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Volker Hofmann and Friedrich L. Sell\*

## Credibility, Currency Convertibility and the Stabilisation of the Rouble

*The measures taken so far to move towards currency convertibility and combat inflation in Russia and the other CIS countries are based largely on a three-stage programme formulated by the IMF. The following article presents alternatives and compares them with the IMF concept from the point of view of credibility.*

The rouble area in the territory of the former Soviet Union is steadily crumbling. The three Baltic states and the Ukraine have left the rouble area completely, and most of the CIS states have independent parallel currencies or currency substitutes in circulation, such as the Byelorussian, Kazakh and Uzbek roubles. At the end of November 1992 the Government of Georgia announced that in the foreseeable future it too would introduce a separate currency, the lari. Apart from the political implications, this turning away from the rouble signifies clear economic distrust of the former common currency. The main cause of this distrust is the acceleration of inflation to a rate of well over 1,000% in 1992, triggered by the elimination of the monetary overhang and further fuelled by a sharp expansion of the money supply. The instability of the CIS currency is also illustrated by its performance on the foreign exchanges; between 1st July 1992, when a unified exchange rate was first quoted on the Moscow foreign exchange market, and mid-December 1992 the rouble declined in value by more than 330% against the US dollar.<sup>1</sup> Action to combat rapid inflation and to create confidence in the rouble is urgently needed in order to allow the transformation process to proceed swiftly.<sup>2</sup>

Relative prices in planned economies tend to be completely distorted; an important task in the conversion to market economy is therefore to bring them into line with actual scarcity conditions so that they can perform their guidance and information functions, which are extremely important for the market process. Only then will the previous enormous waste of resources be stopped and an efficient economic system established. World market prices are also needed if privatisation is to be carried out speedily and with the prospect of success. However, as

prices largely lose their allocative function in a high-inflation economy, the fight against inflation is of central importance. Moreover, a stable and convertible currency would greatly accelerate the adjustment of domestic prices to world market levels.

A further important consideration for system transformation in the former Soviet Union is the low capital stock. Additional capital is urgently needed, and as it is in scarce supply investors could, in theory at least, look forward to high returns. However, risk as well as yield is an important determinant of international capital flows. Experience in developing countries shows that capital can take flight even from "capital-poor" countries if they do not pursue a stability-oriented and hence credible monetary policy.

The steps taken so far towards currency convertibility and disinflation in Russia and the other CIS republics are based largely on a three-stage programme devised by the IMF. Briefly, it aims first to cap inflation by means of budgetary and central-bank discipline so that structural reforms can then be implemented. According to the plan, the final stage consists in the establishment of a rouble stabilisation fund, although this will not be activated until a significant stabilisation of the rouble exchange rate has been achieved. The debate about the current transformation process in the CIS is dominated by this so-called IMF concept, but it is not altogether clear why it should have such predominance. This article therefore aims to widen the current debate by setting out alternative proposals and comparing them with the IMF concept in

<sup>1</sup> The exchange rate fell to a record low of 450 roubles to the dollar on 24 November 1992. At the time of writing (December 1992), it stands at about 420 roubles to the dollar.

<sup>2</sup> As we aim to show, it is wrong to assert that internal prices in Russia must be stabilised "without first being able to gain a reputation for stability" (Rainer Schweickert et al.: Stabilisierung durch feste Wechselkurse: Fehlschlag in Entwicklungsländern – Erfolgsrezept für Osteuropa?, Kieler Diskussionsbeiträge, No. 181, 1992, p. 25).

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terms of credibility. Credibility can obviously be only *one* of the factors in the choice of monetary policy, but in the context of system transformation it is possibly the most important. Calvo and Frenkel point to the predominant importance of credibility in the transformation process: "Whatever the choice of sequence, the early steps must reflect the notion that a necessary condition for a successful transformation is its credibility. A well-designed economic program will not be effective, if it is not credible".<sup>3</sup>

### Criteria for Credibility

An important lesson that can be drawn from stabilisation programmes in Latin America, for example, is that reforms must be credible if they are to succeed. The same applies without qualification to the transformation process and monetary policy in the former socialist planned economies. Credibility obviously plays an important role in the fully developed Western industrial countries as well. The monetary system in these countries is founded essentially on the good reputation their monetary institutions have acquired over many years. In truth, every currency needs to enjoy a sufficient measure of confidence on the part of economic agents if it is to be accepted. However, confidence must first be earned by pursuing a credible policy. In the remarks that follow, the concept of credibility will be divided into three criteria, which in our opinion must all be met if the confidence of economic agents is to be won. We have termed these three criteria "transparency", "competence" and "creditor protection".

