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MACROPRUDENTIAL POLICIES IN EMERGING MARKETS

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Introductory Remarks

Macroprudential policies came to the fore in the aftermath of the Global Financial Crisis (GFC) and have come to be seen as necessary complement to monetary policy in dealing with issues of financial stability. That this is so is attested by the many fruitful discussions in this conference.

Not that macroprudential policies are something new; LTV guidelines in lending, for example, have been around for decades, perhaps even before the use of the interest rate as policy tool. What is different is the recognition, and, by now, systematic modeling, of the interaction between monetary policy and regulatory and supervisory practices. The recognition, in particular, that these interactions may seriously destabilize financial markets; in the extreme, lead to or result in financial crises. This then begs the question of how should central banks incorporate financial stability considerations in the conduct of monetary policy. Hence, the usual response that, in support of financial stability, the first line of defense is the use of macroprudential tools. Adjustments in short-term interest rates would play an ancillary role. In the event, the key conclusion is that the policies are complementary and not substitutes.

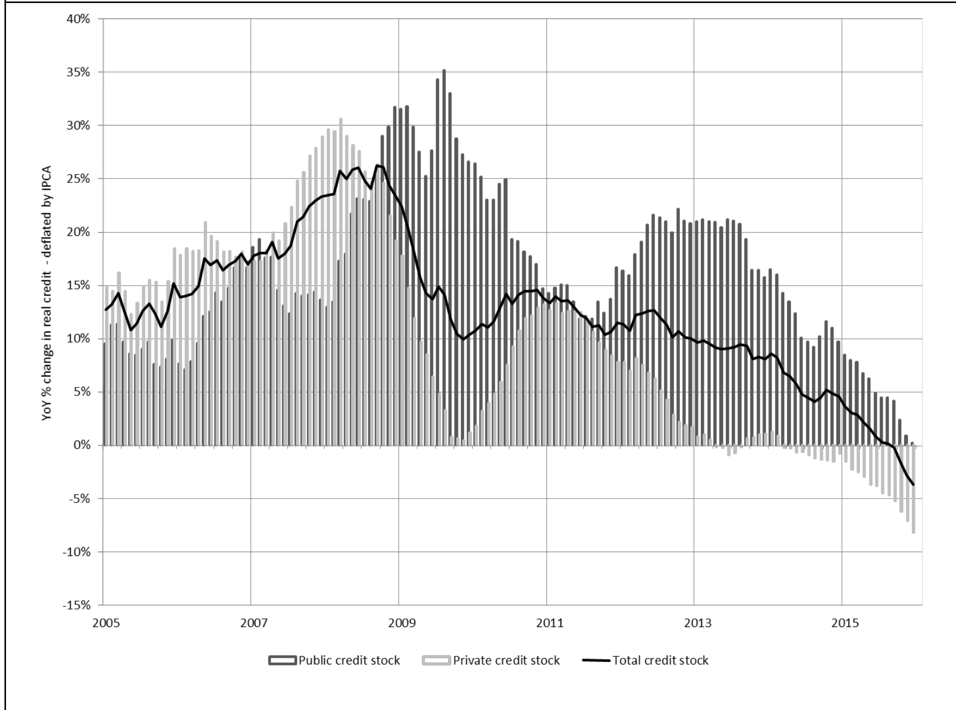
This may be well understood in the context of monetary systems operating with deep financial markets and well-established if sometimes flawed regulatory institutions; where the credibility of monetary policy is not in question. It is more problematic when markets are incomplete or malfunctioning and institutions inadequate or without credibility.

Across a wide array of developing countries in the post-World War Two period macroprudential policies substituted for monetary policy in widespread practices of financial repression. Looking for ways to finance large budget deficits, regulatory policies operating with capital controls captured private savings for public funding through such instruments as caps on interest rates, forced saving schemes and, most commonly, unremunerated required reserves on deposits coupled with directed credits and/or lending-specific capital charges. The result was a gross misallocation of capital with low productivity growth. And many of the reforms implemented in the years before the Global Financial Crisis (GFC) aimed at dismantling this edifice; to discipline fiscal performance; improve resource allocation through financial markets; create effective institutions and tools for monetary policy operating predominantly through price discrimination and not quantitative controls.

The GFC forced a reassessment of this trend towards deregulation.

