

Rethinking money theory in light of fragile states: what a globalising world infers for cash use patterns

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abstract: Research shows that cash holdings abroad constitute increasing ratios of narrow money amongst key international currencies. This paper is based on research that explores this phenomenon at the international level, focusing on the role herein of monetary instability in peripheral countries. Drawing on studies of money use in developing countries as well as the author's fieldwork surveys, the paper explores the link between monetary instability and the use of non-local cash and non-money instruments in peripheral countries to draw out a key explanatory variable that tends to be ignored in money demand and savings research. Here a new fluidity in money supply and money demand in a context of greater openness in monetary flows between countries is emphasised. In this phenomenon, the paper seeks to identify the seeds of future trends in money use as financial globalisation reconfigures the relationship between the state and money, producing different but interlinked outcomes for advanced and peripheral countries' money that hinge upon changing patterns of everyday cash use. This poses significant implications for monetary policy in peripheral states that carries through to a better understanding of trends in cash demand for international currencies' monetary authorities. By evaluating the applicability to fragile states of the conception of money embedded in monetary theory, the paper exposes key assumptions that signal a waning relevance of the conception of money to the greater monetary instability of contemporary conditions in fragile states. Here empirical evidence of changing money use patterns strengthen the paper's key hypothesis that monetary instability distorts the regular patterns of money use that economic theory has been built upon, establishing an increasing importance of cash in ways largely unrecognized by money theory. The paper concludes with policy implications and a call for the reevaluation of money theory so as to better account for both the waning of state monopoly over money issue and for the new order of money instability that undermines conventional notions of liquidity and portfolio preference.

Introduction

The international monetary system has been subject to fundamental change since the 1970s; cut free of the gold anchor and exposed to increasing liberalisation that has fed phenomenal foreign exchange market growth amidst staggering developments in broader financial markets. The era has been marked not only by greater currency volatility but by greater frequency of crisis. It is this context in which research finds sharp increases in foreign cash holdings of key international currency, notably the dollar and euro, with changes in holdings correlating with specific political crises, such as the collapse of the Soviet Union, the series of Latin American crises and the recent global financial crisis (Judson, 2012). The relationship between instability and crisis is taken a step further in the present paper, which seeks to explore the seeds of future trends in cash use. Premised

on the stylised fact that open capital accounts breed greater monetary instability, the paper pushes at the boundaries of the savings and money demand literature to examine the possibility of the diversification of everyday portfolios and patterns of cash use in unstable monetary environments being directly linked to monetary instability, amidst a crucial shift in the broader relationship between the state and money. With money theory tightly pivoting around increasingly outdated assumptions that inhibit a better understanding of changing cash use patterns, the paper forges new links between established empirical findings of complex cash use patterns in everyday portfolios in peripheral countries and increasing cash holdings abroad amongst euro and dollar narrow money, proposing the increasing importance of cash in ways largely unrecognised by the literature. Finally, the paper sets the discussion within the broader context of both policy implications for monetary management as well as a deficient theoretical framework that demands reevaluation.

The changing monetary environment

The long march towards the liberalisation of financial flows continues apace. Despite the havoc in financial markets that arose out of the global financial crisis, characterised by contagion effects and unprecedented cross border dimensions to monetary policy, (Brookings Institute, 2013) the momentum unleashed by the break from gold with the collapse of the Bretton Woods exchange rate system shows no sign of abating. Yet these conditions mark a distinctive new era for money, as the capital controls, exchange pegs and interest rate ceilings of decades passed give way to a firm commitment to foreign exchange liberalisation embraced even at the fringes of the global monetary system, where countries like Mozambique, Iraq and Afghanistan have recently reaffirmed their commitment to free foreign exchange markets (IMF, 2012). As the IMF notes, despite the bitter pill of instability and secular decline following the financial crisis, countries continue to roll back restrictions and controls on foreign exchange transactions, responding to havoc in global markets by adjusting exchange rate regimes rather than attempting to restrict foreign flows (IMF, 2012: 2). Even derivative products, which sit squarely behind the collapse of the global economy in connection with the global financial crisis, have not seen decisive shifts towards greater control by regulatory authorities, either at the fringes nor in financial centres (Senior Supervisors Group, 2012; IMF, 2012). As suggested, these overarching trends represent a long term commitment by monetary and regulatory authorities towards free financial flows. Yet this spells new conditions that are likely to affect cash and cash use patterns at the international level.

