# CURRENCY BOARDS AND CURRENCY CONVERTIBILITY

#### Steve H. Hanke and Kurt Schuler

Standard textbooks characterize the evolution of an economy toward a modern market economy in the following way. Initially resources are privately owned but there is no money, so trade takes the form of unorganized barter. That is extremely costly and inefficient because it requires a double coincidence of wants. The high transactions costs that result are a barrier to any trade taking place at all.

To reduce transactions costs, economic agents attempt to organize barter. Marketplaces develop, with trading grounds divided into trading posts or stalls at which specified pairs of commodities can be traded. Typically, these markets will be open for trade on specified market days. Even such organized barter is very costly, however. For example, the pairwise trading of only 10 commodities requires 45 separate trading stalls.

To further reduce costs, economic agents attempt indirect pairwise trading. That can be accomplished by establishing trading posts for all commodities except one, the exceptional commodity being distinguished from all others by the fact that it is tradeable at all posts. The exceptional, intermediary commodity is money. Money facilitates the development of a modern market system by lowering the costs of acquiring information and making transactions (Brunner and Meltzer 1971).

Now, let us turn our attention from the textbooks to the former Soviet Union. At the very time when the former Soviet Union claims

Cato Journal, Vol. 12, No. 3 (Winter 1993). Copyright © Cato Institute. All rights reserved.

Steve H. Hanke is Professor of Applied Economics at The Johns Hopkins University and Chief Economist at Friedberg Commodity Management, Inc. in Toronto. Kurt Schuler is a Post-Doctoral Fellow at The Johns Hopkins University; he was a Durrell Fellow in Money and Banking at George Mason University when the paper was written. They are the authors (with Lars Jonung) of Russian Currency and Finance: A Currency Board Approach to Reform (1993).

that it wants to move toward a market economy, it is regressing toward unorganized barter. The cause is its dysfunctioning money, the ruble, which is inconvertible externally and, to a large extent, internally. If the former Soviet Union wishes to establish a modern market economy it must introduce a sound, convertible currency.

## The Functions of a Sound Currency

A sound currency serves as a satisfactory store of value, medium of exchange, and unit of account. An unsound currency such as the ruble does not fulfill any of those functions. An unsound currency is not a reliable store of value because inflation makes its value highly unpredictable. As a result, people save by hoarding bricks, timbers, food, and other commodities, which retain value better than money and other financial assets. Although commodity hoarding is rational for people in the former Soviet Union at present, it withholds resources from production and slows economic growth.

An unsound currency such as the ruble is not a good medium of exchange. The outside world refuses to accept it. That impedes much-needed Western investment in the former Soviet Union. The inconvertible ruble also impedes foreign trade, which is needed to provide competition with monopolized enterprises and to establish an internationally competitive structure of prices for tradable goods and services within the former Soviet Union. The ruble is not even a good internal medium of exchange within the former Soviet Union. Consequently, barter is common, and almost all transactions for exchanges of large real property are priced and take place in foreign currency (Uchitelle 1992a). Lack of external and internal convertibility slows economic growth.

An unsound currency is not a good unit of account. Inflation distorts prices and makes business calculation more difficult. Without a reliable unit of account, it is impossible to make accounting calculations, to write contracts, and to make meaningful economic decisions. Indeed, without a reliable unit of account, the information that is contained in market prices is lost and the means of efficient communication ceases. A novelist captured this point when describing the German hyperinflation: "Money was rapidly ebbing away from between men, leaving them desperately incommunicado like men rendered voiceless by an intervening vacuum; millions, still heaped on top of each other in human cities yet forced to live separate, each like some solitary predatory beast" (quoted in Scitovsky 1969, p. 2).

The ruble is being issued by a central bank that possesses little, if any, credibility. Citizens of the former Soviet Union have responded to the ruble's untrustworthiness by conducting their own unofficial monetary reform, substituting foreign currencies for the ruble (dollarization). Flight from the ruble has been significant: it is estimated that households in the former Soviet Union hold \$5 billion to \$10 billion in hard currency (Dempsey 1992, Hanke 1991, Norman 1991b). Indeed, the real value of hard currency holdings by households exceeds the real value of the total ruble supply.

