

CONTROLS ON CYCLICAL CAPITAL INFLOWS

Some Skeptical Notes

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Capital is flowing back to Emerging Market economies, EMs. This is reason to celebrate but, as previous capital-inflow episodes should alert us, complacency on the part of policymakers could be a costly mistake. A recent Fund Staff Position Note (Ostry et al (2010)) shares that view, and has startled many observers by breaking with tradition and giving its blessing to controls on capital inflows in some, admittedly extreme, circumstances. When the Fund talks, people listen!² Thus, the Fund paper has started a lively debate on the issue, which is both timely and useful.

This note collects some of my thoughts and hunches on the issue of capital controls. For the sake of definiteness, I will focus on capital controls as *countercyclical* policy; more concretely, controls that are imposed in response to a large cyclical surge of capital inflows. I will not address the issue of *permanent* control, which could be characterized as some kind of *structural* or *developmental* policy.³

I will assume that the main objectives of control on capital inflows are preventing: (1) large real currency appreciation that, given the surge's temporariness, it is likely to be reversed in a short span of time; and (2) large contraction of capital inflows – possibly even entailing large capital outflow – when the capital-inflow episode terminates (through, e.g., Sudden Stop, SS).

I fully agree with the Fund note that control on capital inflows should at best be thought as a policy of last resort, to be applied only when monetary and fiscal policies show harmful side effects, as when reserve accumulation threatens to ignite high inflation or a large quasi-fiscal deficit – or fiscal policy becomes highly distorting.⁴ However, I will go a step further by arguing that, given the above definitions and policy objectives, controls on capital inflows are likely to be ineffective, and distract policymakers' attention from other central issues, like vulnerability of the domestic financial system, and Sudden Stop of *Domestic* (as opposed to International) credit flows.

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² In memory of E.F. Hutton & Co.

³ Examples are China and India, economies that have imposed capital controls for an extended period of time and, more to the point, do not change them much in response to cyclical factors. Moreover, they also impose controls on capital outflows.

⁴ The advice in the Fund note reads a bit like a chess manual that after going over the intricacies of chess openings, middle and end games closes the book by saying that if none of the above works: kick the chess board (read, *put controls on capital inflows*)! But the wise manual would probably add, in line with the Fund note, that if chess players kick out the board every time they are about to lose (read, *if capital controls become a global strategy*), chess will no longer be played, to the detriment of every chess player in the world – and, needless to say, the manual's authors!

Control on capital inflows is ineffective and potentially distorting

1. As reported in the Fund paper, empirical evidence strongly suggests that control on capital inflows (denoted CKI in what follows) has no discernible effect on total capital inflows, but it succeeds in lengthening the maturity of capital inflows.
2. Thus, the impact of CKI on real currency appreciation is likely to be minor, unless there is aggressive international reserve accumulation, which I will ignore because, as pointed out above, I assume that CKI is adopted *in lieu* of other policy alternatives, like reserve accumulation. Therefore, the objective of preventing large real currency appreciation is unlikely to be fulfilled.
3. It is tempting to conjecture that a reason for CKI to be ineffective in reining in total capital flows is that in practice CKI has focused on short-term capital flows and excluded important components like FDI, making it possible to mask short-term capital flows under a variety of guises. Thus, the question is open about whether effectiveness of CKI could not be enhanced by virtually controlling *all* types of capital inflows. However, I am afraid that this strategy could seriously interfere with trade credit and the operation of multinational corporations, unless CKI had a structural character (a case I am ignoring in the present discussion) and was incorporated in long-term expectations.
4. Turning to maturity structure of capital inflows, there are several issues that are worth highlighting:
 - a. The harm caused by SS (of capital inflows) is, in principle, a function of the size of the eventual capital-flow contraction. In general, a large flow contraction does not require the existence of positive capital *outflows*. Even if CKI succeeds in excluding all types of capital flows that would be able to exit in the short run, the real sector is likely to suffer a major negative shock if prior to SS the economy exhibited large capital inflows that collapse to zero, say, after SS. This is so, because the adjustment in the current account and the rate of reserve accumulation associated with SS is determined by the *change* in capital inflows, irrespective of whether capital flows end up being positive or negative.
 - b. The size of potential capital outflows of external funds is given by their *residual maturity*. CKI has an effect on the maturity of *new* external flows, while residual maturity is determined by the *stock* of existing external funds, which is likely to dwarf the former, especially in the short run after CKI is imposed.
 - c. Finally, even if CKI succeeds in lengthening the residual maturity of external funds, this does not prevent domestic bank depositors, for example, to stage a bank run and head to Miami.

