

GLOBAL LIQUIDITY, SPILLOVERS TO EMERGING MARKETS AND POLICY RESPONSES: AN OVERVIEW

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Global liquidity has become a popular concept in academic and policy discussions of recent years. This concept captures overall “ease of financing” prevalent in the world economy (Caruana, 2013) and it is usually mentioned as a possible cause of capital inflows, global imbalances, excessive credit expansion, high asset prices, and exchange rate appreciations that could pose risks for price and financial stability around the world, but most particularly in emerging market economies.

The importance of global liquidity in academic and policy discussions suggests that global liquidity and its drivers are not only relevant but also determinant for international financial stability, both in the build-up phase for vulnerabilities and when any resulting financial imbalances unwind. With increasing financial integration, global financial conditions have a growing impact on domestic economic conditions, affecting international capital flows and the dynamics of credit, financial asset and property prices in financially integrated economies. Global liquidity can also contribute

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to the build-up of financial system vulnerabilities in economies with distorted financial markets, which may result in large mismatches across currencies and maturities. Periods of lax financial conditions have usually been followed by periods of lower liquidity. Shortages of global liquidity can have major implications for economic growth, as was experienced in the 2008–09 period.

Global liquidity spreads through international financial flows (e.g. cross-border credit provision and foreign currency lending), which are determined by choices made in both source and recipient economies and by public and private sectors. Global liquidity conditions are the result of interactions among macroeconomic factors (including economic growth), monetary policy, exchange rate regime, capital account policies, public sector policies (including financial regulation) and financial factors that guide the behavior of financial market participants and intermediaries, such as financial innovation and risk appetite.

Both macroeconomic and financial factors change and interact in complex ways, blurring the distinction between driving factors and their associated transmission or amplification mechanisms. This volume contributes to the extensive literature (e.g. Forbes and Warnock, 2012; Fratzscher et al., 2012) that tries to understand the individual and combined effects on global liquidity of its various drivers. In particular, Burnside discusses one avenue through which low interest rates in advanced countries may channel capital toward emerging markets' carry trade flows.

Concerns about global liquidity come from the potential spillovers that it can create through global imbalances, credit expansion, pressures on asset and commodity prices, and exchange rate appreciations in emerging markets. These spillovers, coupled with structural exposure, may result in vulnerabilities for financial stability at the local and global levels. In this volume, García-Cicco et al. analyze structural exposure, and Ventura and Martin and Kalemli-Ozcan address some of the potential global liquidity spillovers to emerging markets.

Global liquidity has a pronounced cyclical nature, while being subject to occasional shocks. This, in turn, implies a twofold objective for policymaking from a financial stability perspective. Firstly, to mitigate global private liquidity surges and cycles and their associated credit and asset price surges,¹ and secondly, to quickly

1. Private liquidity mainly corresponds to the provision of credit by private entities.

respond to sudden shortages of global liquidity and associated disruptions in financial systems and economic growth. To this end, policymakers count with a battery of policy measures including macroprudential policies and the provision of public liquidity.²

The strengthening of regulatory frameworks is the first line of defense against the fluctuations in global liquidity. By enhancing the resilience and dampening the procyclicality of the financial system, the frequency and severity of negative liquidity shocks are likely to be reduced. The overall effect remains difficult to assess with certainty,³ and Costinot et al. and Chamon et al. provide some evidence to help in this task. The first of the mentioned papers looks at capital controls from a different perspective and studies their role in the dynamic manipulation of the terms of trade. The second paper studies the desirability of sterilized interventions under inflation targeting.

As soon as a liquidity boom occurs, macroprudential measures and central bank liquidity provision could be needed to mitigate the effects of an excess of capital flows into a fragile economy. One issue is the extent to which individual countries will want to insure themselves against liquidity shocks by building sufficiently large stocks of foreign reserves. Under most conditions, a situation of abundant capital inflows and low global interest rates is good for developing countries. Theory tells us that, in the absence of frictions, international capital flows not only contribute to expand a country's productive capacity but also allow its citizens to share risk with the rest of the world. However, the presence of pecuniary externalities, inefficient fluctuations in credit standards, or other types of financial frictions, may lead to perverse situations where these inflows result in excessive credit growth, risk taking, or misallocation of capital.