Primary here is the issue of monetary instability. Financial liberalisation poses challenges for the management of external assets and liabilities, exposing currencies to impacts of larger and more volatile financial flows and greater inflation pass through with greater trade integration (IMF, 2011) - issues especially prominent for developing countries (Filardo & Lombardi, 2014; Raj et. al., 2008). Indeed international spillovers from monetary policy count amongst the most contentious central banking issues at present (ENS Economic Bureau, 2014; Brookings Institute, 2013) as the maintenance of monetary stability becomes increasingly complicated by forceful subjection of economic and financial conditions to external shocks (Beck et. al., 2013) and by the increasingly

volatile and risky character of capital flows as they have trended upwards over the last 15 years (IMF, 2011). Where such monetary instability is combined with a diversification of money-like objects, we may find effects on cash use patterns where agents move in and out of cash, and across different denominations of cash, in ways that were effectively impossible under the restricted environment of the Bretton Woods system.

Here we are faced with a new world of near-monies, not only in the sense of new broad monies, like ‘shadow bank money’ or bitcoin, but also in the sense of increasing availability of undocumented foreign currency being used outside of its sovereign jurisdiction - beyond both the notional theoretical conception of sovereign money and beyond the regulatory control of monetary authorities. Certainly undocumented foreign cash becomes more easily available with the liberalisation of financial flows, as Edwina Thompson demonstrates in her study of links between Dubai’s deregulated economic zones and Afghan *hawala* money dealers (Thompson, 2011) and is corroborated by the rising sums of US dollars circulating internationally since the 1990s (Judson, 2012). In the same vein, capital account liberalisation makes tax evasion and capital flight easier (Chowla, 2011), reflecting a fluidity in informal cash movements opened up by the liberalisation of formal flows. As such, financial globalisation delivers greater instability in money, as well as greater availability of non-local cash, which combine to detract from the primacy of domestic currency in the domestic money system. These changes are part of significant changes in money use in developing countries that in ways mirror rising issues relating to traditional regulation and financial innovation in the advanced economies. That is, the increasing availability of foreign cash arises in an environment of major shifts in money and money management as grey zones appear in formerly distinct categories of internal and external, formal and informal, and money and non-money. As Bill Maurer notes in the case of M-Pesa in Kenya, “people are potentially setting in motion new media of exchange, methods of payment and stores of wealth and possible measure of value” that are challenging regulators and our understanding of cash use and the payments system (Maurer, 2012: 600).

The contribution of the present paper is to take a step further the association between political crisis and foreign demand for key currency cash, such as euro and dollar bills, that has been developed in the literature (Judson, 2012). Here instability and crisis is understood as an increasingly common feature of the 21st century, demanding consideration of the impacts of this volatility on cash use: combining new research on state fragility with the new norms of monetary instability produces a picture of international demand for foreign cash trending upwards. Emphasising the key inability of fragile states to mobilise domestic revenue, as well as their greater vulnerability to internal and external shocks, a recent OECD report finds state fragility in middle- as well as low-income countries, proposing that state fragility is on the increase. The report notes that the concentration of the world’s poor, now at a third in fragile states, is set to rise through one half in 2018 to two thirds in 2030 (OECD, 2014: 15). Moreover as the Financial Inclusion Database shows (see Demirguc-Kunt & Klapper, 2012), it is in fragile states that formal banking is at its lowest, suggesting a relationship between state fragility and informal monetary contexts that is likely to endure. These findings raise weak state capacity over money management to a new centrality in exploring future trends in money

use as we find ourselves in a world economy increasingly characterised by weak states, volatility and broad informal money markets.

The new monetary environment, then, is a far cry from the relatively discreet national economic units and their sovereign currencies found in the Bretton Woods era. The commitment to free financial flows suggests a future not only of greater monetary instability but also of the greater availability of money-like objects, including undocumented foreign currencies, within individual states. Combined with a shift towards greater state fragility outside of the core key currency countries and emerging economies, a new fluidity in international demand for cash arises.