5. The previous points show that CKI may be highly ineffective in cushioning the effects of SS, unless it is accompanied by control on capital outflows, CKO, a policy that is ignored by the Fund paper.
6. However, CKO is not easy to implement in the short run. Moreover, if investors expect CKO will be implemented during a SS episode, capital inflows may exhibit even shorter maturity.

Control on domestic financial institutions is more promising

1. A crucial transmission channel of capital inflows and outflows is the domestic banking system (see Kaminsky and Reinhart (1999)). Even in the US we learned that, at the end of the day, banks helped to support the financial bubble through SIVs (Structured Investment Vehicles), for example – despite many specialists conjecturing that banks were about to become an extinct species in advanced economies' credit market.
2. I will define Domestic Credit as credit from domestic banks. A common phenomenon during a SS episode is that small and medium-sized enterprises, SMEs, are crowded out from the domestic credit market, even in the unlikely case in which domestic credit flows do not change. A reason is that SS results in a sudden cut of external credit lines to the government and large corporations, which turn around and fund themselves in the domestic market. This they can easily do because they are more creditworthy than SMEs; the latter are typically excluded from the international credit market. Bank credit to SMEs is normally short term and takes the form of working capital. Thus, as SMEs are crowded out from the domestic credit market, these firms are compelled to cut down on labor and raw materials with blitzkrieg speed and intensity. Therefore, SME output takes a big hit. Moreover, since SMEs are typically labor-intensive firms, output collapse is likely to be accompanied by a rapid rise in unemployment.
3. Contraction of credit flows to SMEs is even more severe than in the case discussed in the previous paragraph because, as shown in Figure 1, SS episodes are associated with Domestic Credit SS (defined in the same manner as SS in Calvo, Izquierdo and Mejia (2008)). This positive association is particularly noticeable in the 1998 Russian crisis and the subprime crisis.
4. A relevant instance of SS-DCSS takes place when banks have external credit lines with short *residual* maturity, because banks tend to prioritize serving their external obligations for fear of losing access to the global capital market when the situation goes back to normal. This is, again, likely to crowd out domestic credit to SMEs during SS. Thus, policymakers should be well advised to closely monitor banks' external obligations at all times, not only during a capital-inflow episode, when it could be too late for lengthening their residual maturity. Incidentally, monitoring the maturity of banks' external obligations is not easy. It requires sophisticated bank regulators and transparency of banks' balance sheets. Financial wizards have myriad ways for hiding short-term obligations, a common practice being to hide them as off-balance-sheet items.

5. The general point that emerges from this discussion is that a more effective alternative to CKI is a policy that helps to prevent big swings in domestic bank credit. This type of policy is easier to implement than an across-the-board CKI, because banks are under the tutelage of the central bank. An Instrument that is commonly employed in this regard is banks' minimum liquidity requirement: raising it during a capital-inflow episode and lowering it in SS.
6. As pointed out above, a challenging issue is how to attenuate crowding out of SMEs during SS. One possibility is to subsidize SME credit. This may be hard to implement if the government is part of the problem and has limited access to international finance. Alternatively, credit to large firms could be taxed to level the playing field. However, this may backfire because large firms provide inter-enterprise credit to SMEs and, on occasion, are big demanders of their products.
7. Experience in many EM financial crises, including the current one, shows that domestic credit is slow to recover, even when banks are bailed out.⁵ Therefore, a challenging issue for the government is to find ways to regenerate domestic credit after financial crisis. There are some apparently successful attempts to that effect in which international reserves are made available to some critical sectors, like the export sector, during a SS episode. Brazil has been a leader in that respect, but the jury is still out.⁶
8. A more controversial issue is the role of public banks during DCSS. Public banks could be more effective in attenuating the SME crowding-out problem mentioned above, because they would have a better handle of the microeconomics of the domestic credit market. Besides, public banks do not need to go through indirect policies like credit subsidies or taxes, which results are hard to predict in a crisis. They can simply change the composition of their loan portfolios. It is worth noting that Brazil and Chile have pursued expansive credit policies from their public banks during the Lehman episode. However, not even DCSS at an aggregate level could be prevented (see Figures 2 and 3).⁷ This is another important issue that calls for further research. Clearly, if public banks intend to play the role of Lenders of Last Resort for the SMEs during a DCSS episode, these banks should set aside enough funds for this purpose prior to crisis.

