NBER WORKING PAPER SERIES

FEWER MONIES, BETTER MONIES

Rudi Dornbusch

Working Paper 8324 http://www.nber.org/papers/w8324

NATIONAL BUREAU OF ECONOMIC RESEARCH 1050 Massachusetts Avenue Cambridge, MA 02138 June 2001

The views expressed herein are those of the author and not necessarily those of the National Bureau of Economic Research.

© 2001 by Rudi Dornbusch. All rights reserved. Short sections of text, not to exceed two paragraphs, may be quoted without explicit permission provided that full credit, including © notice, is given to the source.

Fewer Monies, Better Monies Rudi Dornbusch NBER Working Paper No. 8324 June 2001 JEL No. F3

ABSTRACT

In the aftermath of emerging market crises from Russia to Asia and Latin America, there is a quest for better monetary arrangements that are more crisis-proof. Fixed rates are out, flexible rates are in with a policy focus on inflation targeting. But there is, of course, the alternative of abolishing exchange rates all together. This paper revisits the issue of dollarization or currency boards to review what arguments in the debate stand up.

The case for flexible exchange rates emphasizes the need for a tool to accomplish relative price adjustment. This paper argues that in an intertemporal perspective most shocks require financing in the capital market rather than adjustment. Moreover, countries frequently do not use their flexible rate to play a cyclical role and, as a result, only a pay a premium for the option to depreciate but do not take advantage of the flexibility; on the contrary, they engineer systematic overvaluation in the context of inflation targeting.

Rudi Dornbusch E52-357 MIT Cambridge, MA 02139 and NBER rudi@mit.edu

December 2000

FEWER MONIES, BETTER MONIES

Rudi Dornbusch Massachusetts Institute of Technology

"... so much of barbarism, however, still remains in the transactions of most civilized nations, that almost all independent countries choose to assert their nationality by having, to their own inconvenience and that of their neighbors, a peculiar currency of their own."

John Stuart Mill (1894, p. 176)

A century ago, being a civilized country meant being on the gold standard. Gradually countries had converged to the internationalist solution, overcoming their nationalist experiences with peculiar coinage, paper, silver and other unusual and segmenting arrangements. And if countries were not on the gold standard outright, they were on sterling or the dollar. After World War I disrupted a financially integrated world, the first priority was reintegration. All that fell apart in the Great Depression, with the introduction of capital controls, competitive devaluation, and discretionary central banking.

It has taken 50 years to explore all of the possibilities offered by money without rules, and the harvest has been disappointing. But following the great inflation of the 1970s and extreme monetary experiences in many developing countries, the past 20 years have brought a fundamental transformation to monetary management. Independent central banks with policies of transparency and, more or less explicit, inflation targets, are now the standard. In many emerging economies, we also now observe independence of central banks and, where rates are flexible, some variant of an inflation-targeting policy.

At the same time, monetary integration is a lively topic. In Europe, monetary integration has become reality with the creation of the European Monetary Union; and the extent of integration will increase with the incorporation of countries in the East: a handful as early as 2004 with quite a few more on the waiting list. Indeed, membership in the European Union brings with it *automatically* membership in the monetary union and representation at the European Central Bank. But even though membership in the European Union is clearly on the horizon, the larger candidate countries so far remain attached to discretionary exchange rate regimes, forsaking the readily available benefits of unilaterally adopting the Euro.

In the Americas, progress on monetary integration is far more haphazard. Argentina and Ecuador have chosen a unilateral currency board solution in their peg to the dollar. Elsewhere, there was fleeting US Congressional interest in support for dollarization strategies in the Americas, and some talk in Central America, but little else. Academic support is mixed but far from indifferent. (See Calvo (2000a, 2000b) for arguments in

support of hard pegs and dollarization; see also the material assembled by N. Roubini at http://www.stern.nyu.edu/globalmacro/.)

Well-governed countries, in the monetary sense, such as Mexico, Brazil and Chile, seem content with their national solution of managed flexibility cum inflation targeting. Europe and the Americas, accordingly, seem to be going different ways.

The extent of political integration is not the central reason; central bank independence makes political integration an uninteresting issue in this context. It rather seems that a national currency, as oppose to a hard dollar peg, is seen as an unquestioned plus. If that is for anything but nationalistic reasons, it is worth determining where the merit lies. Perhaps, however, we are just encountering one of those deep-seated prejudices against rules and the belief that discretion must be maintained, whatever its cost.

