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New Perspectives on International Debt and Exchange Rates

Kenneth S. Rogoff*

My research over the past couple of years has focused on rethinking international debt and exchange rates, particularly, but not exclusively, for developing countries.

A Revised History of Exchange Rates

The choice of exchange rate regime remains one of the most controversial issues in international macroeconomic policy today and — in the eyes of most policymakers and policy economists — one of the most critical. Yet, curiously, much academic work, pioneered by NBER researchers Marianne Baxter and Alan Stockman¹, has shown that it is difficult to prove that the exchange rate regime systematically affects economic growth or, for that matter, *any* macroeconomic variable other than the real exchange rate. At the same time, it is equally difficult to identify any stable systematic relationship between macroeconomic variables (including policy variables such as interest rates and budget deficits) and major currency exchange rates, at least for horizons up to two years. Richard Meese and I first identified this puzzle in a pair of papers in 1983² and it has stood up to numerous attempts to overturn it since. In a 2000 paper,³ Maurice Obstfeld and I summarize the thin connection between exchange rates and macroeconomic variables as the “exchange rate disconnect puzzle.”

Why have researchers found it so difficult to show that exchange rate regimes matter when policymakers and business people take the connection for granted? Carmen Reinhart and I⁴

offer one possible rationale. We note that, in comparing the performance of fixed and flexible exchange rate regimes, researchers typically have had to rely on the official history of exchange rates, a sterilized picture that is often sharply at odds with reality. That is, most comparisons of fixed and floating regimes have been based on the International Monetary Fund’s official historical classification of exchange rates which, until very recently, has tended to passively reflect what countries report they are doing to the IMF. If a country like China, which has a virtually pegged exchange rate, reports to the IMF that it is engaged in “managed floating”, then (until recently) the IMF database would dutifully record China as engaged in a variant of floating. A related problem is that many countries claiming to have “fixed” exchange rates succeed in doing so only by imposing severe capital controls. Pervasive controls, in turn, typically lead to either a large parallel (“black”) market for foreign exchange or, in other instances, to an official dual market. As a result, there are surprisingly many cases historically where countries reported their exchange rates as fixed while actually following a monetary and exchange rate policy much more commensurate with floating. Although developing countries have dominated this category in recent decades, backdoor floating characterized many major European countries’ exchange rate regimes for the first half of the Bretton Woods period of “fixed exchange rates.”

Reinhart and I develop an algorithm for reclassifying exchange rate regimes going back to 1946; our approach takes neither a country’s official declared exchange rate regime nor its officially declared exchange rate for granted. Remarkably, we find only a tenuous connection between the official IMF historical classification of exchange rates and our new de facto

classification. Indeed, whether the official classification accurately represents underlying monetary and exchange rate policy is a virtual coin toss, with almost half of official fixed rates actually having a much more flexible de facto regime, and visa versa.

In our initial pass toward rethinking economic performance and exchange rates, perhaps the most striking result is that countries with large and variable parallel rate premiums experience considerably poorer inflation and growth records than countries with unified exchange rates (meaning no parallel or dual market). Thus, heavy handed exchange controls — the most historically common and pervasive form of capital account restriction — appear inimical to good economic performance.

In a follow-up paper (based closely on joint work with Robin Brooks and Nienke Oomes⁵), Aasim Husain, Ashok Mody, and I apply the classification scheme from Reinhart and Rogoff to ask whether it implies any performance difference between relatively flexible exchange rate regimes and relatively fixed ones.⁶ We find that it makes a great deal of difference if one sorts countries into three groupings: advanced countries (OECD countries plus a few other small wealthy countries); emerging markets (middle income countries with significant access to international capital markets); and developing countries. Our analysis, which attempts to control both for standard explanatory variables from generic growth regressions and for the potential endogeneity of the exchange rate regime, yields some interesting conclusions.

For developing countries that do not have extensive access to capital markets, we find that (relatively) fixed exchange rate systems perform surprisingly well, offering lower average inflation with no apparent sacrifice in growth. Moreover, contrary to conventional wisdom based on repeated

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catastrophes in emerging markets, fixed exchange rate systems have proven remarkably durable in non-financially integrated developing countries. On the other hand, floating regimes appear to outperform fixed ones for advanced countries, although the evidence is less decisive. Growth appears to be higher in advanced country floaters (again controlling for a variety of standard growth regression variables), and inflation performance is no worse, perhaps because of the advent of modern independent central banks run by inflation-conservative central bankers. Moreover, floating is very robust. Once an advanced country moves to a float, it tends to retain the regime for a very long time. For emerging markets, there is no distinct pattern, although the probability of exchange rate crises is certainly significantly worse under pegs. (We did not consider whether sharing a currency with another country significantly enhances performance, as Rose has energetically argued. Also, following my 2003 paper on financial globalization with Prasad, Wei, and Khose⁷, we use a de facto rather than a de jure measure of international capital market integration, again a very important distinction. Some African countries, for example, have achieved little in the way of international capital market integration despite no overt barriers. Some Latin countries, on the other hand, repeatedly have found capital controls to be ineffective in stemming inflows or outflows.)

Our results fly in the face of conventional policy wisdom: that fixed rates are no longer viable in today's world and should be broadly eliminated as soon as possible. For a developing country without the political and legal capacity to have a meaningfully independent central bank, a fixed rate may be a reasonable alternative form of inflation stabilization, especially when the country is reasonably insulated from international capital markets, either by choice or because international investors are not interested. Of course, once the country becomes a more financially globalized emerging market, the fixed exchange rate may eventually become a liability and an exit strategy may be needed. But espe-

cially for poorer developing countries, the need to design an exit strategy at some point in the distant future provides little argument for abandoning a peg in the present. This is no doubt one reason why pegs have proven so durable in developing countries with low de facto levels of international capital market integration.