In this context, *transparency* means that monetary policy for the transformation process first sets concrete objectives that can be achieved with instruments or rules that are as precisely defined as possible. The rules should, if possible, be known to economic agents and their application should therefore be predictable. Even the deliberate decision to avoid economic intervention and to place trust in market mechanisms instead is a rule which, if consistently applied, provides transparency. The creation of an institutional arrangement that is as transparent as possible will protect economic agents against unpleasant surprises and generate confidence in monetary policy.

*Competence* can be defined as the demonstrable ability of the central bank to follow the rules it has itself previously set. Competence can be derived either directly, from a country's own national sources, or indirectly, with foreign assistance. A sufficiently large currency stabilisation fund, established with foreign loans in order to permit the authorities to pursue an exchange rate policy that is governed by rules and consistent over time, is an example of indirect (or borrowed) competence.

All economic agents who accept central-bank money are regarded here as creditors. One necessary condition for *creditor protection* is the central bank's demonstrable intention to follow the rules that have been laid down. In general, the more an institution limits its own scope for discretionary action ("tying its own hands"), the more credible will this intention be. For example, if a central bank borrows from the public in a unit (currency) that it cannot create itself or at least cannot create itself in limitless quantity, creditors will enjoy protection to the extent of this self-restraint. Here too, experience in Latin America shows that a central bank dependent on the government and able to create an unlimited volume of money at the government's behest does not offer a basis for a credible economic policy.<sup>4</sup> Creditor protection also requires that the institutional arrangement adopted leads to the greatest possible price stability. To that extent, the willingness of the central bank to follow its own rules is a necessary but not sufficient condition for effective creditor protection.

It should be noted that, strictly speaking, the criteria listed above apply only to achieving credibility rapidly. Once it has been attained and consolidated, some elements can be eased over the long term, as was the case with most of the present industrial countries.<sup>5</sup>

In the literature on the reform process in Eastern Europe, concepts such as the "feasibility"<sup>6</sup>, "sustainability"<sup>7</sup> and "irrevocability"<sup>8</sup> of economic reform measures are described as criteria for credibility. At the same time, the policy mix must be "consistent" so that problems of temporal inconsistency can be avoided.<sup>9</sup> In our understanding, "sustainability" and "feasibility" are attributes of competence, and "irrevocability" an aspect of creditor protection, while the criterion of transparency has clearly been underestimated so far. Not so in Calvo and

<sup>3</sup> Guillermo Calvo and Jacob A. Frenkel: From Centrally Planned to Market Economy, IMF Staff Papers, Vol. 38, 1991, No. 2, pp. 268 – 299, here p. 297.

<sup>4</sup> The recent success of stabilisation measures in Argentina is explained partly by strict budgetary discipline, but also by the exemplary transparency of "dollarisation" (guaranteed linkage of the peso to the dollar and 100% backing of the money supply with foreign currencies and gold), which gave "... Argentiniens a credible stability policy after decades of empty promises" (Frankfurter Allgemeine Zeitung of 7. 9. 92), with the 100% backing satisfying the criterion of creditor protection.

<sup>5</sup> See, for example, the experiences of the Latin Union in the nineteenth century (M. Flandrau: On the Inflationary Bias of Common Currencies: the Latin Union Puzzle. Paper presented at the 7th Annual Congress of the EEA, Dublin, Ireland, 1992).

<sup>6</sup> Rainer Schweickert et al., op. cit., p. 9.

<sup>7</sup> Peter Nunnenkamp and Holger Schmieding: Zur Konsistenz und Glaubwürdigkeit von Wirtschaftsreformen. Einige Erfahrungen und Lehren für die Systemtransformation in Mittel- und Osteuropa, Kieler Diskussionsbeiträge, No. 166, 1991, p. 7.

<sup>8</sup> Ibid.

