

From Bretton Woods to Bipolarity: Singapore and the World¹

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It is a pleasure to be here to help celebrate the 30th anniversary of the Monetary Authority of Singapore. This would otherwise be an underappreciated date, since the MAS is not continuously in the news, at least where I live. This is the way it should be, of course. Central banks get headlines when they are forced to respond to crises, or, even worse, when they create them. Central bankers should lead quiet lives. If those of you who work at the MAS do not exactly feel that you lead quiet lives, then you might consider a sabbatical in Turkey or Brazil.

It is also a pleasure to have this opportunity to respond to John Williamson's paper. As with all of John's papers, there is much here to admire and commend. John and I share a historical sensibility -- in particular, a conviction that the development of the international monetary system is an historical process. We both believe that one can only understand the future prospects of that system by analyzing its past development -- that is, the path by which it has gotten to this point. This is an oblique way of saying that John, in his authoritative survey, has preempted just about every important historical point I was prepared to make.

It is also a pleasure to have this opportunity because it allows the two of us to renew a dialogue that dates from 1993. That was when I presented at the Brookings Institution the manuscript of a book, *International Monetary Arrangements for the 21st Century*, that predicted

¹Comment on John Williamson's "From Bretton Woods to Bipolarity: The Evolution of Thought on Exchange Rate Regimes, 1971-2001," for presentation at the 30th anniversary conference of the Monetary Authority of Singapore on July 20th, 2001.

that the spread of high capital mobility and democratic politics would force a growing number of countries to abandon the middle ground of pegs, bands and crawls by moving toward the two ends of the exchange rate spectrum, either freer floats or harder fixes. (This is what came to be known subsequently as the “corner solutions” view.) Brookings, in its wisdom, assigned me the perfect discussant, John Williamson, who of everyone in the profession makes the most coherent and compelling case for the intermediate option. Now the MAS has turned the tables.²

No one would dispute that in the intervening eight years there has been considerable movement away from the middle of the exchange-rate spectrum. Today only two industrial countries, Denmark and Iceland, continue to operate an intermediate regime, in the form of a horizontal band against the euro. In my hemisphere one can point to only one country, Venezuela, that operates an intermediate regime, and it is hardly a model student.³ Dollarization has gained new adherents, such as Ecuador and El Salvador. Meanwhile, a number of emerging market countries that float have begun to float more freely; most recently Mexico has abandoned its rules for intervention in the foreign exchange market for what the governor of the central bank, Guillermo Ortiz, called a couple of weeks ago “a pretty clear float, as clean as it gets.”⁴ As Stanley Fischer observed in a recent paper, of the 33 countries classified as emerging market economies by J.P. Morgan or Morgan Stanley, the proportion with intermediate regimes fell from

²Long before, John had anticipated my point, at least for the case of the adjustable peg, in “The Crawling Peg,” *Princeton Essays in International Finance* no. 50 (1965), International Finance Section, Department of Economics, Princeton University.

³While the crawling peg continues to crawl as designed, interest rates shot up to 20 per cent last month.

⁴*Financial Times* (July 10, 2001), p.4.

64 per cent to 42 per cent over the decade of the 1990s.⁵

42 per cent is a non-negligible ratio, to be sure (although an updated figure, eliminating Turkey and Hungary, among others, would be even lower). Moreover, it is well known that many emerging markets conventionally classified as floating continue to intervene heavily in the foreign exchange market and to adjust their monetary policy instruments to limit exchange-rate movements, displaying what Guillermo Calvo and Carmen Reinhart have dubbed “fear of floating.”⁶ There is a manifest reluctance on the part of central banks to allow the exchange rate to float freely. There is a continued desire, evident for example in last year’s Franco-Japanese paper on the case for a collective basket peg for East Asian countries (an idea for which John Williamson can claim patrimony), for some kind of intermediate option that would limit exchange rate flexibility.⁷

Truth in advertizing and fairness to John impel me to acknowledge these facts. In a sense, I already have: if you compare my 1994 and 1999 books, you will see that I have tempered my language, referring to the trend toward freer floats rather than totally free floats, and to the likelihood that countries will increasingly abandon monetary policy operating strategies organized around a fluctuation band with firm limits for the exchange rate, but without necessarily moving

⁵Stanley Fischer, “Exchange Rate Regimes: Is the Bipolar View Correct?” *Finance and Development* (June 2001).

⁶Guillermo Calvo and Carmen Reinhart, “Fear of Floating,” NBER Working Paper no.7993 (November 2000).

