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Financialization and its Implications on the Determination of Exchange Rates of Emerging Market Economies

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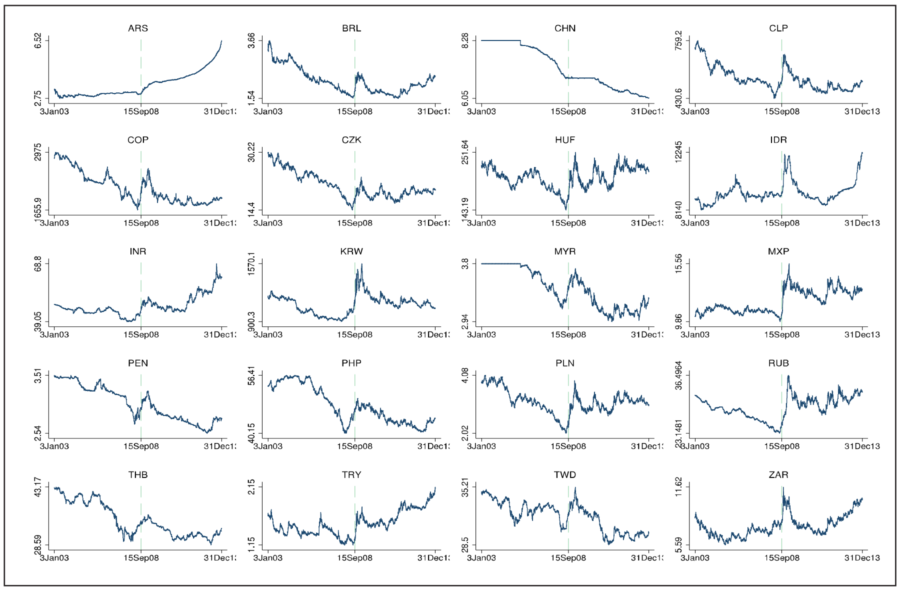
Export-Import Bank of India instituted the BRICS Economic Research Annual Award in 2016. The objective of the Award is to promote advanced doctoral research in international economics, trade, development and related financing, by nationals of any of the five member nations of BRICS, from any University/ educational institution globally. This study is based on the doctoral dissertation titled "Financialization and its Implications on the Determination of Exchange Rates of Emerging Market Economies" selected as the award winning entry for the EXIM Bank BRICS Economic Research Annual Award (BRICS Award) 2017, written by Dr. Raquel Almeida Ramos, currently Research fellow at the Centre d'Économie de Paris Nord, Université Paris 13, Sorbonne Paris Cité, France. Dr. Ramos received her doctoral degree in 2016 from the Université Paris 13, Sorbonne Paris Cité, France and Universidade Estadual de Campinas, Brazil.

Introduction

The Study investigates the impacts of financialization on the dynamics of exchange rates in emerging market economies (EMEs). From a focus on the international level, financialization is defined as the patrimonial and increasingly speculative logic of finance at the international level – as opposed to functions related to the productive economy as financing production or trade.

Figure 1: Emerging currencies: 2000 to 2013



Data source: Ecowin. The vertical line indicates the collapse of the Lehman Brothers, September 15th, 2008. Exchange rates are presented in direct quotation, where a lower value implies that the domestic currency is appreciating.

The implications of financialization in emerging currencies vary according to the extent of the use of these countries' assets and currencies in the different strategies of international money managers. As demonstrated in the study, financialization-related developments are revealed in the characteristics of emerging countries' integration, which are associated with a specific exchange rate pattern, marked by fragility for being vulnerable to the international financial conditions.

Emerging Currencies: A Constant Upheaval not well explained by Economic Literature

The early 2000s was marked a new expansionary phase of the international liquidity cycle and capital flows to EMEs. Since then, the newly floating exchange rates of some EMEs have been 'a constant upheaval', presenting large swings and extreme depreciations according to changes in international financial conditions **(Figure 1)**

Such exchange rate dynamic is not in line with mainstream exchange rate literature that fails to account for features as fat tails and volatility clustering. Heterodox theories have more to add for considering that crises are inherent to these currencies' dynamics due to the low liquidity premium offered by the peripheral currencies of the international monetary and financial systems (IMFS). Specifically, two main characteristics of emerging currencies explain why they are massively sold in case of turbulence. First, they are not used as reserve of value, and during crisis, the preference for the most liquid currency increases. Second, they are not used as denominator of financial liabilities, which are needed when crises emerge and financial obligations must be met.

These explanations are in line with the evidence of fragility of some emerging currencies to the developments of the international financial markets, but they do not explain why they occurred in some emerging currencies but not in others. They also do not explain why this pattern happens to some emerging currencies but not to currencies of other developing countries. This is the gap in the knowledge that the study aimed at enlightening.