Dollarization is costly. To obtain dollars or other "hard" currencies, citizens of the former Soviet Union must exchange real goods and services for bits of paper that Western central banks produce at almost no cost. Moreover, once obtained, those bits of paper lose value over time. They generate significant profits for Western central banks, resulting in a perverse form of foreign aid that flows from the former Soviet Union to the West (cf. Fischer 1982).

## The Currency Board Solution

As long as the former Soviet Union retains a central bank (or establishes new central banks), the ruble will continue to deteriorate, motivating more barter and dollarization. If the former Soviet Union wishes to transform its economy, it must stop relying on central banking. It requires an alternative to central banking. The currency board system is an alternative well suited for the former Soviet Union.<sup>1</sup>

We now present a proposal for introducing the currency board system in the former Soviet Union. We go into some detail because little information about currency boards is easily accessible, and because few people know how to establish and operate currency boards. In addition to presenting our proposal, we answer some questions that have been raised about currency reform for the former Soviet Union.

A currency board is an institution that issues notes and coins convertible into a foreign "reserve" currency or commodity at a fixed rate and on demand. It does not accept deposits. As reserves, a currency board holds high-quality, interest-bearing securities denominated in the reserve currency (or commodity). A currency board's reserves are equal to 100 percent or slightly more of its notes and coins in circulation, as set by law. (Commercial banks in a currency board system need not hold 100 per cent reserves in reserve-currency assets against their deposits, though.) The board generates profits

<sup>1</sup>Other economists who have recently voiced support for currency boards in the former Soviet Union and Eastern Europe include Milton Friedman (1991), Daniel Gressel (1989), Robert Hetzel (1990), Jerry Jordan (1991), Allan H. Meltzer (1991), George Selgin (1992), and Sir Alan Walters (1991). For more detail on the currency board system, see Hanke, Jonung, and Schuler (1992, 1993).

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(seigniorage) from the difference between the interest earned on its reserve assets and the expense of maintaining its note and coin circulation (liabilities). It remits to the government all profits beyond what it needs to cover its expenses and to maintain its reserves at the level set by law. The currency board has no discretion in monetary policy; market forces alone determine the money supply, where the money supply is defined as the public's holdings of notes and coins plus deposits held with the commercial banking system.

The main characteristics of a currency board are as follows.

### Convertibility

The currency board maintains unlimited convertibility at a fixed rate of exchange between its notes and coins, on the one hand, and the reserve currency (or commodity), on the other hand. Although the currency board does not convert local deposits denominated in its currency into reserve assets, the exchange rate that it sets will determine terms of arbitrage between the reserve currency and local deposits at commercial banks.

#### Reserves

A currency board holds reserves adequate to ensure that even if all holders of the board's notes and coins (liabilities) wish to convert them into the reserve currency (or commodity), the board can do so. Currency boards have usually held reserves of 105 or 110 percent of their liabilities, so that they would have a margin of protection in case the interest-earning securities that they held lost value.

## Seigniorage

Unlike securities or most bank deposits, notes and coins do not pay interest. Hence notes and coins are like an interest-free loan from the people who hold them to the issuer. The issuer's profit equals the interest earned on reserves minus the expense of putting the notes and coins into circulation. These expenses are usually less than 1 percent of assets per annum. In addition, if the notes and coins are destroyed, the issuer's net worth increases, because liabilities are reduced but assets are not. Seignorage generated by a currency board is significant.

The chief economic difference between using currency issued by a currency board rather than reserve currency notes and coins is that a currency board captures seigniorage for domestic use, rather than letting it accrue to the foreign central bank that issues the reserve currency. A currency board also has the political advantage of satisfying nationalistic sentiment for a local issue of currency.