Consider the case of Brazil: The impact of the GFC was sharp but highly concentrated in the first quarter of 2009. Until the end of 2008 the economy was performing above par as it was again in the last quarter of 2009 helped by China's expansion and extraordinary countercyclical measures at home. As shown in Figure 1, at the time of the Lehman Crisis in the US, real credit growth in Brazil topped 20% year-on-year, decelerating from a torrid near-30% at the start of the year. Real credit growth decelerated rapidly through 2009 but started to re-accelerate in 2010 and through 2011to rates topping 12% year-on-year in real terms. The contraction was short-lived.

Figure 1 – Credit stock deflated by IPCA

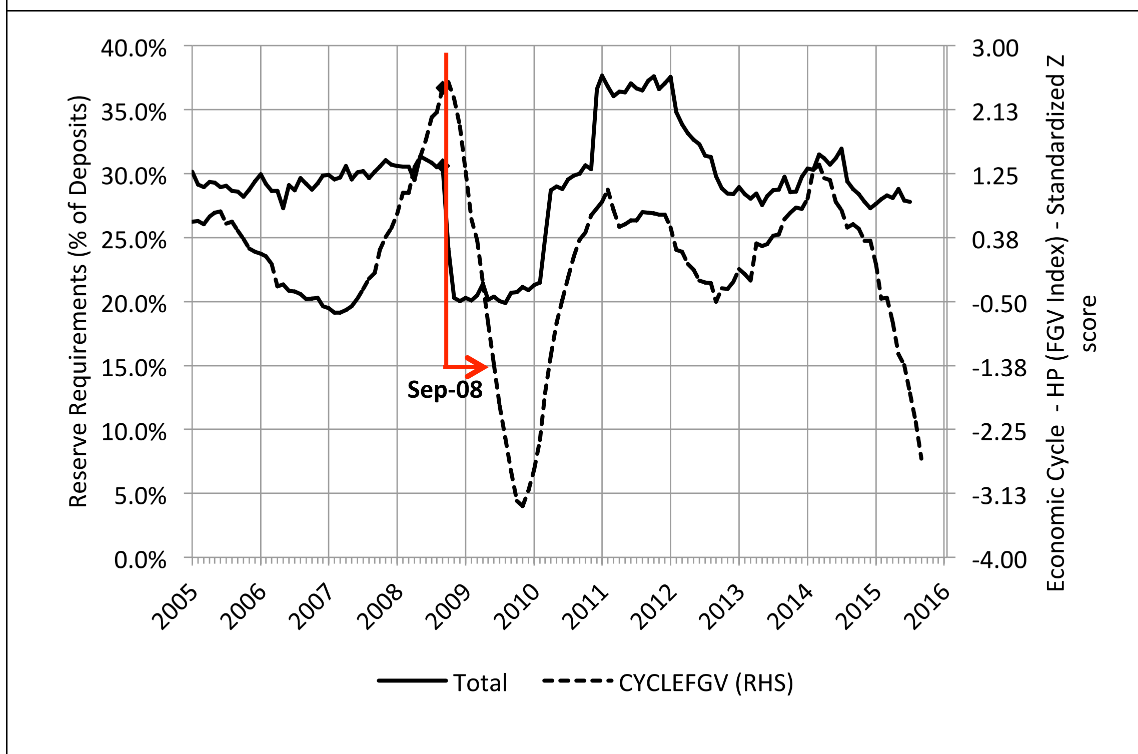


Now what is interesting in this V-shaped recovery of real credit is the performance of state-owned banks, the national development bank, BNDES, the national mortgage bank, CEF, and the publicly owned and largest commercial bank in the country, Banco do Brasil. Look again at Figure 1 and note that, until end-2008, private banks lead the expansion of credit; not so thereafter. By July-August of 2009, credit extended by public banks was growing at 35% year-on-year, admittedly from a low base but at an alarming rate nonetheless. Soon the public system overtook private banks in the share they held in the total stock of credit outstanding.

The new macroprudential framework (the term now used in official documents supporting the policies) explicitly instructed public banks to step-in for risk-averse private banks, to sustain and expand credit to enterprises and households. Moreover, the expansion came with new subsidies; easier access for less qualified borrowers and substantially lower-than-market rates of interest. To ensure that the public banks had conditions to lend, the Treasury capitalized the development bank (BNDES) and the Central Bank lowered reserve requirements for commercial banks.

A return to active reserve management was the hallmark of monetary policy in the period. With the introduction of Inflation Targeting in 2000, the monetary authorities spent most of the following decade attempting to simplify and streamline the complex system of reserve requirements. At one point there were only five reserve levels; by mid-2015 there were again more than twenty requirements differentiated by size of institution, form of deposit, nature of credit and type of borrower. Figure 2 shows the average requirement as a percentage of total deposits. Before the crisis, reserves were used mainly for prudential reasons and to sterilize the impact of public deposit creation on credit availability. They were not used a countercyclical tool. However, as shown in Figure 2, this changed with the crisis.

