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**CURRENCY CONVERTIBILITY:
WHEN AND HOW?
A CONTRIBUTION TO THE
BULGARIAN DEBATE**

Eduard J. BOMHOFF

*REPORT 9102
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Summary (in Dutch)

Dit artikel handelt over zowel de timing als de implementatie van de convertibiliteit (inwisselbaarheid in vreemde valuta) van de eigen munt in de nieuwe democratieën in Centraal- en Oost-Europa. Voor wat betreft de timing van (gedeeltelijke) convertibiliteit pleit ik voor zo spoedig mogelijke invoering, met als hoofdargument dat er dan druk van buiten ontstaat om binnenlandse relatieve prijzen zoveel mogelijk in overeenstemming te brengen met prijsverhoudingen in de wereldmarkt. Zonder vrij-inwisselbaar geld en vrije handel met het buitenland zal het bijzonder moeilijk zijn voor de autoriteiten om consumenten- subsidies af te schaffen en producenten onder de discipline van de wereldmarkt te stellen. Toch zijn beide noodzakelijk voor de omschakeling op een markteconomie.

Vervolgens geef ik een aantal argumenten in het voordeel van een "crawling peg" als wisselkoerssysteem voor de nieuwe democratieën in Centraal- en Oost-Europa gedurende de overgangsfase naar een markteconomie. Een vaste wisselkoers heeft als groot nadeel de onvermijdelijke onzekerheid over de reële concurrentiepositie, omdat de reële loonkosten zullen moeten dalen, maar politiek onduidelijk is in welk tempo. Een volkomen vrije wisselkoers bij afwezigheid van een buffervoorraad aan internationale reserves maakt de wisselkoers bijzonder afhankelijk van het laatste politieke nieuws en de meest recente - en naar hun aard sterk fluctuerende - cijfers voor de handelsbalans.

Tenslotte memoreert dit artikel de Nederlandse ervaringen direct na de Tweede Wereldoorlog die interessant zijn zowel vanwege de monetaire hervorming in de zomer van 1945 als vanwege het feit dat Minister Lieftinck enige tijd de nominale loonontwikkeling gebruikte als nominaal anker voor de Nederlandse economie in 1945.

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Berichte

Currency Convertibility: When and How? A Contribution to the Bulgarian Debate*

By Eduard J. Bomhoff, Rotterdam

I. Introduction

Economic growth in Bulgaria has been stagnant since 1989, inflation is going up and the Lev is rapidly losing its value in terms of other currencies. In March 1990, the Bulgarian authorities declared a moratorium on the country's external debt. Under these difficult economic circumstances, an intense debate has been engaged about the appropriate future monetary policy of the nation, and many new options are open now that Bulgaria has been accepted in the 1990 annual meetings as a member of the IMF and the World Bank.

It would be inappropriate for a first time visitor to Bulgaria to offer firm advice on policy for a country on which little research has been published and for which the past in any event no longer provides much guidance about the future. Currency convertibility and monetary policy have to be discussed under conditions of great economic and political flux, not only in Bulgaria itself, but also in all of its ex-Comecon trading partners. Nevertheless it may be of some use to recall a number of arguments that are important for deciding upon the date of the transition to convertibility as well as the form in which convertibility might take place.

II. Timing of Convertibility

Within one year of the political changes of November 1989, a consensus has formed in Bulgaria that the Lev must become a convertible currency. Officially this has been underlined by the acceptance of Bulgaria as a mem-

ber of the IMF which stipulates in article VIII of its Articles of Agreement: „no member shall without the permission of the Fund impose restrictions on the making of payments and transfers for current international transactions“. However, according to Article XIV member countries may preserve temporarily the existing limitations and controls on current payments. As members of the Fund, however, countries must strive to make the transition to convertibility when economic conditions make this possible.

Bulgarian economists differ about the timing of a move to convertibility. *Mitov* writes: „Different views have been voiced. Some understand convertibility solely as the product of a balanced and strong economy, postponing the problem to the indefinite future. Others plead for this immediate introduction, despite existing shortages and imbalances in the economy – seeing convertibility as a means to economic recovery, despite inherent risks“.

A realistic debate about the timing of a move to convertibility on current account must take into consideration that foreign currency already plays an important role in all Central and Eastern European economies. U.S. dollars and DMarks are widely accepted in urban areas, and may even be the preferred medium of exchange for many residents. This seems to be the essential difference between the situation in Eastern Europe today and, for example, in Western Europe after World War II. The other crucial difference with other times when countries contemplated making their currencies convertible is that in Eastern Europe the transition from a collectivist to a market economy has been agreed in principle but still needs to be implemented. It seems to me that these two factors together make earlier views about the timing of the change to convertibility no longer directly applicable to Eastern Europe today.

