## DOMESTIC BANK REGULATION AND FINANCIAL CRISES: THEORY AND EMPIRICAL EVIDENCE FROM EAST ASIA COMMENT\*

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Different from many other branches of international economics, the literature on currency attacks and financial meltdown cannot quite rely - at least not for the time being - on a "Neo-Classical" theoretical core, that is, on a widely accepted, formally elegant paradigm linking pervasive normative implications to rigorous behavioral microfoundations. But in the absence of a "Neo-Classical" synthesis, the model of currency and financial crises that is rapidly emerging as the focal point in the recent body of research on causes and implications of market turbulence can be appropriately labeled as "Neo-Alexandrian" or - better – "Neo-Alejandrian". The "Alejandro" here is, of course, Carlos Diaz-Alejandro, author among many other things of the classic article "Good-bye financial repression, hello financial crash". That article may well represent the mother of all papers on twin crises, judging from the number of "third-generation" models that keep building directly or indirectly on its insights fifteen years (and counting) since its publication. The chapter by Dekle and Kletzer in this volume is a highly enjoyable contribution to such "Neo-Alejandrian" paradigm, and a very fine one.

Substantially, the "Neo-Alejandrian" paradigm relies on three building blocks. The first one is the overborrowing/overlending/overinvestment syndrome, that is, the role of lending booms in the build-up of a financial turmoil. The idea is that, to the extent that domestic and foreign creditors are willing to lend against future bail-out revenue, unprofitable projects, excessively risky investments, and cash shortfalls keep being refinanced and rolled over. In the case of foreign borrowing and evergreening, this translates into an unsustainable path of current account deficits.

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Underlying the previous syndrome is the second key ingredient of the "Neo-Alejandrian" construction, namely public guarantees (explicit, implicit, or simply presumed) and expected bail-outs. Agents act under the presumption that corporate and financial investment is guaranteed, so that the return on assets is implicitly insured against bad shocks. Quoting Diaz-Alejandro directly, "whether or not depositors are explicitly insured, the public expects governments to intervene to save most depositors from losses when financial intermediaries run into trouble. Warnings that intervention will not be forthcoming appear to be simply not believable."<sup>1</sup> In other words a time-consistency problem is at work here, as the government cannot commit credibly to a *laissez-faire* stance.

The third element is contingent liabilities. Public deficits may not be high before a crisis, but when the government steps in and guarantees the stock of private liabilities, it must undertake the appropriate fiscal reforms. If these involve recourse to seigniorage revenue and money creation, expectations of inflationary financing may lead to speculation in the currency market. If the central bank intervenes to stabilize the domestic currency it loses reserves that could otherwise be used to bail out insolvent private institutions, and vice versa. Thus, the parallel phenomenon of currency and banking crises.

Many authors, several of whom are represented in this conference volume or quoted in the Dekle and Kletzer chapter, have contributed to the elaboration and refinement of the "Neo-Alejandrian" framework for policy analysis and evaluation, especially in relation to the Asian crisis. Of course, recent interpretations of crisis episodes have highlighted the role of several factors, ranging from self-validating panics to magnification effects related to "financial accelerator" mechanisms and liquidity constraints, to institutional characteristics, to the strategies of large players and highly leveraged institutions, and so on. Still, it remains true that the building blocks of the "Neo-Alejandrian" approach are recurrent themes in the vast majority of recent contributions and analyses of turmoil episodes, providing, perhaps, the minimum common denominator underlying the formation of a consensus view of emerging market crises.

With this in mind, what is new in the chapter by Dekle and Kletzer? Arguably, the value added of the paper is the abundance of detail rather than the originality of vision. Thanks to a clever modeling strategy in which only idiosyncratic shocks matter, the role of macroeconomic

<sup>&</sup>lt;sup>1</sup> Diaz-Alejandro [1985, reprinted 1988], p.374.

shocks is de-emphasized, and corporate governance, institutional characteristics, and prudential regulations and enforcement are brought centerstage, the authors are able to articulate a set of close comparisons between theoretical assumptions and predictions and the empirical evidence for the Asian countries. For most scholars and analysts, this exemplary overview will represent the most appealing aspect of the chapter.

On the theoretical side, especially convincing is the way the authors model the links between financial intermediaries and the corporate sector, providing the foundations for an analysis of twin crises whose occurrence can be foretold (and therefore prevented). Briefly, the authors set up their analysis by focusing on households (and firm-owners) whose only form of financial diversification is through bank deposits. Banks are able to monitor firms' performance, and diversify risk by lending to many firms. A firm finances capital with bank loans. Profitability is stochastic. When things go badly, the entire capital of the firm goes to the bank. The bank can declare the firm bankrupt, but this would not be the best course of action. Rather, the bank that now has monopoly power can renegotiate the loan, at a premium.

If the bank rolls over the existing loan, the firm has an incentive to undertake riskier projects (it has no capital, has limited liability, and it pays an interest premium): ultimately, the bank's portfolio becomes riskier over time, raising the contingent liabilities of the deposit insurer. If banks can borrow from foreign intermediaries and there are limited government guarantees on their foreign exposure (including schemes of fixed exchange rate) but prudential regulation is not in place, the rollover/evergreening game can go on until the government reaches its limit on the indemnity liability. The rest of the story is well known: a twin currency and banking crisis occurs when foreign loans are pulled from the banking system, forcing the government to step in and finance its bail-outs through taxes, inflation and depreciation.

One aspect of the model that may warrant deeper investigation in the future is the welfare analysis of a twin crisis and its determinants. Indeed, similar remarks may apply to virtually the entire spectrum of "third-generation" theories, much more focused on the dynamics and the mechanism of a crisis than on its costs and benefits. We understand quite well what guarantees do, and what role they play in the build-up of an unsustainable lending boom. What we still don't quite understand is why guarantees, implicit or explicit, are extended in the first place (and even when there is a good story to explain their presence, the literature has been agnostic on why they work in some cases, but don't work in other cases). It remains rather unclear why exchange rates are pegged in this type of models, given that nobody gains anything by limiting exchange rate flexibility. The typical answer is that fixed rates are a form of implicit guarantee, but this does not solve the problem. It simply reintroduces the previous question of why there are guarantees in the first place. The authors are well aware of the limits of their interpretive framework and, openly, admit they are "interested in the consequences of a fixed exchange rate regime with an explicit or implicit government guarantee of the foreign liabilities of the banking sector in the event of a switch to a float, and not the welfare economics of this policy". It is easy to predict that, for the next generation of contributions to the "Neo-Alejandrian" paradigm, the latter will be a natural starting point.

## REFERENCES

Diaz-Alejandro, Carlos F. (1985) "Good-bye financial repression, hello financial crash," Journal of Development Economics 19, reprinted in A. Velasco (ed.), Trade, development and the world economy: selected essays of Carlos Diaz-Alejandro, Oxford, UK: Blackwell, 1988.