What this note is not about

1. This note does not address Trilemma issues. In particular, it does not discuss if a *permanent* CKI strengthens the central bank ability of setting domestic interest rates independently of interest-

⁵ Calvo, Izquierdo and Talvi (2006), for instance, show in a variety of cases that output recovery after deep crisis can take place without credit. Moreover, recent data for the US economy strongly suggest that a similar pattern is taking shape there (see Calvo and Loo-Kung (2010)). This does not signify that domestic credit is unimportant but most likely that output recovery is the result of the economy finding a variety of ways to recompose liquidity through alternative but possibly inefficient channels.

⁶ An important issue that deserves careful analysis is to what extent the use of international reserves increases the private sector exposure to foreign-exchange denominated loans (*moral hazard*).

⁷ Actually, according to a recent presentation by central bank governor Meirelles at the University of Columbia, the contraction of domestic credit flows to SMEs in Brazil was much sharper than for aggregate domestic credit flows as a result of crowding out.

rate parity conditions. Interestingly, however, an economy where CKI has been claimed to give the central bank greater autonomy in setting its policy interest rate, Chile, has abandoned CKI.

2. This note does not address cases in which CKI is permanent and is accompanied by equally permanent CKO, like in China and India. Under those circumstances, my reservations about *residual* maturity do not apply with the same force. However, as economies become more integrated into global trade, capital controls may become more difficult to implement, and even permanent capital controls may face some of the problems discussed here. The subprime crisis has already shown that, despite India's severe capital controls, for example, portfolio capital showed a sharp reversal during Lehman crisis. Indian economists are hotly debating this issue.

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FIGURES

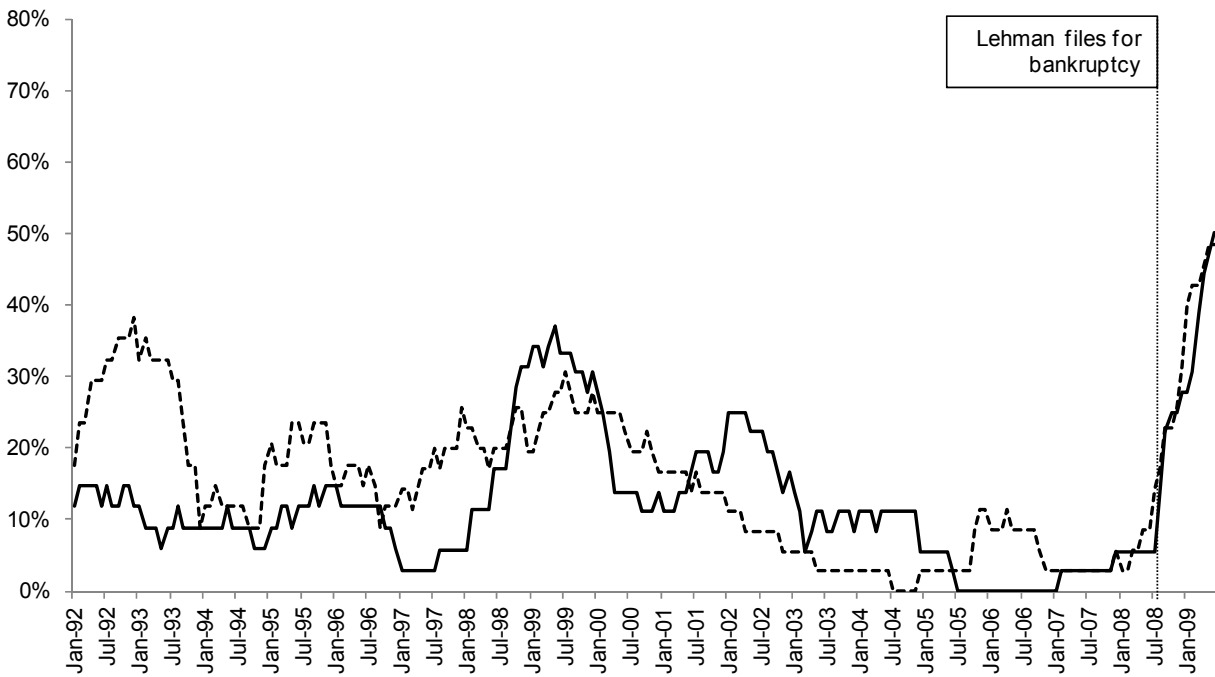


Figure 1.