### Monetary Policy

By design, a currency board has no discretionary powers. Its operations are completely automatic, consisting only in exchanging its notes and coins for the foreign reserve currency at a fixed rate. Unlike a central bank, a currency board cannot act as a tool of inflationary government finance; nor can it offer state-owned enterprises credit at below-market interest rates to accommodate a "soft budget constraint," because a currency board cannot issue fiduciary money. Under a currency board system, government expenditures can only be financed by taxing or borrowing.

#### Interest Rates and Inflation

Given the fixed exchange rate between the local currency and the reserve currency, interest rates and inflation in the currency board country will tend to be roughly the same as those in the reserve-currency country.

#### Historical Record

The currency board system is a well-tried system with an excellent record (Schuler 1992). It has existed in over 60 countries, and in all cases maintained convertibility at a fixed exchange rate. Even though currency boards performed well, most currency boards fell victim to intellectual fashions of the 1950s and 1960s that favored central banking. Also contributing to the demise of currency boards was the unjustified stigma of colonialism that attached to them in many former British colonies. Former colonies tended to rid themselves indiscriminately of previously existing institutions, throwing the baby out with the bathwater in the case of currency boards. Today, orthodox currency boards still exist in Hong Kong, Brunei, the Falkland Islands, the Faroe Islands, and Gibraltar.

Among the nations that have had currency boards is Russia. The region around Archangel and Murmansk had a currency board in 1918 and 1919, during the life of an anti-Bolshevik government in the region. The board was the idea of John Maynard Keynes (Hanke and Schuler 1991b). It issued a very successful, stable ruble currency redeemable at a fixed rate of 40 rubles per £1 sterling. Its currency circulated parallel to the inconvertible, unstable currencies issued by other Russian governments at the time. The board's sterling-backed ruble drove the others out of circulation because it was preferred by inhabitants of the region. The experience of North Russia may appear to contradict Gresham's law that "bad money drives out good." However, Gresham's law only holds when the law sets an exchange

rate that favors the bad money. When exchange rates are determined freely, good money tends to drive out bad money (Brunner and Meltzer 1971).

Like the North Russian currency board system, other currency board systems had excellent records. No currency board ever failed to maintain convertibility at the fixed exchange rate with its reserve currency. Currency boards in North Russia and Burma even managed to maintained fixed rates during civil wars. Most currency board countries accommodated money supply growth and strong, noninflationary economic growth. For example, in Hong Kong, average annual growth in real gross domestic product per person was 6.3 percent from 1965 to 1989. Moreover, Hong Kong maintained relatively low inflation in that period.

## Establishing a Currency Board

In a number of cases, including the free city of Danzig, Palestine, and Libya, currency boards have replaced central banks or other monopoly note issuers. However, the case we present is one in which a currency board comes into existence as a parallel issuer of currency, as it did in North Russia. Hence the currency board's currency may circulate competitively against that of a local central bank or of a foreign central bank (as other former Soviet republics now consider the Russian central bank to be). (In Hanke and Schuler 1991c, we discuss both scenarios in detail.)

The steps in establishing the currency board are as follows.

- 1. The currency board statute is established. (See Hanke and Schuler 1991c, Appendix I for a model statute.)
- 2. The initial reserves are transferred to the currency board, which we proposed should be a private, not a government, institution.
- 3. The currency board issues no more currency than the amount of its initial reserves. Hence, the board's currency is backed by 100 percent reserves from the start.
- The new currency is put into circulation, preferably by a distribution to every citizen according to a predetermined formula.
- 5. All restrictions on foreign exchange and the entry by foreign financial institutions into the former Soviet Union are abolished.
- The currency board's currency circulates as a parallel currency and competes with the currency of the local central bank; the exchange rate between the two currencies is freely determined.
- 7. The currency board stands ready to perform its sole function of exchanging its currency for reserve assets at a fixed rate.

Let us consider the most important questions about these steps.

Step 2: Where can the reserves be obtained? State property should be used to supply the initial reserves. That should not prove to be difficult: the Communist Party and state-owned enterprises in the former Soviet Union deposited \$15 billion to \$40 billion in hard currency overseas in 1991 alone (Dempsey 1992). In addition, revenues from sales of state-owned assets in the former Soviet Union could be used for reserves.