<sup>9</sup> Op. cit., p. 8.

Frenkel: "The policy maker should recognize the limitations of discretionary policies, the virtues of transparent and simple rules that encourage entrepreneurial pursuits ..."<sup>10</sup>

Let us now examine various monetary systems that ensure credibility and stability in different ways, and outline alternatives to the IMF plans that may be attractive in the case of the rouble.

**The Gold Standard**

The gold standard is to be found in various forms in economic history and in the literature. The simplest, and at the same time the most rigid, is the system in which the money supply placed in circulation by the central bank is backed 100% by gold. Under a gold standard, the rouble would be clearly defined in terms of a specified amount of gold. The central bank would then undertake to exchange gold for roubles and vice versa at this fixed price on demand. As a rule, economic agents would continue to use the rouble for transactions, as transaction costs would be lower. However, if they lost confidence in the value of the rouble, they could demand the predetermined amount of gold from the central bank in exchange for their roubles. In this way, the volume of money in circulation would decline and prices would simultaneously fall, so that confidence in the rouble could be restored. The rouble would therefore be fully convertible into gold. Under such a system, an expansion in the money supply would be linked to an increase in the gold reserves of the Russian central bank. As expressed by Cooper,<sup>11</sup> the general price level of a country in units of its own currency can be divided into the product of a currency/gold ratio and a gold/goods ratio:

$$(1) \left[ \frac{\text{Roubles}}{\text{Goods}} \right] = \left[ \frac{\text{Roubles}}{\text{Gold}} \right] \times \left[ \frac{\text{Gold}}{\text{Goods}} \right]$$

<sup>10</sup> Guillermo Calvo and Jacob A. Frenkel, *op. cit.*, p. 297.  
<sup>11</sup> Richard N. Cooper: *The Gold Standard: Historical Facts and Future Prospects*, Brookings Papers on Economic Activity, No. 1, 1982, pp. 1 - 56.  
<sup>12</sup> Cf. Irving Fisher: *Stabilizing the Dollar*, in: Lionel D. Edie (ed.): *Stabilization of Business*, New York 1923, pp. 54 - 112. "The gold dollar is now fixed in weight and therefore variable in purchasing power. What we need is a gold dollar fixed in purchasing power and therefore variable in weight" (p. 90). "As readily as a grocer can vary the amount of sugar he will give for a dollar, the government could vary the amount of gold it would give or take for a dollar" (p. 95).

<sup>13</sup> Hans Georg Monissen: *Die konjunkturtheoretischen Vermutungen von Irving Fisher*, in: Bertram Schefold (ed.): *Studien zur Entwicklung der ökonomischen Theorie VII*, Berlin 1989, pp. 2 - 31, here p. 12.

<sup>14</sup> "Necessary preconditions for the effectiveness of his ingenious and at the same time simple plan are that gold is also sought-after and held for non-pecuniary reasons and that a central policy body buys and sells gold at the stipulated gold price without restriction" (*Ibid.* Our translation).

Under a gold standard, the rouble/gold ratio would be constant, as the rouble would be defined in terms of a particular amount of gold. The purchasing power of the rouble would only be stable, however, if the exchange ratio of gold to other goods were also stable. By way of clarification, equation (1) can also be written in terms of growth rates, with the quotient on the left-hand side representing the rate of growth in the purchasing power of the rouble, in other words the inflation rate:

$$(2) \left[ \frac{\text{Roubles}}{\text{Goods}} \right] = \underbrace{\left[ \frac{\text{Roubles}}{\text{Gold}} \right]}_{\substack{! \\ = 0 \text{ fixed parity} \\ (= 0)}} + \left[ \frac{\text{Gold}}{\text{Goods}} \right]$$