An important body of recent research has been devoted to understanding how an economy may borrow in excess and misallocate credit.⁴ Of course, if we believe that these frictions are present and strong, first-best policy actions should aim to undo them. But this may not be feasible, either because we are unsure about the presence,

2. Official liquidity is that provided by institutions such as central banks via their standard operations in money markets and reserve accumulation, by international financial institutions, through their credit lines, or by central governments through their sovereign wealth fund savings.

3. Lim et al. (2011) and Tovar et al. (2012) are two of the many papers that have tried to quantify the impact of various macro-prudential policies.

4. Bianchi (2011), Korinek (2011), Dell'Ariccia et al. (2013).

type, or magnitude of the frictions involved, or because first-best policies cannot be implemented in the timeframe required.

Global liquidity in the decade preceding the 2008 crisis was associated with an increase of global imbalances between countries. The pre-crisis period was characterized by an increase in the dispersion of current account deficits, excessive capital flows and greater cross-border financial holdings, particularly for advanced economies and a global financial environment with low risk aversion and low volatility. Two papers included in this volume assess the global imbalances phenomenon using empirical or theoretical approaches. Bacchetta and Benhima theoretically examine how corporate saving in emerging markets is contributing to global rebalancing. Lane and Milesi-Ferreti review the recent dynamics of global imbalances and examine the cross-country variation in external adjustment over the 2008-2012 period.

As briefly mentioned in the discussion above, this volume is a collection of nine papers that were presented at the Seventeenth Annual Conference of the Central Bank of Chile, which took place in Santiago on November 15 and 16, 2013. The event brought together leading economists from academia and central banks who discussed global liquidity, its spillovers to emerging markets and policymakers' responses.

The rest of this overview highlights these articles and their contribution to the discussion of and literature on global liquidity, its spillovers to emerging economies, and how policy responses affect and are affected by this phenomenon.

Global liquidity drivers and characteristics

The interest rate differential is one of the theoretical drivers of capital flows among countries. Under some conditions, this differential may lead to carry trade which constitutes a relevant channel of global liquidity and global and current account imbalances. Craig Burnside studies the relationship between interest rate differentials, currency carry trade and capital flows, Lane and Milesi-Ferreti and Bacchetta and Benhima analyze how global imbalances behaved in the former financial crisis, and why.

Burnside revisits the evidence of currency carry trades, exploring their relationship to the uncovered interest parity puzzle and the behavior of risk premia. Contrary to the standard prediction of the uncovered interest rate parity condition—a building block of many

international macro models, he finds that carry trade is profitable in both developed and developing countries; however, there is stronger evidence against uncovered interest rate in the first group of countries than in the second. Also, the risk factors that explain the returns to carry trade in developed countries do not seem to work in explaining these returns in developing countries. Although the relationship between the interest rate differential and capital flows is statistically significant, he finds that it is quantitatively small, which would suggest that the interest rate differential is not a source of destabilizing capital flows.

Lane and Milesi-Ferreti study whether the adjustment in current account imbalances was the result of cyclical factors, including the initial decline in aggregate demand in deficit countries, like the United States and the European periphery, and the initial decline in commodity prices, or rather the adjustment process was more protracted and consistent with a stronger structural process. They document a significant narrowing of the global imbalances in the current accounts following the financial crisis of 2008 and project a further compression of current accounts into the following years. However, they note that, in spite of this compression, stock (creditor and debtor positions) imbalances have continued to expand in relation to GDP which may be indicative that the current account corrections are not definitively implying the end of the global imbalances era.

