

## **Capital Flow Bonanzas: An Encompassing View of the Past and Present**

**by Carmen M. Reinhart and Vincent R. Reinhart**

Comments by:

Sebnem Kalemli-Ozcan

Associate Professor of Economics

University of Houston and NBER

August 2008

Reinhart and Reinhart provide a systematic study of the episodes of influx of capital, namely a “capital flow bonanza.” The authors develop an algorithm, following the work of Kaminsky and Reinhart (1999), to date the incidence of bonanzas. This algorithm allows them not only to detect the smooth deterioration of the current account but also analyze the macroeconomic developments surrounding the bonanzas. The study suggests a strong link between flows, global interest rates and commodity prices. Using data from 181 countries from 1980 to 2007 and a core sample of 66 countries from 1960 to 2007, the authors show that: a) the path of current account around bonanza is V-shaped; b) bonanza periods are associated with higher incidence of banking and currency crisis in developing countries only; c) bonanzas precede sovereign default episodes; and d) fiscal policy is procyclical around bonanza.

I think this paper is an extremely valuable study for anyone who is interested in capital flows and sovereign debt. My main comments will be about the data issues, robustness and the generalization of the results. Most of the analysis is done for 66 countries, during 1960–2007. 58 of these are middle (emerging) and high (industrialized) income and 8 of these are low income (Africa) countries. Are there really data from 1960–2007 for all of these countries? It would be nice to indicate which countries have how many years of data in appendix table 1. If a certain set of countries have more years of data than others than these set might be biasing the results. More importantly, most of the low income and some of the middle income countries are HIPC countries, who have received a lot of aid that shows up as capital

inflows. Cote d'Ivoire, Bolivia, Honduras, Mauritius are some examples. There are also some countries with debt forgiveness that will show up as capital outflows. I think there needs to be a robustness exercise where these countries are excluded. At the moment it is not clear how the authors deal with these issues of aid and debt forgiveness.

We might also worry about pooling emerging and industrialized countries for the empirical analysis since this type of pooling might mask important differences. Why keep oil exporters and importers together, for example? Or force the same coefficient on Eastern European countries who are low savers running a current account deficit and Asian countries who are high savers running a current account surplus. Interestingly enough both of these set of countries have similar average growth rates in the last decade. I think the paper will also benefit from clarifying the definition of the bonanza further. The starting point of the paper is that the old definition did not detect smooth deterioration of the current account. However it is not very clear how the new definition is improving upon this. The reader is referred to appendix figure 2 in footnote 4. There is only an appendix figure 1, where the labels “capital flows” and the “constructed capital flows” are not explained. The figure shows a stark difference between the “current account”, “capital flows” and the “constructed capital flows” during 1970–1974 and also to some extent the latter part of the sample. And it is not clear why this is the case.

Finally, the results should be interpreted with caution since they represent conditional correlations instead of causal effects. Causality runs both ways here. The authors are indeed careful about not interpreting their regression results as casual. However the difference between unconditional and conditional (on bonanza) probabilities of default can also be due to many other “third” factors. For example, for the U.S. mortgage-related securities are a significant part of the foreign purchases and hence lower mortgage interest rates may be a result than a cause. Also in the case of procyclicality, which is based on the correlation between output and government spending, the main question is that what drives both?

To sum up, I think the authors undertake a very rich and systematic empirical study that brings many issues together. There are many interesting results in the paper that highlights

the importance of future research on the underlying drivers and causes of capital flows and sovereign defaults.

Reference: Graciela Kaminsky and Carmen Reinhart (1999), "The Twin Crises: The Causes of Banking and Balance of Payments Problems," *American Economic Review* 89, June 1999, 473–500.