The study

The analyses have a theoretical and an empirical axis. Theoretically, it analyzed how different financialization-related phenomena impact exchange rate determination and how the mechanisms brought about by these phenomena are taken into account by the exchange rate literature. Empirically, the financial integration of EMEs and their currencies' FX markets were subject to in-depth analyses that aimed at assessing the manifestation of financialization-related phenomena in these countries. The hypothesis of the impact of financialization on exchange rates was tested by comparing the different levels of financialization of a country's integration with the fragility of its exchange rates. Based on the findings from the theoretical and empirical analyses, the study proposed to investigate exchange rates through Minsky's framework, where the mechanisms at place that determine exchange rate dynamics are presented in detailed form, allowing an assessment of how vulnerabilities are built.

Relevance

The study's findings call the attention of regulators for avoiding this development to continue; of decreasing the vulnerability of emerging economies to international developments; and thus, fostering a more stable context that favors these economies' capital and human development. The next sections discuss the study's main contributions to the interactions of three main fields: financialization, financial integration and exchange rates.

Financialization and EMEs' Integration

The term financialization is used as reference to various phenomena. A review indicates three main developments referred to as financialization, for a more precise use of the term:

i) the increasing importance of finance at the international level with the decoupling from its earlier functions and logic;

ii) the changes within the financial system, with the sophistication of finance through major innovations of products and usages, the increasing importance of markets, and the evolution of banks; and

iii) the changing relationship between finance and other economic sectors, with the increasing importance of the first and its associated class group, the rentiers.

From a focus on the international level, the study suggested a definition of financialization as the patrimonial and increasingly speculative logic of finance at the international level – as revealed from the innovations of usages and products and the amounts traded. As analyzed, the major volumes traded internationally relative to the underlying productive economy led authors to argue that finance was no longer attached to its prior functions of financing trade and production, following its own logic. The 'excess' increase of finance was related to financial integration, that grew considerably with liberalization and materialized in important increases in the volumes traded on the financial account vis-a-vis the current account. The study refers to this phenomenon as the (re)emergence of a patrimonial logic of finance at the international level. The analysis of the recent innovations of usages and products concluded that this new logic is centered on exchange rate returns, what characterizes it as increasingly speculative. This argument was confirmed by the marked rise of FX transactions vis-a-vis financial integration in both advanced countries and EMEs. These innovations include FX derivatives, and practices focused on exchange rate returns, as derivatives carry trading and currency financialization more broadly, or that are exposed to exchange rate returns, as canonical carry trading and equities or other instruments denominated in local currencies. As these practices and products are not used in every country or currency, financial integration has different rationales in different contexts, what requires the consideration of their features in analyses of their impacts.

The rise of money managers is a major change seen with financialization that pervades the three aforementioned developments. They are portfolio investors funded in advanced countries; small in numbers and managing the major amounts of liquidity available in these economies, they have a great impact on markets. These institutions are key in determining exchange rates for creating a network, through their funding and portfolio allocation choices, where different countries' markets and currencies are interconnected through money managers' balance-sheets.

With the integration of EMEs to this network, and the use of their assets and currencies in the most innovative practices, emerging currencies are now subject to money managers' decisions, which, based on their balance-sheet constraints, depend on conditions of the funding markets in advanced countries and markets where they have assets, across the globe. Therefore, understanding the exchange rates of EMEs involves understanding the dynamics of this network and of money managers balance-sheet constraints.

Integration and Emerging Currencies' Dynamics

Although all EMEs are subject to money managers' decisions for being, by definition, the developing countries that are the most financially integrated, their currencies' dynamics are not all the same, some presenting more turbulence than others, what could be a result of a country's type of integration according to the mentioned different rationales.

To test this hypothesis, an index that characterizes integration with regards to financialization is built. The indicator is based on measures of integration and of the magnitude of FX derivatives markets vis-a-vis the underlying economy: the stock of foreign assets and liabilities relative to i) GDP and ii) foreign trade; the weight of FX markets relative to iii) GDP and iv) foreign trade; and v) the importance of derivatives relative to spot FX contracts. The analyses concluded that the EMEs with the most financialized integration are Brazil, Hungary, South Africa, and Turkey.

The level of financialization of integration was compared to exchange rate features of turbulence – volatility and high frequency of extreme depreciations – and subordination to the international financial sphere – correlation with the VIX index, that is broadly used to proxy uncertainty in international financial markets. The result is a strong association of the currency features with the financialization level of the integration. The exchange rate features were also compared to measures of the magnitude of integration, revealing a higher explanatory power of the type of integration.

These results are crucial for studies on exchange rates, on the determination of capital flows, and on the impacts of integration. The correlation of exchange rates with the VIX and with other emerging currencies hints to the impacts of an external component in determining exchange rates, thus, to a higher importance of push forces in determining the demand for these countries' assets. While the analyses of the push vs. pull literature are focused on their impacts on capital flows, the study using exchange rates, for making use of more frequent data, more precisely indicates the impact of the rapidly changing external conditions.