Figure 2 – Required reserves and the economic cycle



The dotted-line in Figure 2 is an estimate of the economic cycle using monthly activity data produced by the Fundação Getúlio Vargas (FGV). Note that post the GFC, the cycle and the average level of reserve requirements in the banking system are closely correlated: Reserve requirements were used as a macroprudential tool to strengthen a loosening of monetary policy. The first cycle (roughly 2009-2010) was simple enough. Through 2009 reserve requirements and the policy rate dropped as the Central Bank and the Treasury implemented a series of measures to fight contagion and risk aversion. The global sudden-stop in capital flows was made worse locally by the impact of undisclosed corporate derivative contracts in foreign exchange and by reverse flows from local subsidiaries of US and European banks to buttress the fledging capital of their home banks. Some of these measures were reversed in 2010.

It is the next cycle (roughly 2011-2013) that stands out in the new use (or misuse) of macroprudential tools. We should keep track of three components. First, between August 2011 and October 2012 the Central Bank lowered the policy rate 525bp. It did so even as actual and expected inflation increased systematically above the target. Second, not content with the transmission mechanism of lower rates, the government engineered a direct expansion of credit through the public banks and, indirectly, by changing regulations on consumer and mortgage credit. Third, in seeming contradiction to the other two measures, the Central Bank began to *increase* selective reserve requirements and related measures.[1]

[1] The list of measures implemented in 2011 included:

1. An increase in unremunerated RR on term deposits from 15 to 20 percent
2. An increase in remunerated RR (on demand and term deposits) from 8 to 12 percent
3. An increase of the tax rate on financial operations (IOF) from 1.5 to 3.0 percent (annualized) applied to credit operations for individuals for one year
4. An increase on capital requirements for consumer loans for vehicle financing through a change in risk weights from 75 to 150 percent, the equivalent to an increase in capital requirement of 8 to 16.5 percent; at the same time, to avoid the build-up of excessive maturity mismatches the loan to value ratio (LTV) on vehicle loans was increased, penalizing longer maturities—the maximum LTV was set to 80 percent for loans between 24 and 36 months, to 70 for loans between 36 and 48 months, and to 60 percent for loans between 48 and 60 months

The policy package marked an overt return to financial repression. Directed credits to targeted enterprises; the use of public banks for narrow policy aims; extensive use of interest subsidies; active management of selective reserve requirements combined with special capital provisions for targeted categories of credit; a new wave of capital controls and protectionist measures. All in the guise of "macroprudential policies" and now under the aegis of a "rethinking of macroeconomic policy" or, in the more prosaic domestic variety, a "new macroeconomic matrix."[2]

The thinking behind these measures combined a long-nurtured and deep distrust of markets with a particular interpretation of the global macroeconomic moment. The ideological bent led to a massive program of public spending, mainly through the state enterprises, and to overt government guidelines to direct private decision-making.

The diagnosis of the macroeconomy attributed the 2011 domestic slowdown to insufficient domestic demand. The solution? Public spending and direct governmental credit creation. Little thought was given to the possibility that record growth in 2010 was a product of the extraordinary measures taken in 2008-09, first in the effort to elect another Workers' Party President, and then in a panic-reaction to the GFC; that it reflected Brazil's particular advantage to China's unprecedented investment stimulus in 2009-2010; that above-norm growth beginning in 2005 was largely a reflection of the commodity cycle with favorable terms-of-trade; that the previous credit-cycle had already produced an over-leveraged and over-heated economy.

The single-minded thought was to recreate growth at 4-5% per annum; anything less would be "proof" of insufficient demand, to be counteracted by government spending and credit-creation.

The behavior of the exchange rate was a peculiar outcome of these policies. Remember the context: a world of near-zero interest rates, gradually less risk-averse, backed by the Fed's quantitative easing that stimulated risk-taking in Emerging Markets. In the murky post-GFC environment, Brazil's burst of growth in 2008-2010 was a beacon for foreign investors. Already in 2010 but especially in 2011 the flows came in, not as trickle but as a flood, with the expected consequence — a significant real appreciation of the currency notwithstanding a large accumulation of reserves.