⁷Another member of this panel can perhaps contest Dr. Williamson’s patrimony, having put forward similar proposals of this own. See Ronald McKinnon, “Exchange Rate Coordination for Surmounting the East Asian Currency Crisis,” unpublished manuscript, Stanford University.

all the way to benign neglect of the exchange rate.⁸

Singapore, of course, represents a major challenge -- perhaps *the* major challenge -- to my argument that intermediate arrangements that involve a band for the exchange rate are unlikely to be viable in a world of high capital mobility. Singapore has operated an undisclosed (“quiet”) band system since 1975.⁹ It has maintained price stability while allowing the exchange rate to adjust, within limits, in response to changing macroeconomic conditions. Thus, in 1997-8, during the Asian crisis, the MAS could allow the Singapore dollar to decline by some 20 per cent. In calendar year 2000, when the economy grew by nearly 10 per cent, the rate was allowed to appreciate to prevent overheating. And now that the country is entering recession due to weak global demand, for electronics in particular, the MAS has allowed the currency to decline to an 11 year low against the dollar. It has avoided undue currency volatility and has not been the subject of speculative attacks -- a remarkable achievement given events elsewhere in Asia.

How can we explain this success? One explanation would be that Singapore of all countries has come closest to adopting John’s recommendations for how to run an intermediate regime. Singapore operates a variant of what John calls a “basket, band and crawl” (BBC) regime, creating a presumption that the authorities will normally intervene to keep the exchange rate straying far from the band, but keeping open the option to let the rate take the strain, and go outside the band, if they decide that market pressures are overwhelming. Its band is wide, which

⁸*International Monetary Arrangements for the 21st Century* (Brookings Institution 1994); *Toward a New International Financial Architecture: A Practical Post-Asia Agenda* (Institute for International Economics 1999). The most up-to-date statement of my views is “Solving the Currency Conundrum,” *Economic Notes* 29 (2000), pp.315-339.

⁹On this history, see “A Survey of Singapore’s Monetary History,” Occasional Paper no. 18, Economic Department, Monetary Authority of Singapore (January 2000).

allows the rate to fluctuate in response to cyclical conditions. It has avoided the mistake of keying its exchange rate target to a single currency -- most recently, it has not had to follow the dollar up against the euro and the yen. It appears to have adjusted its band periodically in response to changing domestic and international conditions.

I myself would put the emphasis elsewhere, not on the design of the exchange rate band but on other characteristics of the economy. Singapore has been able to credibly commit to adjusting its monetary policy instruments to limit exchange rate fluctuations because it has had an impeccably strong banking and financial system. It has not had a large stock of nonperforming short-term debts in the corporate sector. It has run large fiscal and current account surpluses every year since 1989. It holds large reserves, equivalent to 6 to 9 months of its very considerable imports. Its combination of strong growth and flexible labor markets (achieved through its famous system of variable bonuses) mean that monetary policy adjustments designed to stabilize the exchange rate have not put undue strain on the real economy. Its political stability means that its commitment to hit those exchange rate targets has political support and therefore credibility. And its reluctance to internationalize the Singapore dollar has made it harder for currency speculators to get in and out of the market, insulating the currency from attack.

How many other countries can satisfy these prerequisites for the credibility and viability of a basket, band and crawl? My answer, it will not surprise you, is not many. Few countries have equally strong banking and financial systems. Few have equally able and thorough bank supervisors. Few have equally flexible economies. Few have comparable records of political stability.

Thus, I continue to think that the vast majority of countries will respond -- voluntarily one

hopes but under duress if necessary -- by moving to harder pegs or greater flexibility. In the Western Hemisphere, harder pegs are attractive for small countries, mainly in Central America, that trade heavily with the United States. In Europe, they are attractive for Central European countries that will be able to retain a voice in the formulation of their monetary policy once they join Europe's monetary union.¹⁰ But this is not a solution in Asia (Hong Kong to the contrary notwithstanding), whose trade is dispersed between the U.S., Europe and Japan, and where the desire for deeper political integration, which undergirds the movement for monetary unification in Europe, is not present.

Thus, contrary to prevailing sentiment in this region, I think that most Asian countries will move toward freer floating in the short to intermediate run. But floating is not a monetary policy operating strategy -- as one critic of my argument has put it, it is the absence of a monetary policy operating strategy. So what should be put in its place? While there are many possible alternatives to an exchange-rate based monetary policy strategy, the flavor of the month is inflation targeting. Inflation targeting is a monetary policy operating strategy with four elements: an institutionalized commitment to price stability as the primary goal of monetary policy; mechanisms rendering the central bank accountable for attaining its monetary policy goals; the public announcement of targets for inflation; and a policy of communicating to the public and the markets the rationale for the decisions taken by the central bank. Institutionalizing the commitment to price stability lends credibility to that objective and gives the central bank the independence needed to pursue it. Mechanisms for accountability make this pursuit politically acceptable and impose costs on central

¹⁰Although it is revealing that even these countries have moved to the extremes, in a few cases like Estonia and Bulgaria adopting currency boards, but more generally opting for greater flexibility, during the transition.

banks that are incompetent or behave opportunistically. Announcing a target for inflation and articulating the basis for the central bank's decisions allows these mechanisms to operate.