**The Modified Gold Standard**

In the early twenties Irving Fisher proposed a modification of the gold standard in order to reduce price volatility. He suggested that when the price level changed the central bank should consciously deviate from the fixed parity between the national currency and gold.<sup>12</sup> Applied to the rouble, this would have the following consequences: if the purchasing power of gold in the rouble area falls and hence causes the prices of goods to rise (the gold/goods ratio in equation (1) rises), the central bank must likewise increase the amount of gold per rouble or the weight of the gold rouble, which implies a fall in the price of gold in roubles (the rouble/gold ratio in equation (1) falls). "Even if one ignores the effects of reduced gold production or of an outflow of gold as a result of rising imports (which foster the adjustment process), the non-bank sector will increase its purchases of gold. The effective money supply will diminish, and the original inflationary tendency will be eliminated."<sup>13</sup> According to Fisher, exactly the opposite should be done if the general price level falls, so that overall the purchasing power of the rouble (rouble/goods) will remain constant in the long run.<sup>14</sup> This situation can again be illustrated easily in equation (3) with the help of growth rates:

$$(3) \left[ \frac{\text{Roubles}}{\text{Goods}} \right] = \left[ \frac{\text{Roubles}}{\text{Gold}} \right] + \left[ \frac{\text{Gold}}{\text{Goods}} \right]$$

! < 0 <----- > 0  
 = 0 > 0 <----- < 0



In a currency board system, by contrast, competence depends on the level of available foreign exchange reserves. Hanke estimates that the CIS states need US\$ 5 - 7 billion in hard currency reserves in order to establish a currency board.<sup>21</sup> Here again, one would need to examine the extent to which such competence could be provided through international support.

It is more difficult to estimate the competence for adhering to the IMF concept. As mentioned above, no clear rules have been laid down, only certain intermediate objectives. The IMF itself to some extent provides indirect competence, through technical advice and a standby credit of US\$ 1 billion disbursed to Russia at the beginning of August 1992, but further loans and the planned rouble stabilisation fund will not be granted until a greater degree of macroeconomic stabilisation has been achieved.

### **Creditor Protection**

A fixed gold parity backed 100% by gold leaves the central bank virtually no room for discretionary action. The central bank borrows in a currency unit that it can create only in accordance with the volume of gold it receives. This system therefore fulfils a necessary condition for creditor protection. On the other hand, a fixed gold standard does not protect economic agents against sharp price fluctuations. Inflation or deflation may occur, depending on the volume of gold flowing into the rouble area. In other words, whereas by definition the rouble's gold parity is constant (see equation (1)), the exchange ratio of gold to goods need not remain stable. It rises (the purchasing power of gold declines) if gold inflows increase; disregarding new gold finds, this inflow depends crucially on the behaviour of gold prices in the international market.

For example, if the international gold price falls, *ceteris paribus* an arbitrageur will be able to buy more gold for a given amount of dollars and then exchange the gold for a

larger sum of roubles. Overall, the rouble area can then be expected to experience an inflow of gold, which will raise domestic prices and exert downward pressure on the rouble exchange rate. In such a system, all fluctuations in the world gold price would be transmitted to the money supply and the rouble exchange rate,<sup>22</sup> which would lead to considerable volatility, given the sometimes erratic behaviour of the world gold market. Huber and Monissen<sup>23</sup> reach the same conclusion when they criticise the fact that under a gold standard fluctuations in the international gold market have repercussions on domestic markets in goods and money. This volatility undermines the confidence of economic agents in their currency and reduces creditor protection.

In itself, the modified gold standard à la Fisher allows the central bank scope for discretion through adjustment of the rouble/gold ratio. In order to limit this scope, Fisher suggested a mechanism whereby any percentage change in the price level (of a selected basket of goods) in the course of a month would necessitate an equal percentage change in the amount of gold per rouble. If this change were insufficient to stabilise prices, the same procedure would have to be followed the next month. Fisher's proposed modification gives greater stability to the purchasing power of the rouble, as changes in the world gold market and resultant variations in the inflow of gold can be offset by rule-based central-bank intervention. The greater price stability achieved in this way also stabilises the exchange rate, which under this system cannot fluctuate as widely as under the classical, fixed gold standard.

Creditor protection is also very high in a currency board system. After all, the basic idea of a currency board is to remove the discretionary freedom of monetary policy usually present in a western-style central banking system and to prevent monetary policy from being dictated by political pressure. In a currency board system, the volume of notes and coin in circulation is determined solely by market forces. The board itself cannot manipulate the reserves or the entire money supply, as it accepts no deposits. The reserves can increase only as a result of an inflow of foreign exchange from the reserve currency country. In addition, the fixed parity between the domestic currency and the reserve currency means that the monetary stability of the reserve currency country can to some extent be taken over (the so-called "importing of reputation"). Coupling the rouble to a reserve currency country with price stability thus guarantees equally stable prices in the rouble area.