Step 3: How large should the initial reserves of the currency board be? Establishing currency boards in the former Soviet Union would not require enormous foreign reserves. This is particularly the case since we propose to issue a new parallel currency in each former republic that wants one, rather than to replace an old currency with a new currency. In any case, under the currency board system the actual size of the initial reserves is not crucial, because the system allows the supply of new domestic currency to adjust readily to demand.

To appreciate how small the initial reserves could be, suppose a new currency board in the former Soviet Union were to distribute the equivalent of \$15 to each citizen. Although \$15 does not appear to be much at first glance, it exceeds a month's wages for the average worker at present market exchange rates. Since there are about 275 million persons in the former Soviet Union, the total amount needed to provide 100 percent reserves for new currency boards would be just \$4.1 billion. Past currency reforms that *completely* replaced an old currency with a new (such as the German reform of 1948) were able to restart economic activity by using similarly small amounts of new, sound money.

Step 4: How should the currency board's notes be distributed? The exchange rate between the currency board currency and the reserve currency should be one to one, so as to make conversions easy to calculate. (This is merely a matter of convenience. If the exchange rate is, say, 135.33 currency board rubles per U.S. dollar, the nominal amount of currency board notes will be 135.33 times greater than if the exchange rate is one currency board ruble per U.S. dollar. The real amount of currency board notes, calculated in dollars, will be the same in both cases.) The currency board should start the new monetary system by distributing notes and coins representing 100 percent of the value of its reserves. If it has \$4.1 billion in reserves, it should distribute the equivalent of \$4.1 billion worth of its notes and coins. The actual distribution could be designed in various ways. The easiest method would be to give every citizen or household an equal, one-time gift of the new currency. In addition to simplicity, this type of broad-based distribution of the new currency would be

popular, and would motivate support for the currency reform, popular capitalism, and a transition to a market economy (Piñera 1991).

Step 5: What restrictions on foreign exchange and foreign banks are necessary? None. Without restrictions on foreign exchange, currency competition can exist, not only between the issues of the local currency board and the local central bank, but also with foreign currencies (Hayek [1976] 1991). With the freedom to hold and conduct transactions in any currency, good money will drive out bad, resulting in the sound monetary system that is a necessary condition for a successful transition to a market economy.

To make the currency board system yield its full benefits, foreign commercial banks should be allowed free entry into the former Soviet Union. Existing banks in the former Soviet Union lack the credibility that foreign banks possess. In addition to bringing credibility to the banking system, foreign banks will bring with them new techniques and knowledge about financial matters (Uchitelle 1992b).

The currency board system and free entry of foreign branch banks will allow for the natural establishment of commercial ties with the reserve-currency country, because foreign exchange risk for persons in the reserve-currency country who invest in the currency board country and make transfers of capital will be eliminated. Foreign branch banks have always been common in currency board countries. This has given those countries ready access to international capital markets and expertise. The presence of foreign branch banks has made for a more vigorous commercial banking sector in currency board countries (Hanke and Walters 1991).

Step 6: What will be the fate of the currency issued by the central bank? The currency board's notes and coins will enter into circulation alongside the central bank's notes and coins. If the central bank ruble remains an unsatisfactory currency, much of the economy will quickly switch to the currency board ruble as the unit of account because it will be far more stable than the central bank ruble. It will be a matter for individuals and enterprises to decide which currency they wish to use.

If the currency issued by the central bank continues to suffer from high inflation, it will eventually cease to be widely used. That is what occurred in North Russia after local currency board notes were introduced in parallel with the inflationary issues of other Russian governments fighting the civil war. That was also the experience in the Soviet Union from 1922 to 1924, when the nominally gold-backed chervonets circulated in tandem with the depreciating sovznak (Yeager 1981).

