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## Reflections on Exchange Rates and Dollarization

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## REFLECTIONS ON EXCHANGE RATES AND DOLLARIZATION\*

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The dramatic events in Asia, Russia and Brazil during the past year have generated a torrent of commentary about exchange rates, "hot money," exchange controls and "dollarization." As someone whose views about exchange rates in Asia have been vindicated,<sup>1</sup> who predicted that the Russian ruble would collapse shortly after midyear,<sup>2</sup> and who concluded that the Brazilian real would fall apart after the October 1998 presidential elections,<sup>3</sup> I offer my thoughts as to why most of the commentary has either been half-baked or dead wrong.

The wags in Washington misdiagnosed the patients and prescribed the wrong medicine in Asia, Russia and Brazil. But that has not stopped the "doctors of rotational medicine" from spinning a different story, one that is contradicted by the facts. Just yesterday, U.S. Deputy Treasury Secretary Lawrence Summers said that the financial turmoil that has affected Asia, Russia and Brazil in the past year would have been worse without the IMF.<sup>4</sup>

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1. See *Monetary Mischief*, FAR E. ECON. REV., July 2, 1998, at 70 (suggesting that major economic upheaval in Indonesia could have been avoided if Prof. Hanke's proposal to introduce a currency board had been adopted).

2. See Steve H. Hanke, *Is the Ruble Next?*, FORBES, March 9, 1998, at 64 (predicting that the Russian ruble would be devalued due to pressure generated by turbulent international markets).

3. See Steve H. Hanke, *Will Brazil Be Next?*, FORBES, October 20, 1997, at 44 (predicting that Brazil would face a currency crisis after its 1998 presidential elections).

4. See *Economic Turmoil Would Be Worse Without IMF*, Dow Jones News Serv., January 27, 1999, available in Westlaw, Wires Database.

## THE WORLD'S CHANGING CURRENCY LANDSCAPE

To put my reflections into perspective, it is instructive to consider recent changes in the world's currency landscape. Its morphology has been in a state of flux during the decade of the 1990s. Volatile hot money flows have battered pegged exchange rate regimes, causing volcanic-like eruptions in the European Exchange Rate Mechanism (1992 and 1993), the Turkish lira (1994), the Mexican peso (1994-95), the Thai baht and the other Asian currencies (1997-98), the Russian ruble (1998) and the Brazilian real (1999).<sup>5</sup>

Balkanization has also been a prominent force in the 1990s. With the collapse of the Soviet Union, a large unified currency area was dismembered. In consequence, 15 national currencies officially circulate where the ruble once ruled the roost. Much of the same occurred after Yugoslavia broke apart. Now five currencies circulate as legal tender in a region where one currency used to do the job.

The last time currency balkanization occurred on such a grand scale in Europe was during the period of monetary chaos that followed World War I. In 1914, Europe had ten currencies, all with fixed gold parities and fixed exchange rates. By 1920, Europe had twenty-seven paper currencies, none with a gold parity or a fixed exchange rate.

Even more dramatic than the trend toward balkanization has been that of unification. Argentina, Estonia, Lithuania, Bulgaria and Bosnia have unified their domestic currencies with stronger anchor currencies by establishing currency board systems (CBSs).<sup>6</sup> In 1998, Indonesia and Russia flirted with CBS

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5. See, e.g., John M. Berry, *In a Decade, a World of Currency Woes*, WASH. POST, Feb. 7, 1999, at H15 (reviewing currency crises that struck Mexico, Thailand, Indonesia, South Korea, Russia, Brazil, and caused volatility in the European Union's exchange rate mechanism, in the late 1990s); Andrew Bary, *Trading Points: Here's Why Those Foreign Bonds Were Yielding So Much*, BARRON'S, Apr. 11, 1994, at MW8 (discussing the economic effect of currency crises in Turkey and Mexico in 1994).