They also find that pre-crisis current account gaps and pre-crisis external positions help explain an important part of subsequent differences in demand growth between countries. They show that real exchange rates did not move in a stabilizing direction to a modest extent, but rather the adjustment in current account imbalances came from costly declines in aggregate demand and output in high deficit countries. Finally, they document that only in countries that do not peg their currencies is there a correlation between monetary policy changes during the crisis period and initial imbalances. Countries without a peg see their interest rates drop by more the higher their deficit is. All in all, the authors interpret the evidence as signaling that the narrowing of large external imbalances would be particularly costly in deficit countries that lack monetary autonomy.

Bachetta and Benhima focus on corporate savings to analyze global imbalances. The relevance of the issue comes from the fact that global imbalances were associated with an increase in savings in developing Asian countries and part of this increase came from the corporate sector. The authors extend their own previous work and

present a model with a developed country and an emerging country with borrowing constraints and liquidity needs, where both countries differ in their level of credit tightness. The authors consider three shocks that lead to global rebalancing: a credit crunch, a growth slowdown in the developed country, and a growth slowdown in the developing one.

The authors found heterogeneity in the effects of these three shocks on the interest rate. The shocks originating in the developed country lead to a decline in the interest rate while the shock to the developing country ended up in an increase of the interest rate. This suggests that the initial phase of the rebalancing was associated with lower pressure on real interest rates while the latest phase was associated with an increase in world interest rates. Also a slower growth in the emerging country improves the trade balance of the developed country.

The need for liquid assets in the emerging country implies a new channel of international transmission. A decrease in the world interest rate has a negative impact on surplus economies having liquid assets. This effect should be combined with the positive effects that a reduction in interest rates has in countries in need of collateral, and the substitution effect of labor and capital. An interesting aspect of the model is a positive output co-movement in the presence of productive shocks.

Global Liquidity spillovers and consequences in an integrated world

On many occasions, capital inflow episodes have concluded in sudden stops and sharp currency depreciations that were accompanied by recessions and crises. This volume comprises several papers on this issue. While García-Cicco et al. explore how important these effects are to explain business cycle fluctuations in emerging countries, Ventura and Martin and Kalemli-Ozcan address some of the potential consequences of the capital inflows to financially integrated emerging economies though analyzing the appearance of asset price bubbles and the transmission of foreign shocks.

García-Cicco, Kirchner and Justel study the role of financial frictions in the propagation of credit shocks. To do this, they set up a DSGE model with two financial frictions: the first one is the relationship between banks and borrowers, and the second one between depositors and banks. Then they evaluate the behavior

of the model using Chilean data from 2001 to 2012 period. In the estimated model, foreign shocks play an important role in explaining relevant variables such as GDP, consumption, trade balance and risk premium. However, the role of these shocks is limited with respect to inflation, the monetary policy interest rate, and the real exchange rate. The authors find that domestic financial frictions are relevant for the propagation of foreign shocks. They also show that, in the presence of domestic financial frictions, the contribution of external factors in explaining the evolution of some macro variables during the 2008-2009 recession is larger and significantly different than in a model without these frictions. These results suggest that small open economies with some level of domestic financial frictions (like Chile) are vulnerable to financial shocks like a global liquidity episode with large capital inflows and then a sudden stop.

Ventura and Martin set up a model to analyze the interactions of capital flows, low interest rates and asset bubbles and their effect on macroeconomic performance. They show that the effects of bubbles on economic activity depend on the circumstances the country is facing. When the supply of funds from international markets is high, bubbles raise net capital inflows, investment and growth. When foreign financing dries up (sudden stop), bubbles have a negative effect on net capital inflows and economic activity. A conclusion of this work is that the bubble that attains the optimal level of investment should be large during normal times and small during sudden stops. Since bubbles are driven by expectations, there is a role for government policies (capital controls) to achieve the desired bubble allocation. They claim that the government should subsidize gross capital outflows and tax gross capital inflows during normal times while adopting the opposite policy during sudden stops. The environment of low interest rates used in the analysis is key in concluding these policy prescriptions that are not what is usually inferred from other contributions in the literature.