Demand for foreign cash in less developed states

With instability on the rise, both in terms of monetary volatility and of political and more general economic fragility, attention could fruitfully be focused on cash use trajectories in fragile regions. Here, the surging demand for foreign cash related to incidences of instability found in the literature on international cash demand in the 1990s and 2000s is recast as a permanent state of affairs, not only in “mega crisis” states but in persistent “forgotten” crisis regions (see OECD, 2014: 26), which are tipped to engulf expanding populations in coming decades. Moreover, for international cash demand patterns, it is these regions where capacity over the money system is the weakest, suggesting broad informal foreign exchange markets that cater to growing demand for foreign cash. Here we find both expanding demand and expanding supply. In order to explore the seeds of foreign cash use trends, focus is thus placed on the dynamics that undergird cash demand in regions characterised by instability.

Here, a new literature on money and savings forges a novel path in exploring changing cash use patterns, moving beyond the narrow confines of traditional scholarship on the subject and contributing a more nuanced framework that draws out the complexity of cash management at the household level in the ‘majority world’ of developing countries. New work on the anthropology of money compliments more orthodox approaches to the study of savings and money demand to develop a complex picture of day-to-day money management by ordinary citizens in poor regions that had not been previously captured in standard household surveys. Here, clues may be found about international demand for undocumented foreign cash, which help us to focus on dynamics of cash use in the growth area of fragile regions. While bouts of political and economic instability are commonly associated with a tendency of the public to shift into foreign currencies as a hedge (Chami et. al., 2007), analysis of such tendencies remains limited by the narrow representation of shifts out of local assets in national accounting schemas, which do not capture undocumented flows. Here, exchange rate premiums in the so called kerb or black market hint at demand for foreign cash that falls outside official foreign currency accounts and formal outward flows, but still transmit limited information about underlying dynamics.

In exploring the dynamics behind informal demand for foreign cash in developing countries, a useful frame is provided by Collins, Morduch, Rutherford and Ruthven

(2009). Collins and her colleagues have here closely tracked daily transactions of a wide sample of poor individuals in India, Bangladesh and South Africa to construct a conception of the 'portfolios of the poor' that challenges a simple reading of hand-to-mouth living by those living on less than \$2 per day. This research reveals complex cash-flow management strategies that entail high levels of leverage and sophisticated diversification of assets and liabilities through a methodology that looks beyond the standard categories of standard household surveys. The work of Collins, Morduch, Rutherford and Ruthven crucially provides a frame in which to interpret unexplained findings in the more conventional savings literature. For example, a recent major World Bank study of financial inclusion by Demirguc-Kunt and Klapper (2001) using the Global Findex Database finds that the majority of savers in 55 countries use neither formal institutions nor informal money dealers or savings clubs to hold savings. While the Database does not gather the types of data that would allow this puzzle to be explored further (see Demirguc-Kunt and Klapper, 2001: 34), the sophisticated portfolio allocation between formal and informal transactions, and barter as well as monetised assets and liabilities revealed by Collins and her colleagues suggests active hedging strategies that push beyond the traditional categories of the savings literature.

This proposition is supported by work in the interdisciplinary literature. The work of Collins, Morduch, Rutherford and Ruthven presents empirical findings of a level of complexity in day-to-day cash management in developing countries that supports the findings of new anthropological work on money. Here the textbook story of 'primitive' barter being replaced by 'modern' fiat money is complicated by grey areas that challenge earlier notions of a socially embedded economic past and an instrumentalist future of anonymous transactions (Maurer, 2006). This break from simplistic teleologies characteristic of traditional theory corroborates alternative characterisations of active and sophisticated portfolio management in a social economy that bridges 'new' and 'old' worlds through active microeconomic strategies, even at the very fringes of the global economy.