In Asia, the discussion of monetary arrangements is picking up steam at the behest of Japan. Noting the developments in Europe, discussion of dollarization in Latin America, and the fragmentation of Asia in response to the Asian crisis, Japan is exploring what kind of monetary arrangements makes the most sense. (See Ogawa and Ito (2000).) Initial discussions, however tentative, are underway with Korea. Conceptually, this goes far beyond the discussion of an Asian IMF or the establishment of the central bank swap lines (that are already in place).

Traditional arguments

Five arguments have traditionally been made against currency board arrangements. These are, respectively, the loss of sovereignty, the loss of seigniorage, the loss of monetary policy, the loss of a lender of last resort, and fiscal preparedness. On the surface, each argument is persuasive; upon closer scrutiny none really is. Sovereignty cannot be taken seriously. When it comes to the quality of money the argument does not come up; when it comes to national pride it should not come up in most countries.

The loss of seigniorage is, of course, a critical issue for public finance. The inability to pursue an optimal inflation strategy to extract maximum revenue (as a function of the inflation sensitivity of money demand and the growth rate) limits public sector revenue and forces either spending cuts or recourse to other, potentially more distortionary, forms of taxation. The argument is most appropriate for full dollarization, but does still apply in the case of a currency board. However, the fact that interest is earned on foreign exchange reserves limits the cost of the loss of seigniorage to the spread between a country's borrowing and lending rates times reserves. (We can imagine reserves being borrowed to support the currency on a long term basis but invested short term.) The spread is a reality, so the loss of seigniorage has a real cost. But there is an important offset to the loss of seigniorage that arises from the reduction in public debt service costs that results from reduced interest rates; this factor (discussed below) is surely more significant than the 1 percent or so of GDP in lost seigniorage. Of course, any kind of stability-oriented monetary policy will yield some bonus, but currency boards and dollarization presumably command the highest bonus.

The loss of monetary policy is, on the surface, an obvious cost. If money creation is tightly and mechanically linked to reserve flows, the external balance rather than the local central bank determines interest rates. But there is surely an illusion here: What central bank in Latin America can cut interest rates below New York? What central bank in Eastern Europe can go below Frankfurt? The fondest hope of these central banks is to attain these low levels, and the safest way to achieve them is to foreswear any kind of independence. In principle, there might be some scope for deeply undervalued currencies, expected to appreciate, achieving lower nominal interest rates than New York. However, achieving such levels of undervaluation is unseen in these regions except in the immediate aftermath of a collapse, when inflation fears typically abound. The loss of monetary policy, therefore, is of little practical relevance.

The loss of the lender of last resort is intriguing. This argument is based on the assumption that the central bank – rather than the Treasury or the world capital market – is the appropriate lender. There is surely nothing encouraging about money being printed to save banks that are facing an external drain – and the brief Turkish experience with this strategy in December 2000 showed it to be an express train to currency collapse. In that situation, the central bank poured money into failing banks even while that money poured out of the country, cutting central bank reserves in excess of a billion a day. At most then, the lender of last resort issue has to do with substituting good credit (not money) for bad credit. That is intrinsically a role for the Treasury; and if the Treasury is not a source of good credit, it is a role for the banking system (if any good part remains), or for the rest of the world. It may be the case that there is no good credit available and that a bank closure is inevitable; it is much better to recognize this than to conceal the fact in a process of money creation that blows up the currency and good banks too. Using the central bank as a lender of last resort, more often than not, is failed or failing banking policy.

The fifth, and perhaps most surprising argument in against currency boards is fiscal preparedness. Of course, at an elementary level there is a point here: the central bank must be separated from the treasury; all back doors must be closed. However, it is hard to see how a discretionary monetary and exchange rate policy can accommodate a lack of good fiscal conditions better than a fixed rate. At its most extreme, this may just be an argument about the government being unable to do without seigniorage revenue. As argued above, the savings on debt service from lower interest rats under a currency board amply compensate for the loss of seigniorage, removing the sting from this argument. And if the argument about fiscal preparedness is not that the loss of seigniorage, then there is no argument at all. To believe that inflation and devaluation are constructive solutions to a fiscal problem is contradicted by much of financial history. Indeed, from a political economy point of view one might argue that the favorable political and growth effects following from a shift to a currency board offer a unique opportunity to implement important fiscal reform.

_

¹ The point is relevant for Switzerland in joining the EMU because Swiss inflation and interest rates are far lower than those in the European Union.