Here are some well-known traditional arguments for caution:

- Political uncertainty and the general wish to diversify one's portfolio may induce residents to move part of their savings to foreign countries. With currency convertibility the implicit costs of doing so are much reduced, even if the currency is only convertible for transactions on current account. Over-invoicing of imports, under-invoicing of exports and a variety of other legal or illegal means are available once the currency becomes convertible for trade and tourism. It may be in the national interest, however, to stimulate domestic savings and to discourage for at least some time international diversification of domestic wealth. A non-convertible currency may make it much more costly to transfer part of domestic wealth abroad.

* Revised version of a lecture at the second International Varna Seminar On the Way to Convertibility in Central and East European Countries, October 1990. Prof. Dr. *Todor Valtchev*, Dr. *Lyubomir Mitov* and Prof. *Nesho Tzarevski* provided useful insights about the Bulgarian economy. *John Williamson* and other Seminar participants gave stimulating comments. The views in this paper are solely my own.

- Tourists going abroad may use valuable foreign currency and – once again – invest their wealth or even their talents in foreign countries. A non-convertible currency allows for political control over outward-bound tourism.

All such arguments against early convertibility involve substantial political control over economic transactions and important limitations on the freedom of contract between domestic residents and foreigners. Here follow some points associated with postponing the move to convertibility:

- If government has the power to allocate foreign exchange, this will easily become a source of corrupted practices and will involve a bureaucracy that is costly not only in the direct budgetary sense but also because vital imports may be delayed through excessive red tape.
- Domestic entrepreneurs may judge that black market activities and smuggling may offer attractive rewards, but there is a difference between the private and social benefits of such activities.
- Distorted domestic relative prices that are out of line with world prices complicate business life for domestic firms and have social costs. A convertible currency makes distorted domestic prices far more visible and may even prevent continued distortions because of substitution effects both in production and consumption. For instance, in Western Europe the past few years have shown how much discipline is imposed on domestic governments in the area of taxation because of further integration of the financial, labour, and goods markets in the European Community. We observe a clear convergence of Value Added Tax rates as well as of income tax schedules not because the different politicians have come to agree about the optimal structure of taxation, but because their residents will move either their purchases or their work effort abroad if induced to do so by glaring differences in rates of taxation.

Possibly of all these arguments the final argument against postponing the transition to convertibility should dominate. For, the transition to a market economy will suffer if domestic relative prices differ substantially from world prices, or if there is persistent political uncertainty about the continuation or termination of such distortions. To impose domestic relative prices that are more in agreement with world market conditions will initially impose heavy adjustment costs on consumers and producers. Families have become used to subsidization of food and some basic commodities. The benefits of more realistic prices do not appear immediately; the costs of reduced subsidies hurt directly. For that reason alone, removal of distortions in relative prices will stimulate strong political opposition on the consumer side. Producers will have to make equally hard adjustments if impor-

tant relative prices and subsidies change. A very important advantage of currency convertibility is that the speed with which domestic relative prices adjust to conditions in the world market no longer depends on domestic political conditions but is imposed from abroad.

External discipline has worked well in putting some constraints on taxation policies in the European Community; it may also be the most feasible way to achieve a more sensible structure of relative prices in the economies of Eastern Europe. With a convertible currency the whole world market is on your side if you wish to remove distortions in relative prices. Because future prosperity requires a market economy, and a market economy in turn presupposes realistic relative prices and far fewer distortions, immediate currency convertibility may help to import a relative price structure that could be politically impossible to obtain through individual domestic political decisions.

I should also like to suggest that the bias in favour of large firms and against small firms and new entrepreneurs may be an additional very important argument to remove control over foreign exchange from the central authorities. In my own country, the Netherlands, politicians belonging to the two largest political parties are now actively debating the amount of government support that would be needed to help *Philips*, the struggling electronics firm. And this within a context of strong economic growth, a very tight labour market and an unsustainably large budget deficit. Government subsidization of Philips implies higher taxes to the detriment of other firms and potential new entrepreneurs. However, in the "market" for political influence large existing companies have a more concentrated power in favour of subsidies than those who eventually pay the budgetary costs. In addition, *Hayek's* warnings that governments have no comparative advantage in guessing which future activities are most promising (and would best be served with foreign exchange) apply with full force. Finally, political control over foreign exchange imposes unavoidable heavy distortions in the domestic credit market. Some companies may find it easy to generate cash flow or to attract capital in order to expand, but may fail to obtain foreign exchange for vital imports of machinery. Other businesses may have little cash flow and few attractions for potential creditors, but they enjoy the political connections that are helpful in obtaining foreign exchange. A "shadow" market in foreign exchange will appear in which firms and individuals will try to obtain licenses to import. However, there will be a varying degree of political control over this "market", leading to an uncertain and inefficient set of constraints on firms' activities.