Serial Default

Recent work with Reinhart⁸ (described in the *NBER Digest*, August 2004), and with Reinhart and Miguel Savastano⁹, looks at the phenomenon of serial default in developing countries, past and present. While lightening may never strike twice in the same place, developing country default certainly does so, again and again. Argentina, for example, has remained mired in a painful restructuring since its late-2001 debt default. But this is in fact the fifth time that Argentina has defaulted since it gained independence in the 1820s. And Argentina is not alone as a serial defaulter. Brazil had defaulted on its debt seven times, Mexico eight times, Turkey seven times, and Venezuela nine times — so far. Incidentally, if Venezuela is the modern day record holder, it is by no means the all-time leader. That distinction belongs to Spain, which has defaulted 13 times since the 1500s. Many other European countries, including France, Germany, Portugal, and Greece also were serial defaulters back in their days as emerging markets. Although each wave of default inevitably is followed by a witch-hunt for the culprits (in the 1990s, many blamed the International Monetary Fund), the simple fact is that debt crises have been with us for a very long time, and many a financial engineering scheme has failed to avert them. Reinhart, Savastano, and I find that serial defaulters can develop “debt intolerance,” so that the risk of default begins to skyrocket at debt levels that might be quite manageable for a country with a more pristine record. One possibility, we suggest, is that default imposes lasting damage on a country's financial system, thereby making it more vulnerable to future defaults.

Part of the blame for the ongoing cycle rests with policymakers in developing countries who, typically under short-term political pressure, tend to walk a country's debt too far out on a limb. Thanks to spreads, creditors earn normal returns on developing country debt, but creditors do not bear the large dead-weight costs imposed by repeated financial crises. Unfortunately, the debtor country's citizens typically must bear that burden, and to a lesser extent the international tax payer through bailouts. Our analysis suggests that debt thresholds are highly country specific and depend heavily on past history of default on external debt and on hyperinflation (which is tantamount to default on domestic debt). Argentina, for example, appears to begin experiencing symptoms of debt intolerance at debt-to-GDP ratios of 25-30 percent, far below the level for countries in Asia, where up until now, sovereign defaults have been much less frequent. In related work, we find that a history of repeated default and high inflation helps to explain why pervasive dollarization of liabilities, in both domestic and foreign debt, tends to persist long after a developing country has succeed in bringing down its inflation rate.¹⁰

Reinhart and I argue that many developing countries' histories of repeated high inflation and default are an important piece of the puzzle of why capital seems to flow from rich countries to poor countries, a phenomenon Mark Gertler and I identified and modeled in our 1989¹¹ paper, and which Lucas highlighted in his celebrated 1990 analysis.¹² Today, of course, these flows are dominated by massive sustained borrowing by the United States. Obstfeld and I¹³ first raised the prospect that the U. S. current account deficit (now over 5 percent of GNP) is not likely to be sustainable, and that when it unwinds, one may see a massive depreciation of the dollar. In more recent work¹⁴ we have updated and extended our analysis. We conclude that the problem has only become worse over the four years since our initial paper. No one expects that the United State will default in the style of a developing country, but the prospects for a sharp depreciation of

the dollar could be quite problematic for the global economy, particularly if they coincided with security problems or severe budget problems in the United States.

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² R. Meese and K. S. Rogoff, "Empirical Exchange Rate Models of the Seventies: Do They Fit Out of Sample?" *Journal of International Economics*, 14 (February 1983), pp. 3-24; and R. Meese and K.S. Rogoff, "The Out-of-Sample Failure of Empirical Exchange Rate Models: Sampling Error or Misspecification?" in J. Frenkel, ed., *Exchange Rates and International Macroeconomics*, Chicago: University of Chicago Press, 1983, pp. 67-105.

³ M. Obstfeld and K.S. Rogoff, "The Six Major Puzzles in International Macroeconomics: Is there a Common Cause?" NBER Working Paper No. 7777, July 2000, and in B. Bernanke and K. S. Rogoff, eds. *NBER Macroeconomics Annual 2000*, Cambridge, MA: MIT Press, pp. 339-90.

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⁶ A. M. Husain, A. Mody, and K. S. Rogoff, "Exchange Rate Regime Durability and Performance in Developing Countries Versus Advanced Economies," NBER Working Paper No. 10673, August 2004, forthcoming in the *Journal of Monetary Economics*.

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¹⁰ C. M. Reinhart, K.S. Rogoff, and M.A. Savastano, "Addicted to Dollars," NBER Working Paper No. 10015, October 2003.

¹¹ M. Gertler and K.S. Rogoff, "Developing Country Borrowing and Domestic Wealth," NBER Working Paper No. 2887, March 1989; revised version published as "North-South Lending and Endogenous Domestic Capital Market Inefficiencies," *Journal of Monetary Economics*, 26 (October 1990), pp. 245-66.

¹² R.E. Lucas, "Why Doesn't Capital Flow from Rich to Poor Countries?" *American Economic Review*, 80 (May 1990), pp. 92-6.

¹³ M. Obstfeld and K.S. Rogoff, "Perspectives on OECD Capital Market Integration: Implications for U.S. Current Account Adjustment," in *Federal Reserve Bank of Kansas City Global Economic Integration: Opportunities and Challenges*, March 2001, pp. 169-208.

¹⁴ M. Obstfeld and K.S. Rogoff, "Current Account Adjustment and Overshooting," prepared for NBER pre-conference on G-7 Current Account Imbalances, July 2004, and R. Meese and K.S. Rogoff, "Empirical Exchange Rate Models of the Seventies: Do They Fit Out of Sample?" *Journal of International Economics*, 14 (February 1983), pp. 3-24.