6. Until the 1950s, orthodox CBSs were widely used, particularly in Africa, the Caribbean and Asia. In 1983 Hong Kong reestablished a CBS, but it deviated from orthodoxy in several important ways, as do all the CBSs introduced in the 1990s. All CBSs have performed well even during civil wars.

proposals.<sup>7</sup> These two CBS episodes merit special attention for the light they shed on the international politics of currency reform and the Machiavellian role played by the U.S. Department of the Treasury and the IMF. The Clinton administration was determined to mortally wound or topple President Suharto,<sup>8</sup> and it was betting on monetary chaos to do the job. When President Suharto embraced the CBS idea in February 1998, the U.S. Treasury and its stalking horse, the IMF, panicked because they thought the CBS would stabilize the rupiah and elevate Suharto to the status of a Javanese god. This explains why the U.S. Treasury and the IMF used their friends in the press to mount a swift and massive counterattack. The Russian story was quite different, however. In August 1998, the Clinton administration was desperately trying to prop up the ruble and President Yeltsin.<sup>9</sup> That's why a CBS for Russia was viewed in a favorable light by the U.S. Treasury and the IMF. They knew that Bulgaria's CBS had provided a quick fix for the hyperinflating lev in July 1997.

On January 1, 1999, eleven European countries embarked on the greatest monetary experiment of the century. That's when they unified their national currencies and replaced them with a

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For a general discussion of currency boards and a more detailed explanation of their main features, see Alan Walters and Steve H. Hanke, *Currency Boards*, in 1 THE NEW PALGRAVE DICTIONARY OF MONEY AND FINANCE 558 (Peter Newman, Murray Milgate & John Eatwell eds., 1992).

7. See Steve H. Hanke, *How I Spent My Spring Vacation*, INT'L ECONOMY, July/Aug. 1998, at 30 (reviewing Indonesia's consideration of a currency board in spring 1998); Christopher L. Culp, Steve H. Hanke & Merton Miller, *The Case for an Indonesian Currency Board*, BANK OF AM. J. APPLIED CORP. FIN., Winter 1999, at 57, 57 (same); Steve H. Hanke, *How to Save Russia*, INT'L ECONOMY, Nov./Dec. 1998, at 44 (noting debate over whether Russia should adopt a currency board, and proposing a draft currency board law).

8. See *Foreign Power Made Me Quit, Says Suharto*, SINGAPORE STRAITS TIMES, Jan. 28, 1999, at 23 (reporting an admission by former President Suharto of Indonesia that he was forced to step down in 1998 as a result of pressure from an unnamed foreign country with extensive interests in Indonesia).

9. See, e.g., Jacob M. Schlesinger, Carla Anne Robbins & Bob Davis, *U.S. Policy Makers Put Focus on Russia as Arena Where They Can Make Impact*, WALL ST. J., Aug. 12, 1998, at C19 (describing efforts by the Clinton administration to prevent a devaluation of the Russian ruble).

new currency, the Euro. This currency unification was accomplished by establishing a monetary union. The European Monetary Union has been followed by calls to establish other monetary unions, most notably in the Mercosurian and Asian regions.<sup>10</sup>

If all these changes in the world's currency landscape weren't dramatic enough, Russia and Belarus are negotiating a deal in which the Belarus *harc* would be replaced by the Russian ruble.<sup>11</sup> And now Argentina is studying the possibility of pushing its currency unification with the United States to the limit by officially replacing the peso with the U.S. dollar.<sup>12</sup> Argentina's move has motivated monetary unification discussions in Central and Eastern Europe. Indeed, these countries are beginning to debate "dollarization" or the replacement of their national currencies with the euro.

#### EXCHANGE RATE REGIMES

There are three types of exchange-rate regimes: floating, fixed and pegged. Each type has different characteristics and generates different results. Although floating and fixed rates appear to be dissimilar, they are members of the same family. Both are free-market mechanisms for international payments.<sup>13</sup> With a floating rate, a monetary authority sets a monetary policy,

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10. See Paul Blustein, *Currencies in Crisis; Turmoil Spurs Calls for Change, But System Will be Hard to Fix*, WASH. POST, Feb. 7, 1999, at H1 (noting a proposal by Joseph Yam, chief of the Hong Kong Monetary Authority, that Asia should consider creating single currency unit).