I should emphasize that the regime I that am describing, which I would recommend for most emerging markets (and all industrial countries, or groups thereof, with their own currencies), is *flexible* inflation targeting as opposed to *strict* inflation targeting. Strict inflation targeting is when only inflation enters the central bank's objective function, flexible inflation targeting when there is also a positive weight on other variables, output for example. Under flexible inflation targeting the central bank does not attempt to return the actual inflation rate to its target immediately under all circumstances, for doing so would create undue volatility in interest rates and output. Rather, it eliminates discrepancies between actual and target inflation gradually over time, since it is adverse to sharp fluctuations in output.

What is the role of the exchange rate in inflation targeting? In an open economy, exchange rate movements contain information about future inflation and unemployment. Thus, a central bank concerned to minimize deviations in inflation and unemployment from their targets will respond by adjusting policy when the exchange rate moves. But it will not follow a rigid, preannounced rule for automatically altering policy when the exchange rate moves to the edges of a preannounced band. How it will respond to exchange rate movements will depend on why the exchange rate moved in the first place, and on what that movement implies for future output and inflation. Without going into details (which constraints of time and space prevent), an inflation-targeting central bank will respond differently to exchange rate fluctuations depending on the

source and nature of the shock that causes the exchange rate to move.¹¹

This raises the question of whether inflation targeting is really any different from a basket, band, and crawl system as John describes it. A central bank operating a basket, band and crawl regime will respond in some cases when the currency approaches the edge of its band to prevent it from straying further, but not in other cases. In particular, when the authorities see pressures on the rate as temporary but overwhelming, they can let it move further, in the expectation that it will eventually come back on its own. Permanent shocks to the competitive position of the economy justify changes in the level of the band or the rate of crawl, where temporary shocks do not. Thus, a central bank operating a Williamson-style band will also respond differently to different shocks to the foreign exchange market, depending on their source and on the circumstances. In fact, then, there are many similarities between IT and BBC.

This is the point where one traditionally weighs the merits of these competing alternatives, something I naturally cannot resist.¹² It is clear that an exchange-rate based target is more crisis prone. It gives speculators a well-defined target to aim at. By attaching all of the authorities'

¹¹The details are analyzed in Barry Eichengreen, "Can Emerging Markets Float? Should They Inflation Target?" <http://emlab.berkeley.edu/users/eichengr/website/htm>.

¹²Assuming, as I do, that the two regimes are in fact competing rather than complementary. In his paper, John argues that monetary policy should be directed toward the attainment of internal balance (an inflation target), while exchange rate policy should be directed toward the maintenance of external balance (and exchange rate target). This assumes that the monetary authorities possess two independent policy instruments -- the interest rate and sterilized intervention -- both of which are effective over the relevant horizon. I have serious doubts that this is the case (that sterilized intervention is effective, obviating the need to adjust interest rates to affect the exchange rate), especially in small open economies. The balance of the empirical literature seems to point in this direction; for a survey see Hali Edison, "The Effectiveness of Central Bank Intervention: A Survey of the Post-1982 Literature," *Special Papers on International Economics* 18, International Finance Section, Department of Economics, Princeton University (1993).

accumulated policy credibility to this one variable, it creates a natural reluctance to change the level of the band or the rate of crawl, even when the “blueprint” says this is warranted.¹³ To be sure, the greater exchange rate flexibility that inflation targeting permits is no guarantee against sharp shocks to the foreign exchange market that can produce serious financial distress -- an outcome that looks a lot like a crisis, in other words. But I think there is now an accumulation of evidence that the consequences of these events are less severe when the exchange rate has been allowed to move more freely.¹⁴ In part this is because the private sector feels a stronger incentive to protect itself from volatility, by hedging and otherwise strengthening its balance sheet, when the currency fluctuates.¹⁵ This is not a complete solution. It does not eliminate all crises. No

¹³One of the principal arguments for an exchange rate target is that governments sometimes “misbehave,” and that the exchange rate band functions as an active constraint to limit excesses. My point is that many governments still misbehave despite having a band in place, and they then compound the consequences by their reluctance to admit the fact (and to adjust the band accordingly). This makes me doubt the inference that bands are better than floats for avoiding misalignments, in practice as opposed to theory.

¹⁴This is a conclusion that John himself approaches is “Are Intermediate Regimes Vanishing?” Speech given at the International Conference on Exchange Rate Regimes in Emerging Market Economies, Tokyo, 17-18 December 1999, www.iie.com.