The Exchange Rate Issue

The most serious and contentious point raised by the establishment of a currency board is the abandonment of the exchange rate. This objection has two parts. First, in response to an unfavorable disturbance, a flexible exchange rate offers an easier way than general deflation of adjusting relative price levels and hence competitiveness. Second, a fixed rate sets up a one-way option that is bound to be a target for speculative attacks.

Consider first the loss of flexible relative prices. This argument is overdone in a number of ways. First and most importantly, most disturbances are temporary rather than permanent. Consequently, they should for the most part be financed rather than adjusted to. But before we get into that discussion, there is the obvious question of whether exchange rates are, in fact, a short run stabilization tool. With low short-run elasticities, it is possible for exchange rate movements to destabilize both the current account and employment. The more the discussion focuses on temporary disturbances as the target of rate movements, the more relevant that view.

The more substantial issue is to view the response to disturbances in a context of intertemporal optimization that includes an explicit role for capital markets. In a world with international capital markets, neither cyclical disturbances at home or abroad nor temporary terms of trade fluctuations require offsetting movements in relative prices to maintain current accounts balanced. On the contrary, from a perspective of intertemporal optimization, most of the buffer should come from partial adjustment of consumption or investment and current account financing. But if current account adjustment is not part of the script, where is the need for relative price adjustment? Of course, this overstates the point because there will typically be some adjustment of consumption or investment and, as a result, some need for relative price changes to maintain full employment. To some extent, this need is met by flexibility of wages and prices, but that flexibility may be incomplete, especially a new regime. That leaves a bit of an exchange rate issue, but it also puts the costs and benefits in perspective. In terms of the models used in new classical economics, the exchange rate can be used as a "fooling device" to create unexpected changes in real factor rewards, but that last only as long as expectations, wages, and prices cannot adjust.

At the same time, the option to fool agents comes at a cost in the capital market. If recourse to unexpected movements of the exchange rate is part of the regime it will lead to a premium in interest rates and hence in the cost of capital. That premium, in turn, leads to a loss of competitiveness that must be compensated for through lower equilibrium real wages. (This discussion assumes that capital is mobile and labor is not.) The point of this discussion is that the devaluation option has limited scope in labor markets, as new classical economics warns, and increases costs in the capital market. Closing the circle suggests that a regime with the devaluation option translates into lower average equilibrium real wages compared to a hard peg.

With permanent or highly persistent disturbances the role of exchange rates becomes, of course, more prominent. It is an issue of adjustment rather than financing. The adjustment

of the relative prices would, of course, seem to be favored by exchange rate movements. But it is also true that price-wage adjustment can accomplish much the same thing. If they cannot, because of "rigidities," it stands to reason that the exchange rate will rarely do the job without some complication. That has been the experience in Latin America, where inflation-devaluation cycles have been the centerpiece of monetary regimes.² If anything, exchange rates have been the dominant instrument of destabilization.

It is a very special kind of money illusion that permits real wage cuts from a large and perfectly obvious devaluation but cannot generate a fall in wages or prices. Perhaps it says more about the monetary authorities' unwillingness to create the conditions for deflation and their willingness and ability to get by with real wage cutting by depreciation and inflation. After all, the wage-price regime is not written in stone but rather is mostly written by the central bank's systematic policy conduct.

The Gains

The gains from a currency board or dollarization come in the financial area and derive from enhanced credibility in the exchange rate and hence inflation performance. The gains come in two forms. First and most obviously, there is a dramatic decline in interest rates with all of the attendant benefits. That gain is, of course, more important the more debilitated a country is financially. (See Giavazzi and Pagano (1988) who called it the gain "from tying one's hands.") The gains from Greece and Italy becoming part of the EMU have been striking; as have the gains from Argentina establishing a currency board. In countries that are not outright fragile, the gains are still significant since in a modern financial setting a difference of a percentage point or two in the cost of capital is decidedly relevant. But the gains from abandoning national money are inversely proportional to its quality, past, current and prospective.

As important is the transformation of the financial sector. With low or stable inflation, and a stable currency, agents' economic horizons lengthen. The lengthening of horizons, in turn, is conducive to investment and risk taking, which translates into growth and closes a virtuous circle. Moreover, once an economy moves out of crisis or state-of-siege mode, distortions and inefficiencies become far more apparent and can become the target of public policy. There is ample evidence that inflation hurts growth, and high and unstable inflation does so with a vengeance. Hence a monetary regime that delivers and maintains low inflation, other things equal, will help growth. While these points are quite obvious – and were behind the case for low inflation targets on the part of central banks in advanced economies – on the periphery and notably in Latin America the gains are still to be reaped. In sum, doing away with inflation is a step toward pervasive and deep reform.