As the public becomes convinced that the monetary reform is working, it will deposit its hard foreign currency in local bank

branches. People should be free to convert foreign currency into domestic currency or to hold the deposits in any foreign currency they wish. Permitting foreign currency deposits will promote financial development, as it has in Hong Kong, where foreign currency deposits exceed Hong Kong dollar deposits.

Step 6 (continued): What will be the effects of the currency board on wages and prices? The currency board is based on a fixed rate of exchange with the reserve currency. Using this rate as an anchor, nominal wages and prices within the currency board country must be set accordingly. No one can know in advance what the proper wages and prices should be; thus we cannot give any recommendations on "correct" wages and prices. Market forces should be allowed to set wages and prices freely. The new currency would facilitate the process, though. Some wages and prices will temporarily be set at inappropriate levels, but trial and error in the market will tend to make mistakes self-correcting.

As a first approximation, wages and prices can be translated into their levels in the reserve currency. Thus, if a farmer sells potatoes for 15 rubles per kilo, the floating exchange rate of the ruble is 100 rubles per U.S. dollar, and the fixed exchange rate of the currency board currency is one currency board ruble per U.S. dollar, the price of potatoes should be 0.15 currency board rubles per kilo. (Remember that the currency board ruble has a fixed exchange rate with the U.S. dollar in this example, but it floats against the central bank ruble unless the central bank fixes the ruble to the U.S. dollar also.) As confidence in the new monetary system increases, wages and prices will probably require substantial adjustment from their initial levels. The government should not interfere with price adjustments by imposing mandatory indexation or price controls on the private sector. Such interference will result in an inflexible economy that is incapable of adjusting to changing market conditions (Luders and Hanke 1988).

## Operating a Currency Board

A currency board is simple to operate. Past currency boards have usually had staffs of 10 or fewer people. They have been able to achieve economies by contracting some clerical and investment functions to outside parties. Indeed, most currency boards have used large commercial banks in the countries where they deposited their assets as agents. One of the great advantages of a currency board is its extreme simplicity. It is doubtful whether the former Soviet Union has enough well-trained people to staff a central bank. We shall now describe the basics of operating a currency board.

### Exchange Policy

The sole business of the currency board will be to stand ready to exchange its notes and coins on demand at a fixed rate into or from the reserve currency at its offices. To hold a large stock of reserve currency notes and coins would reduce its profits, because the board would not be able to invest those funds in interest-bearing securities. The board should try to do a "wholesale" currency exchange business with commercial banks. However, the public as well as banks should be able to deal directly with the currency board. Some British colonial currency boards dealt only with banks, as a way of reducing their need for staff. It seems unnecessary and unjust to discriminate against the public in such fashion. Most people will exchange currency through banks in any case. Accepting transactions from the public introduces a form of competition with banks, and ensures that their fees for exchanging into the reserve currency will be low, thus tightening the link with the reserve currency.

The currency board should preferably not charge any commission for its exchange services, and should have no lower limit for exchanges. (By nature a currency board has no upper limit for exchanges, unless the public converts all of its notes and coins into reserve currency.) The purpose of a currency board is to costlessly eliminate exchange-rate risk between the board's currency and the reserve currency. Accordingly, there is no point in erecting barriers to exchange with the reserve currency. The social benefits of not charging commissions far outweigh the pecuniary benefits to the board of charging commissions. The board will earn a return on its assets in the form of interest from reserve-currency securities, which will easily cover all costs of operations.

## Offices

The board should have a main office in Moscow, and perhaps a few branch offices in other large cities. The role of the branch offices or agents will be mainly to serve as places for safekeeping currency. It is not necessary to have actual branches. Instead, a commercial bank could act as the board's agent, as the Bank of British West Africa did for the West African Currency Board. The board should perhaps also have an office in the reserve-currency country to handle business there.

## Management

The currency board should have a small board of directors—past currency boards have had three to eight directors—to oversee the

board's managers. The powers of the board of directors and of the managers will be quite limited. Unlike their counterparts in central banks, directors will have no influence over monetary policy. (Later we will suggest how board members should be chosen.)