11. See Irina Yasina, *A Harebrained Union*, MOSCOW TIMES, Jan. 5, 1999, at 8 (reporting talks between Russia and Belarus on the creation of a unified currency).

12. See Stephen Fidler and Ken Warn, *Argentine Central Bank Presents Plan for Switch to Dollar*, FIN. TIMES, Jan. 22, 1999, at 1 (reporting that Argentina's central bank presented its government with a report describing how the country could surrender its currency in favor of the U.S. Dollar).

13. This explains why Professor Milton Friedman, who is known for his advocacy of floating exchange rates, has also been a longtime strong advocate of currency board systems and fixed exchange rates for developing countries. See, e.g., MILTON FRIEDMAN, *MONEY AND ECONOMIC DEVELOPMENT: THE HOROWITZ LECTURES OF 1972 38-67* (1973) (discussing monetary policy in developing countries).

but has no exchange rate policy. The exchange rate is on auto-pilot. In consequence, the monetary base is determined domestically by a monetary authority. Whereas, with a fixed rate, a monetary authority sets the exchange rate, but has no monetary policy. The monetary policy is on auto-pilot. In consequence, under a fixed-rate regime, the monetary base is determined by the balance of payments. In other words, when a country's official net foreign reserves increase, its monetary base increases and vice versa. With both of these free-market exchange rate mechanisms, there cannot be conflicts between exchange-rate and monetary policies, and consequently, balance of payment crises cannot occur. Indeed, under floating and fixed-rate regimes, market forces act to automatically rebalance financial flows and avert balance of payments crises.

While both floating and fixed-rate regimes are equally desirable in principle, it must be stressed that floating rates, unlike fixed rates, do not perform well in developing countries because these countries usually have weak monetary authorities and histories of monetary instability.<sup>14</sup> Indeed, currencies in developing countries rarely float on a sea of tranquility. Knowledge of this fact would, no doubt, have prompted IMF Deputy Managing Director Stanley Fischer to temper his remarks concerning Indonesia's float of the rupiah. On the day of the float, August 14, 1998, Dr. Fischer proclaimed that "The management of the IMF welcomes the timely decision of the Indonesian authorities. The floating of the rupiah, in combination with Indonesia's strong fundamentals, supported by prudent fiscal and monetary policies, will allow its economy to continue its impressive economic performance of the last several years."<sup>15</sup>

Fixed and pegged rates appear to be the same. However, they are fundamentally different. Pegged rates are not free-market mechanisms for international payments. Pegged rates,

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14. See generally Steve H. Hanke, *Some Reflections on Currency Boards, in CENTRAL BANKING, MONETARY POLICIES, AND THE IMPLICATIONS FOR TRANSITION ECONOMIES* 341 (Mario I. Bléjer & Marko Skreb, eds., 1999).

15. *IMF Welcomes Indonesia's Exchange Rate Action*, News Brief No. 97/18, Int'l Monetary Fund (Aug. 14, 1997) <<http://www.imf.org/external/np/sec/nb/1997/NB9718.HTM>>.

such as those that were employed throughout most of Asia and in Russia and Brazil before the recent currency crises, require a monetary authority to manage both the exchange rate and monetary policy. With a pegged rate, the monetary base contains both domestic and foreign components. Unlike floating and fixed rates, pegged rates invariably result in conflicts between exchange rate and monetary policies. For example, when capital inflows become "excessive" under a pegged system, a monetary authority often attempts to sterilize the ensuing increase in the foreign component of the monetary base by reducing the domestic component of the monetary base. And when outflows become "excessive," an authority attempts to offset the decrease in the foreign component of the base with an increase in the domestic component of the monetary base. Balance of payments crises erupt as a monetary authority begins to offset more and more of the reduction in the foreign component of the monetary base with domestically created base money. When this occurs, it's only a matter of time before currency speculators spot the contradictions between exchange rate and monetary policies and force a devaluation.