Gaps in the literature

A fuller understanding of the complexity of portfolio management by ordinary citizens of peripheral economies, however, has been stunted by traditional thinking on the role of money in the economy. Theory posits domestic currency as the exclusive form of money within a sovereign territory, ring-fencing domestic currency as the exclusive definition of money applicable to modern states. This limited conception of cash and bank deposits as the definition of money represented in M1, M2, M3 and so on, lays out a road map for the process of monetisation in developing countries and informs monetary and economic theory, reinforcing the conceptual exclusivity of domestic currency within money management policy and research. This imagined exclusivity of 'domestic currency plus bank deposits' being used as money within a sovereign state is demonstrated in the 'puzzle' of persistent low and even reversing monetisation in some states (McLoughlin & Kinoshita, 2012) and in the savings and money demand literature (Sriram, 2001), which focus on formal interest rates and simplistic proxies for real assets in understanding opportunity costs. Indeed in the World Bank study cited above as well as in the work of

Collins, Morduch, Rutherford and Ruthven, the use of both foreign cash and liquid non-money objects is ignored in evaluating how people hold purchasing power. As such, while Collins and her colleagues contribute major advancements in our understanding of how the poor interact economically, they do not manage to entirely overcome a long entrenched bias in thinking about money and savings that assumes state monopoly over money issue. As noted, Collins and her colleagues do not include foreign cash holdings in their examination, nor properly explore the use of liquid non-money assets that are used, essentially, as money. Nor do they or Demigurc-Kunt and Klapper explore any potential relationship between microeconomic behaviour and instability.

This obfuscation is of elevated importance as money systems shift towards new norms of greater instability as well as the broader availability of foreign cash in informal money markets amidst low levels of formal banking participation. With the frame of the new anthropological literature on money and research, such as that by Collins et. al., demonstrating complex hedging in day-to-day money management by ordinary people in developing countries, the foundational concepts that traditional theory rests upon become increasingly redundant. Liquidity preference, for example, proposes that greater instability will lead to a shift out of bonds and into (local) cash through the financial intermediation of the formal banking sector with the household and business sector. This conceptualization of microeconomic behaviour arises as somewhat out of step with a far more complex reality. That is, the new literature shows us that everyday economic management at the household level certainly does entail complex risk assessments and active strategies of diversification and leverage. But a picture of responses to instability through everyday portfolios feeding into market demand for bank money and bonds is out of step with microeconomic strategies that in fact bridge formal and informal as well as barter and monetised balance sheets. Similarly conventional notions of money demand rest on opportunity costs of holding narrowly defined money vis-a-vis holding formal financial instruments or real assets, proxied at expected inflation. Yet in fragile regions with low banking sector penetration, opportunity costs must be more broadly understood so as to incorporate the myriad of 'own interest rates' that reach far beyond commercial interest rates and across different currencies, largely held as undocumented cash. Taken together, this suggests that ordinary people do actively respond to currency instability but that the range of assets and liabilities with which they engage extends far beyond the conventional categories of the savings and money demand literature, which assumes that 'money' is local currency and that savings are held in conventional 'money' and financial forms. Thus the use of foreign cash by ordinary people as a hedge against instability in local currency appears a very likely reality. To be clear, the argument here is that even though new research shows that ordinary people in developing countries undertake complex risk assessment and diversification strategies, the narrow notion of the sovereignty of domestic money that permeates traditional money theory continues to inform the savings and money demand literature, which tends not to consider informal liquid assets and foreign cash which may play an increasingly important role in environments of monetary, political and more general economic instability and broad availability of foreign cash in informal markets.

The author's own field surveys in Pakistan corroborate these propositions. Pakistan is identified as a "forgotten" (OECD, 2014: 26) or endemic crisis state, characterised by political, monetary and economic instability; low levels of banking participation; a liberalised foreign exchange regime (IMF, 2012); an extremely poor tax to GDP ratio, and vast informal markets in cash and foreign flows. With high levels of volatility in inflation and exchange value exacerbated by exposure to unstable international flows, hedging the decline of the rupee is a daily task for ordinary people and an expansive enterprise for those better endowed. Broad interviews across the social spectrum reveal a distinct and widespread new lack of confidence in the rupee, characterised by an active attitude towards overcoming associated losses involved. This perspective is less an acceptance of state-issued money within a domestic financial realm, as is implied by conventional thinking on money. Rather, attitudes reveal an infidelity to the rupee, which transgresses the implications of standard theory insofar as money balances are commonly and systematically held in undocumented foreign cash and liquid non-money assets, and may be reverted to the rupee for payments purposes. To be clear, these practices largely exclude the banking sector, or include only very temporary depositing of cash in bank accounts, even amongst the educated and affluent, and reveal a willingness to endure inconvenience and transaction costs in order to actively hedge potential decline in rupee balances. That is, instability breeds active shifts in and out of local currency, which includes undocumented foreign cash as well as liquid non-money objects, that are not represented in formal statistics and are not formally anticipated by theory nor represented in conventional studies of money demand and savings practices. These new practices are not confined to criminals or corrupt elites, but are daily practices of ordinary people and systematic cash-flow management strategies across all strata of the business community.