¹⁵ Ron McKinnon has questioned the logic that greater exchange rate flexibility will encourage hedging; see for example “The East Asian Dollar Standard: Life After Death?” Working Paper no. 99-017, Department of Economics, Stanford University (June 1999). McKinnon’s argument is that while greater perceived exchange risk will increase the demand for hedges, other things equal, it may also increase the cost by reducing the supply. While this logic is impeccable, I have doubts about its practical implications. Indonesia illustrates my point. For some time prior to the outbreak of the Asian crisis in 1997, the country had been operating a crawling band allowing for fluctuations of plus-or-minus four per cent against a basket of currencies. As is typical of many emerging economies, it had relatively high interest rates, which made it attractive for international investors to place their money there. These large capital inflows worked to push the rupiah toward the strong end of its band. Because the authorities were committed to limiting exchange rate fluctuations (and because the strength of the currency lent credibility to that commitment), domestic banks and (especially) corporations accumulated unhedged foreign exposures. And the consequences, of course, were devastating. I

exchange rate regime, not even the corners, is perfectly crisis free, I am happy to admit. But the question is not about absolutes; it is one of *comparative* fragility and costs.

The main grounds on which to prefer an exchange-rate based target is that it will limit volatility -- at least, it will if the crisis problem is avoided. But a large literature shows that simply reducing volatility has a limited impact on trade and growth. Maybe eliminating misalignments has bigger benefits in terms of growth. I am not sure, and in any case I am skeptical that installing an exchange rate band is sufficient for avoiding misalignments.¹⁶

We have an interesting case at the moment in Mexico, which by moving to a clean float has reduced its vulnerability to crisis at the risk of incurring what many increasingly worry is a serious overvaluation. Mexico is highly open and dependent on trade with its neighbor to the north. John has written that he finds it difficult to believe that any country (a class which includes Mexico) will be able to “sustain an economic miracle of the sort Asia achieved in the quarter of a century before the crisis with a floating exchange rate...”¹⁷ Achieving an Asian miracle is a high standard to meet. If John is willing to settle for sustained growth in excess of the United States’, then perhaps he and I can again meet a few years from now and ask whether Mexico has been

choose this example because Williamson (in "Crawling Bands or Monitoring Bands: How to Manage Exchange Rates in a World of Capital Mobility," *International Finance* 1, pp.59-80) cites it as an example of the benefits of having a crawling band. For an account by an informed insider running parallel to mine, see Maranda Goeltham, "Remarks," in Federal Reserve Bank of Boston, *Rethinking the International Monetary System*, Boston: Federal Reserve Bank of Boston (1999).

¹⁶See the preceding footnote on the scope and even incentives for misbehavior when an exchange rate band is in place.

¹⁷“Are Intermediate Regimes Vanishing?”, p.3.

better or worse off as a result of accepting this tradeoff.¹⁸

The other difference between monetary policy as it is practiced in Singapore and by the major inflation targeters concerns in the transparency of the rule. For inflation targeting to work, as I explained earlier, the central bank must announce the rule, publish its inflation forecast, describe the model it uses to map its instruments into its targets, explain why those targets sometimes fail to be met, and specify the corrective actions it plans to take. The MAS, in contrast, studiously avoids specifying its exchange rate band.

Here, whatever our other differences, John and I agree on the advantages of greater transparency. Explicitly specifying the monetary policy operating strategy makes it easier for the markets to monitor the consistency of the authorities' actions with their stated intentions. Transparency enhances credibility, as we have learned time after time. For countries that target the exchange rate, this means specifying the limits of its permissible fluctuation in order to take advantage of the "bias in the band" (produced by what is traditionally known as stabilizing speculation). For countries that target inflation, it means specifying the target, the forecast, the model, and the corrective actions.

This last point may sound funny coming from an American, whose own central bank follows a strategy that resembles inflation targeting but without specifying its parameters. Of course, the credibility of monetary policy in the United States rests heavily on the shoulders of one man, Alan Greenspan, and on the authority he commands in both the markets and the Open Market Committee. We will not be able to rely on him forever (as John McCain colorfully

¹⁸Perhaps we will be able to consider the matched pair of Mexico and Argentina, assuming no change in the latter's exchange rate regime.

acknowledged during the presidential primaries last year). I fear that our failure to specify an inflation targeting rule in the United States will be something that we may come to regret in the post-Greenspan years.

One can make similar arguments about monetary policy in Singapore. The country may face an even more volatile economic environment in the future than the past.¹⁹ Politics may grow more contested. In the face of these uncertainties, the markets may require the greater credibility that a transparent rule provides. The two of us agree on this point, even if we do not agree on whether it should be a rule for the exchange rate or the inflation rate.

¹⁹Who is to say what will happen in China?