At first, the authorities welcomed the inflow, happy that it bolstered domestic asset markets and helped fight inflation. However, by mid-2011 the strength of the BRL was a concern, and it is in this circumstance that

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5. The IOF on nonresident portfolio investments was increased from 2 to 4 percent (and ultimately to 6) and a 60 percent unremunerated RR on banks' short position in the forex spot market was imposed
6. Additional measures to limit banks' exposure in forex derivative markets

In 2012, faced with less favorable global conditions, the central bank adjusted the macroprudential stance reducing the additional RR on demand deposits from 12 to 6 percent first and then to zero, and the additional RR on time deposits from 12 to 11 percent. Finally, in the summer of 2013, confronted with strong currency depreciation pressures triggered by the Federal Reserve's "tapering talks," the IOF on forex operation was abolished; in December 2013, the IOF on cash withdrawals in foreign countries was increased from 0.38 to 6.38 percent. See, Afanasieff, T, et al, "Implementing Loan-to-Value Ratios: The Case of Auto Loans in Brazil (2010-11)." Brasilia: Central Bank of Brazil, Working Paper 380, March 2015; http://www.bcb.gov.br/pec/wps/ingl/wps380.pdf

[2] In February 2010, Olivier Blanchard, Giovanni Dell'Ariccia, and Paolo Mauro published an influential paper as an IMF Staff Position Note: "Rethinking Macroeconomic Policy" (SPN/10/03) - https://www.imf.org/external/pubs/ft/spn/2010/spn1003.pdf. The note and supplementary material from the IMF's Research Department addressed flaws in earlier IMF assessments, corrected and/or qualified part of prior dogmatism in the institution's policy advice, and generally condoned a cautious heterodox use of capital controls, reserve requirements, public lending and other such policies as used by the Brazilian authorities. In its Article IV Reviews for 2009, 2010, 2011, 2012 and 2013 the IMF Staff cautiously accepted the Brazilian policy practice, while, through a series of working papers, mainly authored by Luiz Pereira da Silva and Pierre Agénor, the Central Bank of Brazil outlined and defended its practices. See for example, "External Shocks, Financial Volatility and Reserve Requirements in an Open Economy," Working Paper 396, August 2015 - http://www.bcb.gov.br/pec/wps/ingl/wps396.pdf and the literature cited therein.

macroprudential became most creative. The idea was to use selective taxes and reserve requirements to discourage capital inflows and credit creation in narrowly specific parts of the credit system.

The central bank maintained low interest rates and sterilized its buildup of reserves by issuing specially designated Treasury paper offering private banks an easy alternative to increasingly risky credit creation amidst rapid deposit growth. To counteract and then up this trend, the Treasury funded the public banks. This was their moment and they went on a veritable credit binge. And to ensure that demand and not only credit was growing at a rapid pace, the budget and state-enterprises increased spending. The fiscal and quasi-fiscal deficits ballooned; demand was bursting at the seams even as, with the wrong incentives, private investment and output decelerated. The current account deficit widened from 1.4% of GDP in 2009 to 3.0% in 2012 and 4.4% in 2014. Growth in imports was extraordinary, outpacing the record gains in commodity exports. The outcomes confirmed the mistake in diagnosis; the problem was lack of supply, not demand. The entire experiment of the "new economic matrix" was a disaster, macroprudential policies as well. This is today well recognized and made worse by a political crisis that likely will produce three years of recession with an unprecedented drop in GDP.

Brazil's case was extreme, but it is not alone. In a recent paper, Tito Cordella and co-authors find that, in a wide panel of EM economies, the use of countercyclical reserve requirements is far more common than the countercyclical use of the interest rate. In other words, macroprudential policies are a substitute for not a complement to monetary policy, and they usually work in the wrong direction![3] When surges in capital inflows are linked to over-expansionary domestic policies, and the correct policy response would be a drastic and rapid but difficult reduction in fiscal spending, it is not uncommon to find the wrong response. As inflation threatens, interest rate hikes could restrain inflation, but they may also attract more capital, which in turn can fuel further real exchange rate appreciation and credit expansion. Then comes the temptation of the macroprudential. A tax on inflows is an attractive palliative. An increase in selective reserve requirements may lead to an increase in bank intermediation spreads through lower deposit rates, higher lending rates, or both; combined with targeted capital requirements it could induce banks to reduce credit in "dangerous" segments. The stage is set for a potentially disastrous policy mistake.

[3] Cordella, T., et al, "Reserve Requirements in the Brave New Macroprudential World," Washington, D.C.: The World Bank, Policy Research Working Paper 6793, February 2014; http://www-wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/2014/02/27/000158349_20140227144114/Rendered/PDF/WPS6793.pdf