-

² Martinez, Sanchez and Werner (2000), for example, note that pass-through from the exchange rate to prices is as high as 65 percent, of which 50 percent occurs within 2 quarters.

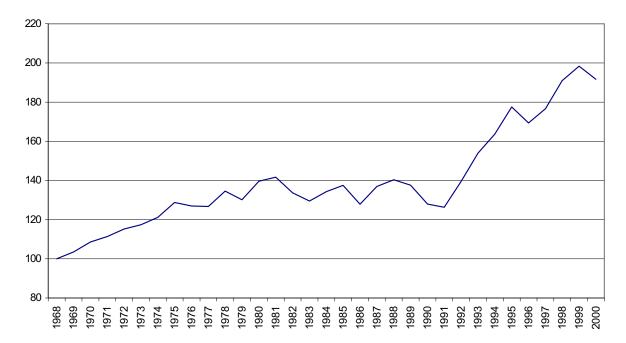
The Case of Argentina

Much of the current prejudice against currency boards comes from the Argentine experience. Argentina is viewed as being trapped by its currency board, unable to achieve a more competitive real exchange rate and a resumption of growth. Events like world emerging market crises, a neighbor's crisis, and currency collapse are viewed as situations that require a devaluation response, so that the inability to respond in that fashion condemns a country to no or at most poor growth.

It is, however, a grave mistake to read the Argentine experience with a currency board in this fashion. In the aftermath of the adoption of a currency board in 1991, Argentina has had one of the best growth performances in this century, some 5 percent including even the setback of the Tequila crisis and the Brazilian collapse. Moreover, the political success of the currency board, and the wise use of it as a driver, made for a formidable restructuring of Argentina's public sector and its distorted economy.

But the adoption of the currency board did not change three fundamental facts. First, Argentina has a high debt levels and a very poor fiscal situation. The present crisis is above all a fiscal crisis – it centers on the question of whether Argentina can successfully rollover its debt and attract financing for its current account deficit. That question is intimately linked to the second fact: Argentina has invested little over the past 50 years and its economy, much restructuring notwithstanding, is both highly obsolete and quite closed. Third, Argentina has a legacy of unconstructive labor relations. Unions continue to view the economic situation as an end game and that view stands in the way of an economic reconstruction or an investment boom. Unfortunately, beyond the first few years of stabilization and reform, the government has readily fallen back into accepting this situation.

ARGENTINA: REAL GDP (Index 1968=100)



Would devaluation – abandoning the currency board or the other version of devaluation followed by full dollarization – materially change things? There would be a formidable shock to the banking system and with that an extra debt or wealth shock in a country that has already had a few too many. But there is also the question whether devaluation would significantly change growth. The share of trade in GDP is just 10 percent and much of industrial Argentina's output stands little chance in world markets because it is of poor quality or obsolete. (That was the experience of Eastern Europe and Argentina is not much different.) As a result, devaluation would likely accomplish little and would destroy the one positive factor at play now, confidence in the financial system. Rather, Argentina will have to reconcile its politics and its economy to the reality of having run out of credit, asset sales, and other easy options.

The Case of Mexico

Frankel (1999) has argued that no single exchange rate regime is right for each country and each time. Against this agnosticism consider Mexico. It has had unstable economic performance for the past 25 years. For a while, and with surprising regularity, the currency collapsed every 6 years, shortly after the new president took office. Invariably, the exchange rate is used as an active tool to bring down inflation, only to collapse again and open yet another cycle.

MEXICO: REAL EXCHANGE RATE (JPMorgan Index 1990=100)



Far from being used as a stabilization device, the exchange rate has been the very cause of economic instability and Mexico's dismal macroeconomic performance of only 2.7 percent average growth over the past 20 years – not much above the growth rate of population. NAFTA and a broad range of reforms carry the promise of a far stronger performance, and the newly-independent central bank with its flexible rate might work in that direction, too. But it would be a mistake to believe that there is a well established and unquestioned commitment to sound money, understood and accepted by politicians and the public.