### HOT MONEY AND EXCHANGE CONTROLS

Hot money flows are principally associated with pegged exchange rates. Most analysts have misdiagnosed the hot money problem because they have failed to appreciate this all-important linkage. In consequence, they have prescribed exchange controls as a cure-all to cool off the hot money. That prescription treats the symptoms. It fails to treat the disease, which is pegged exchange rates. Until pegged rates are abandoned, there will be volatile hot money flows and calls to cool the hot money with exchange controls.

Professor Paul Krugman is the most notable promoter of exchange controls.<sup>16</sup> Alas, Malaysia's mercurial prime minister, Dr. Mahathir Mohamad, took Professor Krugman's bait and

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16. See, e.g., Paul Krugman, *Saving Asia, It's Time To Get Radical*, FORTUNE, Sep. 7, 1998 (recommending that Asian countries in financial crisis adopt exchange controls).

imposed draconian controls on September 2, 1998.<sup>17</sup> Like all pyromaniacs, Professor Krugman has now washed his hands of this dastardly deed. Perhaps this is the most devastating critique of controls. But there is more.

Currency convertibility is a simple concept. It means residents and non-residents are able to exchange domestic currency for foreign currency. However, there are many degrees of convertibility, with each denoting the extent to which governments impose controls on the exchange and use of currency.

The pedigree of exchange controls can be traced back to Plato, the father of statism. Inspired by Sparta of Lycurgus, Plato embraced the idea of an inconvertible currency as a means to preserve the autonomy of the state from outside interference. It's no wonder, therefore, that the so-called Red-Brown (communist-fascist) coalition in the Russian Duma has rallied around the idea of exchange controls and an inconvertible ruble. This also explains why the leadership in Beijing finds the idea so user friendly.

The temptation to turn to exchange controls in the face of disruptions caused by "hot money" flows is hardly new. Tsar Nicholas II first pioneered limitations on convertibility in modern times, ordering the State Bank of Russia to introduce, in 1905-06, a limited form of exchange control to discourage speculative purchases of foreign exchange.<sup>18</sup> The bank did so by refusing to sell foreign exchange, except where it could be shown that it was required to buy imported goods. Otherwise, foreign exchange was limited to 50,000 German Marks per person.<sup>19</sup> The Tsar's rationale for exchange controls was that of limiting hot money flows, so that foreign reserves and the exchange rate could be

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17. See Barry Porter, *Malaysia Sinks Into Currency Isolation*, S. CHINA MORNING POST, Sept. 2, 1998, at 1 (reporting Malaysia's introduction of exchange controls in order to isolate its economy from the Asian financial crisis of 1998).

18. See STEVE H. HANKE, LARS JONUNG & KURT SCHULER, *RUSSIAN CURRENCY AND FINANCE: A CURRENCY BOARD APPROACH TO REFORM* 43 (1993) (reviewing the early history of central banking in Russia).

19. *Id.*



maintained. The more things change, the more they remain the same.

But before more politicians come under the spell of exchange controls, they should ponder the following footnote in Nobel laureate Friederich Hayek's 1944 classic, *The Road to Serfdom*:

The extent of the control over all life that economic control confers is nowhere better illustrated than in the field of foreign exchanges. Nothing would at first seem to affect private life less than a state control of the dealings in foreign exchange, and most people will regard its introduction with complete indifference. Yet the experience of most Continental countries has taught thoughtful people to regard this step as the decisive advance on the path to totalitarianism and the suppression of individual liberty. It is, in fact, the complete delivery of the individual to the tyranny of the state, the final suppression of all means of escape—not merely for the rich, but for everybody.<sup>20</sup>

Hayek's message about convertibility has regrettably been overlooked by many contemporary economists. Exchange controls are nothing more than a ring fence within which governments can expropriate their subjects' property. Open exchange and capital markets in fact protect the individual from exactions because governments must reckon with the possibility of capital flight.

From this it follows that the imposition of exchange controls leads to an instantaneous reduction in the wealth of the country, because all assets decline in value. To see why, let's review how assets are priced.

The value of any asset is the sum of the expected future installments of income it generates discounted to present value. For example, the price of a stock represents the value to the investor now of his share of the company's future profits, whether issued as dividends or reinvested. The present value of future income is calculated using an appropriate interest rate that is adjusted for the various risks that the income may not materialize.