## Staff

The currency board's staff will perform two functions: exchanging its notes and coins for reserve currency (and vice versa), and investing its assets in high-grade reserve-currency securities. The exchange work requires only a small staff of bank tellers. The investment work requires some expert financial traders, but since the board will follow rather routine, conservative investment practices, its expenses should be smaller than those of commercial banks with portfolios of similar size.

#### Reserves

The board should hold its reserves in high-quality bonds denominated in reserve currency. (Later we will explain how this rule could be modified.) It should not hold assets denominated in local currency, because that would open the way to central banking—type operations. Specifically, commercial bank reserves could be altered by changing the proportion of local currency assets to foreign currency assets held by the board. Besides opening the way for central banking, holding local-currency assets also could expose the currency board to defaults engineered by the domestic government.

It may be desirable to specify in the currency board's charter or by-laws what types of assets it could hold and what the maximum maturity would be. Long-term fixed-rate bonds swing widely in value as interest rates change, although they may offer higher average returns. Some past currency boards that invested heavily in long-term bonds suffered large losses when interest rates in the pound sterling rose sharply because of speculation against sterling, though their additional reserve of 10 percent prevented their reserve ratio from falling below 100 percent.

Past currency boards often divided their investments into a "liquid reserve" and an "investment reserve." The liquid reserve, consisting of securities that had maturities of less than two years, was typically about 30 percent of total reserves. The investment reserve, consisting of securities with longer maturities, made up the rest of the total reserves, equivalent to an estimate of the public's minimum, "hard-core" demand for a board's notes and coins. Liquid reserves should probably exceed 30 percent at the start, although it may be possible to reduce the ratio as time goes by.

### Expenses

Judging from the experience of past currency boards, expenses should average no more than 1 percent of total assets, and may be as low on average as 0.5 percent of total assets. The main expense will be printing notes and minting coins. Salaries will be the next greatest expense, and rent, utilities, and remaining costs will be small.

## Protecting the Currency Board

Although the currency board system was a great economic success, most currency boards have disappeared because they lacked the political independence to prevent them from being converted into central banks. Suspicion that a new currency board might be reconverted into a central bank would undermine the board's credibility, defeating one of the main advantages of the currency board system. To strengthen its credibility, a currency board in the former Soviet Union could undertake the following actions.

The currency board should insulate itself from any possible government manipulation. The majority of the board of directors could be appointed by foreign governments or foreign private institutions. Precedents for such an arrangement exist. For example, only three of the eight directors of the Libyan Currency Board of the 1950s were Libyan nationals; the rest were British, French, Italian, and Egyptian nationals chosen by their respective governments.

The currency board could also keep its assets in a safe-haven country such as Switzerland, and could be incorporated as a private entity under the law of the safe-haven country, independent of the governments of the former Soviet Union. (Their permission would of course be necessary for the board to operate on their territory.) The Burmese and Jordanian currency boards, among others, had their headquarters in London even after Burma and Jordan became independent.

Another way for the currency board to strengthen its credibility would be for its notes to contain a statement that they are convertible into the reserve currency at a whatever fixed rate had been established.

The currency board's notes should be printed outside of the country where the board operates, and should be of high quality to protect them from being counterfeited.

# Why Not a Commodity-Backed Currency?

Some economists argue that to obtain credibility, the ruble should be convertible into gold or some other commodity (Angell 1989, Wanniski 1990). That may indeed be the case, particularly in the southern republics of the former Soviet Union. A commodity-backed currency board is possible. In the past, most currency boards have used a single foreign currency as their reserve currency. However, some currency boards have held gold or silver along with foreign-currency securities as assets.<sup>2</sup> Since no well-developed loan market for physical gold and silver existed, their gold and silver reserves paid no interest. The boards earned less seigniorage than boards that held foreign-currency securities only.

Today, with new markets and financial products, the seignorage opportunity costs of using gold or other commodities as reserve assets for a currency board would be less than in the past. A currency board whose reserve asset was gold could lend the gold on the London gold loan market at the prevailing interest rate, currently about 2.8 percent a year.