--- DCSS, _____ SS

Notes. EMs (23): Argentina, Bolivia, Brazil, Chile, Colombia, Czech Republic, Dominican Republic, Ecuador, Egypt, El Salvador, India, Indonesia, Korea, Malaysia, Mexico, Peru, Philippines, Russia, South Africa, Thailand, Turkey, Uruguay and Venezuela.

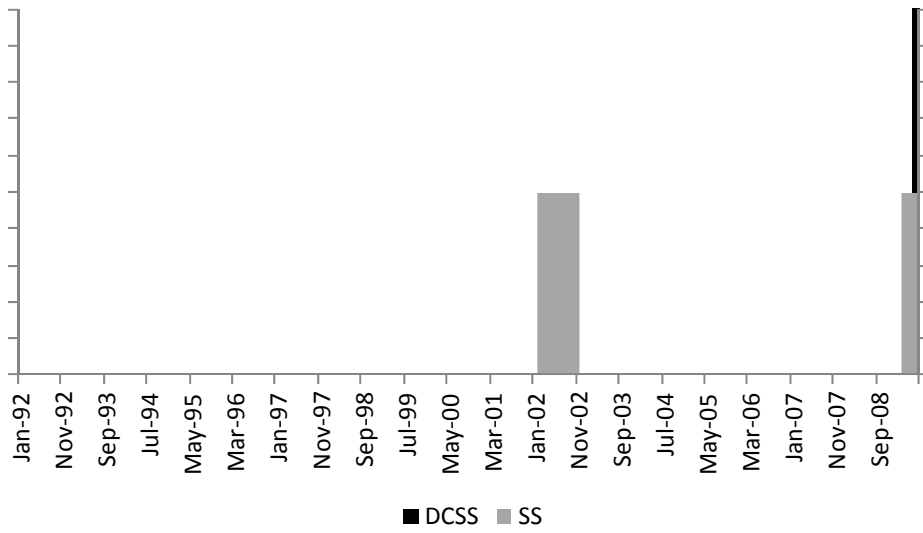


Figure 2. Brazil

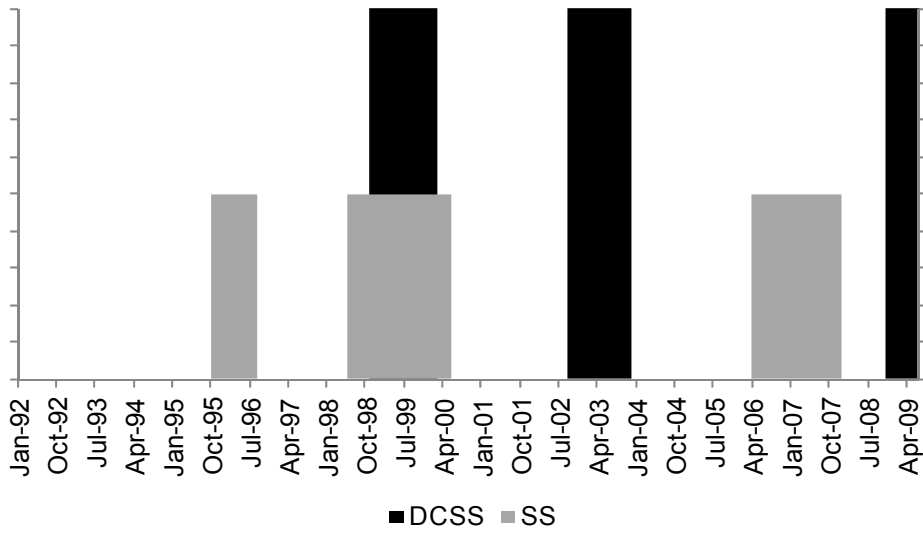


Figure 3. Chile