Kalemli-Ozcan empirically studies the role of global banks in transmitting the global crisis to emerging markets. She finds a negative relationship between banking integration and synchronization of output cycles in crisis periods. However, this relationship turns positive in tranquil times. Interestingly, she also finds that this correlation is driven mainly by linkage between countries in the developed world. When considering financial links between emerging countries, the findings indicate that the correlation becomes positive.

The author concludes that these findings are consistent with the theory that indicates that in complete markets, financial integration creates divergences under real shocks (tranquil times) and convergence under financial shocks. The disappearance of the negative shock in developing countries' linkages would be in tune with the existence of frictions in international financial markets that hinder capital flows. She also concludes that there was a contagion among the emerging markets that was financially linked, although the crisis was not transmitted to them from advanced economies via financial markets.

Effectiveness and convenience of policy responses to face global liquidity

As observed, episodes of capital inflows combined with distortions may lead an economy into undesirable situations. Consequently, policymakers have implemented not only traditional monetary policy, but also interventions in forex markets, capital-account-management and macro prudential policies. In this volume, Obstfeld, Costinot et al., and Chamon et al. analyze different effects of policies of this kind over the moderation of spillovers to emerging economies producing global financial shocks.

Obstfeld evaluates the capacity of emerging market economies to moderate the domestic impact of global financial and monetary forces through their own monetary policies. Those economies, able to exploit a flexible exchange rate, are far better positioned than those that devote monetary policy to fixing the rate (a reflection of the classical monetary policy trilemma).⁵ However, exchange rate changes alone do not insulate economies from foreign financial and monetary shocks. While potentially a potent source of economic benefits, financial globalization does have a downside for economic management: it worsens the tradeoffs monetary policy faces in navigating among multiple domestic objectives. This drawback of globalization raises the marginal value of additional tools of macroeconomic and financial policy. Unfortunately, the availability of such tools is constrained by a financial policy trilemma, distinct from the monetary trilemma. This second trilemma posits the incompatibility of national responsibility

5. Rey (2013) argues that the monetary trilemma is really a dilemma, because emerging economies can exercise no monetary autonomy from United States policy (or the global financial cycle) unless they impose capital controls.

for financial policy, international financial integration, and financial stability.

Costinot, Lorenzoni and Werning look at policies that affect countries' saving decisions and compare these policies with more standard protectionist policies like a temporary import tariff. They show that policies affecting saving keep the real exchange rate undervalued, depressing imports and stimulating exports. Although both policies reduce current imports, the first one entails short-run welfare losses for the domestic country and short-run welfare gains for the trading partner, while the second policy has the opposite welfare effects.

Chamon, Ghosh and Ostry analyze the interaction of inflation-targeting regimes and exchange rate interventions.⁶ They argue that interventions need not undermine central banks' credibility provided that they communicate clearly the primacy of the inflation target over the desire to stabilize shocks that move the exchange rate away from its fundamental value. Moreover, by acknowledging the exchange rate instrument, central banks may actually enhance their credibility, as this second instrument provides more room to smooth shocks to the exchange rate in a way consistent with the inflation target.

6. It is common in developing countries to intervene in the exchange rate market when the exchange rate fluctuates considerably. For example, in the capital inflow episode before the crisis, some developing countries saw their currency appreciated and there were central banks that decided to accumulate reserves in response to this phenomenon. Accumulating reserves is a costly strategy in terms of interest rate differentials, however big fluctuations in exchange rates may be costly in emerging economies because of distortions like currency mismatches for example. Thus, a possibility is that inflation-targeting emerging economies would jeopardize their inflation target if they incorporated the exchange rate target in their objectives. Inflation credibility may be at stake, which would impede a successful inflation-targeting regime.

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