Other commodities or a basket of commodities could also be used to back a currency issued by a currency board. Since organized loan markets for other commodities do not exist, the opportunity costs of using them would even be higher than using gold. Since nominal rates of interest from gold loans are lower than the rates presently available on securities in the leading hard currencies and since other commodities do not yield interest, a currency board that uses a commodity backing would earn less seigniorage than a board that uses a foreign-reserve currency. The credibility that might be gained by using commodities as reserves may exceed the seignorage lost, however. If so, commodity reserves should be considered for the currency board.

# Why Not Free Banking?

Some have argued that the way to supply sound, convertible currencies in the former Soviet Union is to introduce a free banking system (Anderson 1992). Free banking is the system of banking without severe legal restrictions; in particular, it implies competitive note issue and decentralized reserve holding. Free banking existed in approximately 60 countries during the 19th century and the early 20th century (Dowd 1992). No free banking systems exist today, but free banking is enjoying an intellectual revival as an alternative to central banking.

The most important requisite of stable free banking is strong, competitive banks. Decades of socialism have left the former Soviet

<sup>&</sup>lt;sup>2</sup>Examples include Mauritius (1849–1934), which held silver coins; New Zealand (1850–56), which held gold and silver coins; and Kuwait (1961–69), which held gold bullion.

Union with no real bankers and bankrupt large banks. Indeed, virtually all banks are burdened by large portfolios of bad loans. Even if the banks are recapitalized or split into "good" and "bad" banks, or if inflation reduces their assets and liabilities to near zero, they will be weak for some time to come (Uchitelle 1992b).

As we argued above, a solution to the problems of the local banking system would be to allow reputable foreign banks to enter the market without restriction, either to buy local banks or to set up new competing branch networks. In free banking systems in some Latin American nations, the Caribbean, and British colonies, foreign banks provided great stability and keen competition. However, these systems arose over extended periods of time, not overnight (see Dowd 1992). If free banking were permitted today in the former Soviet Union, it would initially be characterized by feeble competition among poorly capitalized local banks; the banks would be managed by persons with no experience in banking in a market economy; and the banks would be operating in an environment in which few people trust local institutions.

Such a free banking system would be disastrous. No system of checking accounts and check clearing exists yet in the former Soviet Union, so currency has a greater role in business and personal payments than it does in the West. If no unquestionably reliable domestic currency existed, a few failures by so-called free banks would turn public opinion against competitive note issue and would make it impossible to achieve true, mature free banking, which is characterized by a small number of well-capitalized banks having extensive branch networks, competing with one another nationwide.

The present currency regime makes it too risky for foreign (or domestic) banks to try to establish branch networks in the former Soviet Union. However, if history is a guide, under a currency board system, well-capitalized private banks (most likely foreign-owned), with extensive branch networks, would develop in a relatively short period of time. Once a currency board made the currency regime stable, it would be possible for sound banks to become established and to eventually issue competing parallel currencies along lines envisioned by F. A. Hayek ([1976] 1991) and Roland Vaubel (1978). The currency board would not preclude such an evolution. Indeed, a currency board system would provide the type of stable currency regime required for the development of a free banking system.

Competition between currency board notes and bank-issued notes has occurred before. In the British Caribbean colonies, banks issued notes not subject to any special reserve requirements. Bank notes competed with currency board notes until the 1950s, when local governments outlawed bank note issue to gain more seigniorage revenue for themselves.

Whether the currency board would continue to exist after a mature free banking system developed would depend on whether consumers wanted to continue holding its notes and coins. If they did not, the board's note and coin circulation would decline toward zero as competing issuers gained circulation. Because the board would have 100 percent foreign assets, it would easily be able to meet competing issuers' demands to redeem its notes and coins. The board would fade away after having served as a bridge between central banking and free banking.

## Why Not a Central Bank?

To date, most persons have blindly assumed the desirability of central banking for the former Soviet Union. (A notable exception has been Paul Volcker 1990.) The new nations formed from the wreckage of the Soviet Union are busily planning to establish their own central banks, and the Bank of England and the Bank of France are training aspiring central bankers (Norman 1991a).