The higher explanatory power of the type, rather than the magnitude, of integration is most relevant for the literature that analyzes the impact of capital account liberalization and financial integration on an economy. This literature measures integration through its size, but the focus on magnitudes overlooks the fact that financial markets lead integration with different aims and through different practices, resulting in different patterns of flows. It also implies adding concerns over exchange rates, which are indeed an important transmission channel: in the case of turbulence of nominal rates, through its impact on uncertainty, and thus, on investments; and indirectly, for affecting the level of the real exchange rate, through its impacts on trade.

A broad implication of the empirical results on exchange rate theories is the need for theoretical frameworks that are in line with the countries' type of integration. In a small open economy that trades a commodity, the price of this good might be the most relevant variable in explaining the countries' exchange rate. In the case of EMEs, as the most turbulent exchange rates are the most correlated with the international sphere, the decisions of international portfolio investors are crucial in understanding exchange rate patterns. Accordingly, this result indicates the need to analyze exchange rates through the decisions of the main actors of international financial markets, the money managers. The higher turbulence of the currencies from highly integrated countries and where FX derivatives are important underscores the need to consider the role of derivatives FX markets and focus on exchange rate returns that might be behind the important magnitude of FX markets.

This is done through a Minskyan analysis, based on money managers' decision concerning the desired exchange rate exposure, that evolves with the macro environment. As emerging currencies offer lower liquidity premium, a decrease of uncertainty and liquidity preference positively impacts demand for emerging currencies. It is a feature that progressively increases demand, in tandem with the gradual distance to crisis: as crises become far in memory some money managers reassess prior decisions of avoiding more aggressive investment options as too conservative. Given the centrality of exchange rate returns in times of financialization and the findings on the volatility of emerging currencies, the more aggressive investment option for the money manager is the EME's asset. Accordingly, demand for EMEs' assets progressively increases as crisis are forgotten.

Fragility is built through the cycle of increasing demand, appreciation, expectation of further appreciation, stability of FX markets, confirmation of prior decisions and creation of a convention favorable to EMEs. At this moment, any event that drives money managers to reassess their decisions can result in extreme depreciation. These events can be associated to the EMEs or to any other market that is part of money managers' network, any balance-sheet constraint.

The analysis argues that the fragility of emerging currencies is endogenous to the behavior of money managers, that, in turn, is based on emerging currencies' features of high volatility and is intensified with the availability of liquid derivatives FX markets. Their behavior, combined with the specific features of EMEs' insertion, allows a self feeding mechanism to install, and the build up of fragility that will end up with an extreme depreciation, or crisis.

Emerging currencies fluctuate according to money managers' decisions that are not necessarily related to the country in question, but to their balance-sheet constraints. This greatly contrasts with most exchange rate models. The focus on investors' decisions differs from models solely focused on macro variables (as most traditional mainstream frameworks, including portfolio and carry trading models), but is similar to some heterodox approaches and the mainstream behavioral finance analyses. It is similar to the heterodox approaches focused on the specificities of emerging currencies, which emphasize the role of international financial conditions, but it includes events other than the ones related to the advanced countries, such as events in another market where money managers have assets, as these impact their balance-sheets.

Another important point of divergence between the results of the suggested framework and the exchange rate theories is the equilibrium seeking behavior. As shown, with the self-feeding mechanism emerging currencies become a 'deviation amplifying system', whose trend depends on an external determinant. This strongly contrasts the idea of equilibrium seeking and market clearing included in trade-related analyses.

Policy Implications

Emerging currencies are subordinated to international financial conditions because of their type of insertion and because their demand depends on international liquidity preference – ultimately due to their currencies' low liquidity premium vis-à-vis of the central ones. In this context, two main policy alternatives emerge.

The first is a reform of the IMFS similar to Keynes's suggestion of an 'International Clearing Union', a central bank of central banks that would issue an international currency, as the 'bancor', and liquidate countries' central banks position. An international currency to denominate contracts and that allow countries to trade in their own currencies would decrease the asymmetries of the international monetary system where the U.S. dollar is the only currency that exercises the three functions of money, thus reducing the subordination of every other currency, including the ones from EMEs.

The second alternative includes country-level policies focused on decreasing fragility given the structural asymmetry. In this sense, the main options are: capital inflow controls, reserves of foreign assets and 'derivatives management techniques'. As argued, these policies decrease the impact of money managers' innovative strategies in building the fragility of emerging currencies. Accordingly, they could attenuate the deleterious impacts from the hierarchical nature of the IMFS, and are a crucial step in favoring long-term investments, trade, and growth through more stable exchange rates and monetary policy autonomy.

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