Mexico is an obvious candidate for a currency board arrangement. Its trade focus on the US, the increasing integration deriving from NAFTA, and the long history of recurrent monetary instability (which is being tested for the first time in a wide open democracy) are three important reasons, but there are more. Interest rates are high and financial development, including horizons, is being held back. And uncertainty about the exchange rate is pervasive because of its high level in real terms. Overall, the gains from a currency board would seem to be significant.

But there is also an argument from the other side: What does Mexico need an exchange rate for? One obvious answer might be fluctuating oil prices. But oil is entirely in the public sector and in the external balance, with negligible spillovers to the home economy. Therefore, temporary oil price fluctuations are a textbook case of when an economy should finance the budget and the external balance in the world capital market rather than by adjustment: during booms there would be a surplus and debt reduction, during low oil price periods deficits would be financed by the worlds market.

This would seem a far better strategy than bringing an exchange rate into play, with the risk of misuse – which has been endemic – and more of the extraordinary crises that have repeatedly destroyed the financial system and diminished real wages. Here is an economy that, even if it has reformed, can further benefit from deeper financial integration with the US. Mexico may well have reformed. If so, an unnecessary premium is being paid that holds back growth and social performance.

The System

Currency boards and dollarization are strong measures that tend to be applied in extreme circumstances, when everything else has failed. And even then, many see them as transition solutions, to be set aside once normalization offers the leeway to return to more flexible settings for monetary and exchange rate policy. This view does a disservice to the institution. On the contrary, there is a whole range of economies that are doing okay, such as Poland and Mexico, but that would benefit from the immediate introduction of currency boards to deepen economic integration and thereby improve growth prospects. Discretion does not have a good record and even if it is not putting the house on fire for a moment, it is thoroughly out of line with open capital markets and the opening up of repressed finance.

Convergence on regional monies is a no-brainer; at the front end the burden is on the periphery to recognize and collect the bonus. The benefits of good money and credit do not stop at the border. There comes a point where the center also must recognize the gains from system safety and create the presumption of a lender of last resort. Somewhere along the line, seigniorage sharing also becomes plausible. Like unilateral trade liberalization, unilateral adoption of a currency board is in a country's interest. But there is further ground to be covered. The benefits can be enlarged on both sides if the center also contributes risk management – that large area between default and triple AAA where the presumption of support yields low risk premia and assures sound credit performance – and seigniorage sharing. There are moral hazard issues that need an answer, but these issues should not put an end to the discussion.

REFERENCES

Calvo, G. (2000a) "The Case for Hard Pegs in the Brave New World of Global Finance." Unpublished manuscript, University of Maryland, http://www.bsos.umd.edu/econ/ciecalvo.htm.

----- (2000b) "Testimony on Dollarization." Subcommittee on Domestic and Monetary Policy, Committee on Banking and Financial Services, June 22, 2000.

Dornbusch, R. (1998) "Lessons from the European Monetary Union For Latin America". http://www.mit.edu/~rudi.

----- and F. Giavazzi (1998) "Hard Currency and Sound Credit." http://www.mit.edu/~rudi.

Edwards, S. (2000) "Exchange Rate Regimes in Emerging Economies." Unpublished manuscript, UCLA.

Frankel, J. (1999) No Single Currency Regime is Right for All Countries or At All Times, Princeton Essays in International Finance. No. 215.

Hanke, S. and K. Schuler (1994) <u>Currency Boards for Developing Countries: A Handbook</u>. San Francisco: ICS Press.

Hanke, S., L. Jonung, and K. Schuler (1993) <u>Russian Currency and Finance: A Currency</u> Board Approach to Reform. Routledge: London

Ghosh, A., A.-M. Gulde, and H. Wolf (2000) "Currency Boards: More Than a Quick Fix?" <u>Economic Policy</u>. No 31 (October).

Giavazzi, F. and M. Pagano (1988) "The Advantage of Tying One's Hands." <u>European</u> Economic Review. 32, 5, pp. 1050-1082.

Martinez, L., O. Sanchez, and A. Werner (2000) "Consideraciones Sobre la Conduccion de la Politica Monetaria y el Mecanismo de Transmision en Mexico." Banco de Mexico, Unpublished manuscript.

Mill, J.S. (1894) Principles of Political Economy. Vol. II, London: Macmillan.

Ogawa, E. and T. Ito (2000) On the Desirability of a Regional Basket Currency Arrangement." NBER Working Paper No. 8002.

Roubini, N. (2000) website on global macroeconomics at http://www.stern.nyu.edu/globalmacro/.