The changing monetary environment revisited

As suggested above, contemporary monetary conditions are challenging conventional assumptions about money and its relationship to the state at a series of levels, revealing unprecedented new dynamics that must prompt a recasting of theory if it is to understand the very essence of what money is, how it is used and how it can be managed in a rapidly changing global environment.

For advanced economies, central banks are faced with increasing complexity. Micro economic units no longer neatly conform to a national characterisation, with complex webs of transactions crossing through formally discreet jurisdictions. This is posing new dilemmas for the ability of central banks to track financial flows, prompting calls for new forms of regulation that take a system-wide approach, namely macro-prudential regulation, where a micro-focused frame can no longer maintain its former grasp on activity.

Of equal concern in advanced economies is the complexity of new instruments themselves, which produce analogous issues insofar as central banks are at a loss in tracking transactions, values and risks. Crucially, such innovation in financial instruments is of prescient theoretical significance. Here we find a blurring of the distinct ontological categories of money and non-money assets as the national framing within which these

concepts have developed itself blurs under the weight of globalisation. As new financial innovations force regular redefinition of exactly what falls inside and what falls outside of M2 and M3 (Lim & Sriram, 2003), the question of what exactly money is becomes increasingly prescient. Here we find a break with the old money regime in which base money (M0) is structurally linked to broad money (M2, M3 etc), all of which is produced within the remit of central bank control, either directly as in the case of narrow money or indirectly in the case of broad money. Financial innovation instead equates to the production of new near-monies beyond the scope of central bank oversight, and therefore at an unprecedented distance from the state itself. Furthermore, adaptation in central bank techniques to cope with new levels of complexity affirm a complication of the distinction between money and non-money assets. While central banks had traditionally intervened as lender of last resort through loans to compromised banks, the global financial crisis saw new 'unconventional measures' introduced whereby central banks did not deal only in the asset of which the state monopolises production, namely bank reserves and other state money instruments. Abandoning traditional 'treasuries only' policy, the Fed purchased and continues to hold non-money assets, such as mortgage-backed securities. Here the Fed has crucially stepped outside of its traditional domain of money management through dealing in narrow money and Treasuries, and into uncharted waters of money management through dealing in various commercial assets, including those that are not produced even within the regulated banking system; not a lender of last resort within the realm of state money but a dealer of last resort in extensive near-money markets (Mehrling, 2010). This suggests that the traditional conception of money as produced by the state directly, or indirectly by the banking sector yet within the remit of central bank oversight, is being swamped by a new money reality. Here, then, the relationship between the state and money is changed as new near-monies break free from the former state monopoly issue of money.

At the other end of the spectrum, fragile states that sit at the periphery of the global economy face new circumstances not entirely dissimilar to those faced by the advanced economies. Here we find radical instability in the value of money, which, as proposed above, detracts from the monopoly use of domestic tender as money within the sovereign state. Rather we see active hedging strategies even by the poor, who diversify and leverage amongst a score of liquid non-money assets and undocumented foreign cash in financial contexts of broad and deep informality that show no inherent fidelity to the local currency - in fact a conscious interpretation of local currency as a kind of potential liability. This suggests that monetisation in these regions is unlikely to mimic the textbook course, and that with increasing volatility in local currency as well as greater availability of more stable foreign cash, diversification beyond the local currency will only increase.

The analogy with issues facing the advanced economies is that in fragile regions, central banks similarly enjoys only weak powers of oversight and do not fully control money where liquid non-money assets are used as money or where significant informal foreign cash markets cater to everyday cash use by citizens. Moreover while central banks in fragile states continue to attempt to control monetary stability through transacting with financial institutions in narrow money instruments, significant new research suggests that

inflationary expectations are pegged not to the central bank's perceived commitment to limiting money supply expansion and adjusting short term interest rates, but rather to non-monetary factors such as electricity prices and wheat subsidies (Abbas et. al., 2014; State Bank of Pakistan, 2013). Again, then, we find that controlling money is no longer an issue of traditional intervention by central banks in money, but that central banks may need to move in non-money realms in order to control even only money, let alone broader goals of growth and stability.