The IMF plan, by contrast, provides for a western-style central banking system. Initially, a fiat money system of this

<sup>21</sup> In the autumn of 1992 the foreign currency reserves available to support the rouble were put at US\$ 100 million (cf. *Frankfurter Allgemeine Zeitung* of 3. 9. 92.).

<sup>22</sup> A fixed exchange rate, which is frequently still linked with the design of a gold standard, can be achieved only if other countries also make their currencies convertible into gold and endeavour to maintain convertibility. As such action cannot be expected, the introduction of a gold standard for the rouble area involves a flexible exchange rate.

<sup>23</sup> Bernd Huber and Hans Georg Monissen: Ein wohlfahrts-theoretischer Vergleich konkurrierender Währungsordnungen, in: J. Siebke (ed.): *Monetäre Konfliktfelder der Weltwirtschaft*, Schriften des Vereins für Socialpolitik, New Series, Vol. 210, Berlin 1991, pp. 353 - 370.

<sup>24</sup> At present the Russian central bank is bound by the instructions issued by Parliament, and since the autumn of 1992 central bank Governor Gerashchenko has also been a member of the Government. Some observers attribute the somewhat reduced expansion in central-bank credit since then to his sharing of government responsibility (cf. *Neue Zürcher Zeitung* of 2. 12. 92.).

<sup>25</sup> Cf. Rainer Schweickert et al., *op. cit.*, p. 25.

kind can offer some degree of creditor protection only if the central bank is made completely independent from political directives.<sup>24</sup> However, even central-bank independence does not in itself guarantee that monetary policy will be oriented towards stability; its mere existence does not automatically give economic agents a high degree of confidence in their own currency. For this reason, an independent Russian central bank that had to use the classical instruments of a fiat money system would first have to earn the trust of economic agents over a fairly long period by pursuing a stability-oriented monetary policy.

### Conclusion

The IMF reform proposals for the rouble do not offer much by way of credibility; in terms of transparency and creditor protection, the IMF plan is little better than a classical gold standard with a fixed gold parity. A modified gold standard along the lines proposed by Irving Fisher or a currency board system are both superior to the IMF

concept in this respect. Large question marks also remain over the concept's ability to meet the competence requirements. Basically, it stands and falls on the ability of the IMF to persuade the Russian Government to accept its ideas. It also presupposes that the traditional instruments of a fiat money system can be applied quickly, and that they will bite. However, it is doubtful whether these preconditions can be met quickly and effectively.

For these reasons it is important to consider alternative concepts as well. With a currency board system or a gold standard à la Fisher, credibility and confidence in the monetary and exchange rate policy of the rouble zone could be generated very quickly. Even if one acknowledges that the gain in credibility is bought at the cost of a possible loss of flexibility,<sup>25</sup> and that over the long term a fiat money system is superior from the economic point of view, this is by no means at odds with an interim solution for the extremely delicate phase of the transformation process in the former Soviet Union.

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Michael Krakowski, Dirk Lau, Andreas Lux\*

## Eastern Germany's Quality as a Business Location

*Private investment has a key role to play in the "economic take-off" in Eastern Germany. Can the region attract sufficient investment? What factors stand in the way of a rapid improvement in the quality of the new Länder as a location?*

**B**y their peaceful revolution of 1989/90, the people of Eastern Germany expressed their wish for a new economic order. Their elected representatives quickly reached fundamental decisions that established the social market economy but also contributed to a virtual collapse of production in that country. These fundamental decisions included the introduction of economic, monetary and social union (which led to a large real

reevaluation in Eastern Germany), integration into the Federal Republic of Germany and the decision to follow the principle of "restitution rather than compensation" with regard to confiscated property. This article will explore how the potential of Eastern Germany as a business location should be assessed in the new conditions.

The "location debate", which has flared up again with increasing vehemence, revolves primarily around the question of how the rising burden on the public finances due to transfer payments can be reduced or made more bearable, with attention focussing increasingly on the burden being placed on locations in Western Germany.<sup>1</sup> The debate has been triggered by the recognition that the

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