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20. FRIEDERICH A. HAYEK, *THE ROAD TO SERFDOM* 92 n.2 (1944).

When convertibility is restricted, risk increases, and so the risk-adjusted interest rate employed to value assets is higher than it would be with full convertibility. That's because property is held hostage and subject to a potential ransom through expropriation. As a result, investors are willing to pay less for each dollar of prospective income and the value of property is less than it would be with full convertibility.

This, incidentally, is the case, even when convertibility is allowed for profit remittances. With less than full convertibility, there is still a danger the government will confiscate property without compensation. This explains why foreign investors are less willing to invest new money in a country with such controls, even with guarantees on profit remittances.

So investors become justifiably nervous when it seems a government is considering imposition of exchange controls. At this point, settled money becomes "hot" and capital flight occurs. Asset owners liquidate their property and get out while the getting is good. Contrary to popular wisdom, restrictions on convertibility do not retard capital flight; they promote it.

This type of capital flight (and unofficial dollarization) has been occurring on a grand scale in capital-starved Russia. Indeed, Russians swapped \$13 billion worth of rubles for greenbacks in 1997, a year in which the dollar-ruble rate was stable and inflation was falling rapidly. This unofficial dollarization amounted to a capital export that exceeded all capital imports to Russia in 1997. The actions of the Russian people indicate that, among other things, they anticipated the possibility of the imposition of exchange controls.

Restrictions on convertibility also promote other noxious activities. For example, if capital account convertibility is restricted or limited and convertibility on the current account is allowed, a two-tier currency market will be either formally or informally established. In that case, the "investment currency" will trade at a premium over the price of the relevant foreign currency on the official market for current account transactions. With two prices for the same currency, there are profits to be derived from having capital account transactions "reclassified" as current account transactions. That ad hoc reclassification can usually be bought by crony capitalists, for a price.

Full convertibility is the only guarantee that protects people's rights to what belongs to them. Even if governments are not compelled by arguments on the grounds of freedom, the prospect of seeing every asset in the country suddenly lose value as a result of exchange controls should give them pause.

#### CURRENCY UNIFICATION VIA CBSs AND DOLLARIZATION

As we enter the twenty-first century, globalization (the liberalization of financial and trade flows) is threatened. Volatile hot money flows are identified as the problem and exchange controls the remedy. This prescription, which is based on a wrong headed diagnosis, will lead to monetary nationalism and the type of chaos the world encountered after World War I. The only way to avoid such a disaster is for developing countries to unify their currencies with stronger ones. This can be accomplished by either establishing a CBS or by replacing a national currency with a strong foreign currency (official dollarization).

An orthodox CBS is a monetary institution that issues notes and coins. These notes and coins are backed with a minimum of 100 percent (up to a maximum of 110 percent) of foreign reserve currency, and they are fully convertible into the reserve currency at a fixed exchange rate on demand. In addition, an orthodox CBS cannot act as a lender of last resort, does not regulate reserve requirements for commercial banks, only earns seignorage from interest on reserves and does not engage in forward-exchange transactions.

Hong Kong's CBS, as well as those established in the 1990s, deviates in important respects from orthodoxy. While these CBSs have performed well, something even the skeptics have admitted, they are not trouble free. For example, even though Argentina weathered the storms of 1995, the spread between interest rates on Argentine 30-day loans in pesos and dollars has varied between 0.5 percentage points and 4.4 percentage points during the past year. If the peso-dollar fixed exchange rate was perfectly credible, these spreads should have been close to zero.

The peso-dollar interest rate spreads are not zero because the Argentine CBS deviates from orthodoxy. It engages in

lender of last resort activities, it regulates reserve requirements for commercial banks and up to one third of the dollar denominated reserves it holds to back its monetary liabilities can be held in the form of bonds issued by the government of Argentina.

