currencies. This has critical policy-related importance to non-issuing states, since such analysis can provide guidelines regarding which international currency they should choose to use, for example between the dollar and the renminbi. The calculation will of course differ across countries, depending upon their specific domestic and international political economic contexts. And a low generalizability of analysis of any single case is thus implied. Nevertheless, alongside the great practical implications for the individual countries concerned, analysis of this issue can provide explanation of why certain foreign actors use particular international currencies, and in turn why any particular international currency prevails (and will prevail) at a given time.

VII. Conclusions

After a long period in the doldrums, the political economy study of international currencies has at last begun to make significant progress since outbreak of the global financial crisis, which reintroduced debate about the future of the dollar as the leading international currency. The subsequent European debt crisis and the Chinese government's active promotion of renminbi internationalization have also helped further in drawing political economists' attention to international currency issues. And although such growing interest in international currencies within political economy circles appears belated, it is highly desirable. International currencies affect the characteristics of the international monetary system, which in turn shapes the world political economy by influencing the political and economic relationships among countries. The study of international currencies is thus vital for understanding the establishment of and changes in the world order.

The political economy study of international currencies is still in its early stage, however, despite its significant development recently. Indeed, much of the literature cited in this study comes from the economics discipline, and much broader political economy research on international currencies is necessary. And in this regard this study has highlighted, among others, four particular issue areas—historical events, the political determinants of currency internationalization, government policy strategies, and the consequences of international currency choice—as among those needing further research.

[62] Indeed, a recent study (Zhang 2011) by a senior research fellow at the Chinese Academy of Social Sciences, the premier academic research organization in the field of social sciences in China, proposes that the country substitute Asian government bonds for US Treasuries as its foreign exchange reserves—under the exceptionally politically bold title of "Is it Desirable for Asian Economies to Hold More Asian Assets in Their Foreign Exchange Reserves? The People's Republic of China's Answer."

The study of these issues is expected to contribute to the building of a better analytical framework for the study of international currencies. The ongoing Chinese experiment in internationalization of the renminbi provides a valuable opportunity to study these issues. Yet, at the same time, political economy study even of the emergences of the historical key international currencies—sterling and the dollar—also remains underdeveloped,[63] and revisiting these critical historical events is thus highly likely to contribute greatly to the literature as well.

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