Yet this new money context cannot be captured at the level of theory given the narrow state of money theory at present. Across the economic literature a sense of money persists that assumes a strong state, a stable currency and the exclusivity of local state money within a sovereign territory. These deeply embedded assumptions are flagrantly challenged by conditions in fragile regions and, given upwardly trending monetary instability as well as political and general economic instability amidst broadening availability of undocumented cash, are only set to become more so. Here the old assumptions associated with liquidity preference, money demand and even monetary policy more generally, appear increasingly redundant as the control of central banks over local currency gives way to cross border impacts and more fluid availability of foreign currencies within a sovereign territory.

For fragile states, this means that monetary policy must be reevaluated. Conceptions of money supply and of money demand must embrace a fluidity in definition that reaches beyond entrenched assumptions of local state money monopoly within sovereign borders. Part of this fluidity lies in the fact that in general, banking systems do not operate in the same way as they have traditionally in the advanced economies. This fact demands nuance when interpreting increasingly accepted views of endogenous money by the central banking community (McLeay et. al., 2014), suggesting that much 'money' in fragile states assumes commodity characteristics rather than the credit characteristics associated with the endogenous money view.

This lesson is reinforced with the important findings published by the IMF in 2012 that monetary policy transmission largely fails in low-income countries. The authors of the report conclude that "it is very hard to come away from this review of the evidence with much confidence in the strength of monetary transmission in low-income countries" (Mishra & Montiel, 2012:24). These findings confirm what has long been known in fragile states, where high spreads suggest a lack of competition in banking sectors which distorts monetary policy transmission while the bulk of the economy in fact operates beyond the narrow remit of the formal system in the significantly less 'sticky' informal economy (see Ahmed et. al., 2012; Choudhary et. al., 2011). In fragile states, the state tends to dominate credit demand, real interest rates tend to be negative, inflation largely beyond the control of the authorities, and formal private credit of minimal aggregate significance. In these conditions the banking system serves more to support government borrowing than to support growth and innovation in the private sector by expanding money supply through interest rate elastic private sector lending amidst sticky prices and wages. Yet added to acceptance that the monetary climate in fragile states is distorted insofar as the banking system is of minimal centrality to the private economy, the fluidity

of money itself must be recognised in the authorities attempts to control the money system as well as broader aims of general economic growth and stability. This requires a vast recalibration of monetary policy in fragile states that recognises state money as not the special asset designated by theory but as one of many risky assets.

Finally, the problem of monetary instability might be fruitfully addressed by central banks in fragile states if they are to establish a more conventionally distinct role for local state money within their economy. In developing countries, exchange rate regimes and temporary capital controls are being experimented with in the wake of the crisis (IMF, 2012), reflecting a need for currency stability that clean floats do not allow. These options need to be taken seriously and greater intellectual and policy space needs to be made for coordinated efforts in these regards.

Conclusion

To understand future trends in cash use, then, we must take into account a new kind of fluidity in money availability and use. This fluidity is linked to the greater openness of convertibility as it affects both the demand and the supply side of foreign cash. Moreover these changes arise in a broader context of significant change in the international money system as a whole. With these changes, it is hoped that the narrow confines of money theory will be opened up to a new understanding of the fundamentals of money, which must yet play out in a more open focus of scholarship that examines money use, savings behaviour and monetary policy. For key currency monetary authorities, a continuation of the surging demand for key currency cash can be expected and forecasting of foreign cash demand must take foreign instability and crisis into account. This is but one step towards a better understanding of why Keynes' reasoning for privileging the state money rate of interest as the 'real' rate of interest now looks increasingly outdated. Perhaps central banks need to monitor multiple 'own rates' of interest - for other state monies, for street lenders, and for staple commodities being used as money alternatives, as part of the remit of monetary policy, even though to do so would be a concession of their own lack of capacity.

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