To make Argentina's currency unification with the dollar perfect, President Carlos Menem has suggested that Argentina replace the peso with the dollar.<sup>21</sup> This official dollarization would close the peso-dollar interest rate spreads. In addition, peso notes would no longer circulate and Argentina would no longer earn seignorage from its CBS. Argentina could easily implement official dollarization by exchanging its dollar reserves for outstanding peso notes and coins and by declaring that all peso assets and liabilities in Argentina be denominated in dollars.

At least 120 countries have officially used the currency of another country at some time. Today, the best-known country that is dollarized is Panama, which has operated under that monetary system since 1904. However, there are twenty-seven other countries and dependent territories that currently don't have a national currency and use a foreign one instead. Even though facts unambiguously support official dollarization as a superior monetary regime, the "Prince of Spin," Lawrence Summers, doesn't like the idea. Indeed, earlier today, Treasury Secretary Robert Rubin's Deputy pulled one of his old Indonesian tricks out of the hat and confidently asserted that monetary unification via dollarization would not provide a "quick fix" for monetary crises.<sup>22</sup>

#### THE PERFORMANCE OF CBSS AND DOLLARIZATION

Some analysts fret about the inflexibility imposed by CBSS and dollarization. *The Economist* summarized these sentiments

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21. See Stephen Fidler and Ken Warn, *supra* note 12, at 1 (noting that Argentina's central bank drafted a plan on switching to the U.S. dollar on the order of President Carlos Menem).

22. Stephen Fidler, *Dollarization "Not a Quick Fix"*, FIN. TIMES, Jan. 28, 1999, at 8 ("[C]ountries seeking to replace their currencies with the dollar could potentially derive large advantages from such a move, but stressed dollarization would provide no short-term fix for economic difficulties.").

in a piece, *The Great Escape*, which appeared in the May 3, 1997 issue.<sup>23</sup> That article asserted that currency board systems cannot cope with external shocks; that they are vulnerable to surges in inflation triggered by capital inflows; and that with limited lender of last resort capacities, they cannot deal effectively with financial emergencies.<sup>24</sup>

The evidence does not support these oft-repeated assertions, however. Let's look at the data from ninety-eight developing countries during the period 1950-1993 and separate it into two categories: countries that have pegged exchange rates and those that have fixed rates. The latter category includes countries with currency boards, monetary institutes, and those that rely solely on foreign currency. On average, the growth rates, measured in terms of GDP per capita, in countries with fixed exchange rates were 54% greater than those with pegged exchange rates. Furthermore, the variability of those growth rates (as measured by their standard deviations) was virtually identical, indicating that the lack of discretionary monetary policy with fixed exchange rates did not result in any greater incidence or vulnerability to external economic shocks. As for inflation, fixed rates have proved far superior to pegged rates, with average inflation rates being 4.9 times higher in countries with pegged rates and 4.2 times more variable. In terms of budget deficits as a percent of GDP, those countries utilizing pegged rates had deficits which on average were 65% larger and 1.4 times more variable. Finally, countries with fixed rates experienced fewer financial emergencies.<sup>25</sup>

#### CONCLUDING OBSERVATIONS

Until recently, most economists have refused to consider CBSs or dollarization. Many have just declared that fixed rates are "inappropriate" or claimed that the facts are "erroneous." There's nothing new here. Indeed, Michael Polanyi concluded in

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23. *The Great Escape*, *Economist*, May 3, 1997, at 69.

24. *Id.* at 69.

25. See Steve H. Hanke, *Some Thought About Currency Boards*, *supra* note 14.

his 1958 book, *Personal Knowledge*,<sup>26</sup> that it is “[t]he normal practice of scientists to ignore evidence which appears incompatible with the accepted system of scientific knowledge.”<sup>27</sup> With the failure of pegged and floating rates in Asia, Russia and Brazil the tide has begun to shift. This shift is welcome and has left me feeling a bit like Winston Churchill on his return from the Boer War, when he remarked that “Nothing in life is so exhilarating as to be shot at without success.”

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26. MICHAEL POLANYI, *PERSONAL KNOWLEDGE; TOWARDS A POST-CRITICAL PHILOSOPHY* (1958).

27. *Id.* at 138.

*Notes and Observations*