It is extremely unlikely, however, that a standard type of central bank will provide a credible currency in the former Soviet Union. After all, central banks are responsible for the dire condition of the ruble and the weak condition of all other East European currencies. We who live in Western nations, most of which have relatively good central banks, tend to forget how rare good central banks are. Western central banks are the star pupils of the class. They produce convertible currencies that depreciate "slowly." However, for most of the 99 nations that the World Bank classifies as low- and middle-income, central banks produce inconvertible, unsound currencies. For example, in those nations, average annual inflation was 16.7 percent from 1965 to 1980 and 53.7 percent from 1980 to 1989.

To issue a fiat currency that functions properly, a central bank must possess credibility. That will be difficult in the former Soviet Union. For one thing, its historical experience does not inspire hope. Russia has had a government currency issue since 1768, and a central bank since 1860. However, it has had a fully convertible currency for only 35 of those years. The last year of convertibility was 1914. After that, Russia had something approaching sound money only from 1922 to 1924, in the early days of the chervonets currency. A sound, convertible central bank currency is not part of the Russian culture or memory.

Furthermore, the recent behavior of the Soviet (now Russian) central bank behavior has made most citizens distrustful of the ruble.

In early 1991, 50 ruble and 100 ruble bank notes were demonetized. Most persons holding 50 ruble and 100 ruble notes were able to exchange them for an equivalent amount of smaller denominated rubles, but 10 billion to 12 billion rubles were confiscated by officials who determined that they had been obtained through "speculation" and other illegal means (Peel 1991).

In addition to a bad memory and mistrust of the central bank, citizens in the former Soviet Union and other post-communist nations have little trust and confidence in any government institutions (Engelberg 1992). A distinctive feature of the communist regimes was the overall mistrust that penetrated all relationships in society. The relationships among authorities and economic agents have been ones in which each has attempted to mislead the other with false and biased information (Major 1991). With decades of low credibility and mutual irresponsibility of authorities and economic agents, it is hard to imagine that that conditioning can be overcome quickly and credibility established at a central bank. Without credibility, a central bank will lack a necessary condition for the establishment of a sound, convertible currency.

Many believe that once Russia and other former Soviet republics join the International Monetary Fund (IMF), the credibility problem will be solved. That is a false hope. Let us look at recent experience of Yugoslavia, which has been a member of the IMF since 1945. The experience of Yugoslavia shows that, in an environment that has many similarities to that in the former Soviet Union, good behavior, credibility, and sound money have proved as illusive as the holy grail (Hanke and Schuler 1991a).

In December 1989, the monthly inflation rate was 50 percent in Yugoslavia, and for the entire year it had been 2,720 percent. Armed with an IMF stabilization plan, Yugoslavia introduced a currency reform in December 1989. It established a "hard" pegged exchange rate of seven dinars per German mark. To maintain the peg under conditions of low credibility, real lending rates were about 40 percent and real deposit rates were about 25 percent per year in most of 1990. Although inflation came down in Yugoslavia during 1990, the rate remained much higher than in Germany. Hence, the dinar became grossly overvalued and the Yugoslavia economy slumped into a deep depression. Eventually, Yugoslavia had to give up on the hard peg and inflation soared (see Silber 1992).<sup>3</sup>

<sup>&</sup>lt;sup>3</sup>For information abou tthe scandals afflicting the National Bank of Yugoslavia in 1991 and 1992, see Ernsberger (1992), Sudetic (1991), and World Bank (1989).

#### Conclusion

Unlike a central bank, the currency board system in the form we propose would provide the former Soviet Union with a currency that would serve as a satisfactory store of value, medium of exchange, and unit of account. In doing so, it would lay the foundation for the development of a banking system in which banks could eventually issue their own notes that competed with those issued by a currency board. Therefore, if the former Soviet Union is to make a transformation from socialism to capitalism successfully, it should utilize the currency board system. Indeed, that system should play a central role in the transformation process.

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