The Soviet Union and some of the other ex-socialist economies have promoted cooperative forms of organization for smaller enterprises. Some cooperatives are spin-offs of larger state-owned firms; others have arisen to perform tasks that were neglected in the past. As long as domestic relative prices remain grossly distorted, managers of state firms may take a personal pecuniary interest in a new cooperative and deal with these smaller privately-owned satellites in ways that are socially harmful even though individually profitable. For instance, a state firm may sell subsidized inputs to a cooperative which then subsequently sells its output at a realistic price. News reports from Eastern Europe suggest that such practices are strongly disliked by the public, which suspects big-firm managers to have a selfish interest in some cooperatives. By contrast, other cooperatives may be eliminated by state firms that have exclusive rights to foreign exchange or cheap government-provided inputs and compete with the cooperative in consumer markets. It would be regrettable if the transitional phase to a market economy was greatly hampered by these two different types of problems and this may be one additional reason to favour policies such as immediate convertibility of the currency that lead to a realistic relative price structure.

The transition to a market economy will witness the establishment of many small firms which have to survive a symbiosis with a number of extremely large enterprises, either state-owned or not yet privatised. It is essential that the new firms and cooperatives can compete on equal terms with the state-owned-conglomerates. This requires that the so-called soft budget constraint for the state-owned enterprises is replaced by a binding budget constraint. In other words, losses must have consequence also for socialized firms. Additionally, the rule of law obviously must apply not only to the new privatized firms and cooperatives, but also to the state-owned businesses: Bureaucratic favouritism has no place in a true market economy. It would be naive to forget that politicians and bureaucrats have a natural tendency to give more weight to the problems of large existing firms than to the difficulties facing new and unknown enterprises. But, the design of institutions and policies should counter this bias as much as possible. Within this context, an immediate move to convertibility of the currency makes much more sense than continued bureaucratic allocation of foreign exchange to business and individuals.

Table 1: Fixed Rates

- 1) "automatic Central Bank" (Hong Kong)
- 2) Currency union (Belgium - Luxembourg)
- 3) fixed by multinational agreement (E. M. S.)
- 4) fixed unilaterally (Austria, Norway)

Table 2: Flexible Rates

- 1) almost no interventions
- 2) "leaning against the wind"
- 3) wide, secret target zones
- 4) crawling peg with very frequent adjustments

III. Form of Convertibility

First, a brief review of the different options that are open to a small economy which makes its currency convertible. Table 1 shows four different versions of fixed exchange rates; table 2 four ways to implement flexible exchange rates.

Many of the small trading nations of Western Europe have opted for some form of fixed exchange rates. Obviously, these countries have concluded that their national economy is not an optimum currency area and that they should provide their citizens and business firms with a system in which foreign transactions with at least some major trading partners can be conducted with little or no currency risk. Membership of the EMS is increasing, because German dominance has delivered low and stable inflation for many years. If a new member country ties its currency to the DMark in a manner that is viewed as credible by the financial markets, the country „buys“ reputation from the Bundesbank. As long as Germany continues to dominate the system, the reputation of its Central Bank is a public good that can be provided to new members without diminishing its supply to the old members of the EMS.

For new members, the „quality“ of the national money may improve through a tie-in with this German dominated system, and credibility may be purchased more cheaply than if the Central Bank had to obtain a strong reputation for anti-inflationary policies on its own.

On the other side of the ledger there are obvious transitional costs as the new EMS-member must adjust to lower inflation. Also, domestic politicians give up the possibility to use the Central Bank for stimulating the economy in an election year. Such misuse of the Central Bank in order to generate a „political business cycle“ is a temptation in all countries that set their own monetary policies. One of the important advantages of a system such as the EMS for the citizens of the participating countries is that the common monetary policy will not be under as much of a threat to play its part in promoting re-election of sitting governments as in the case in which each country implements its own monetary policy.

Given all these advantages of a common monetary policy and a common inflationary path for participating member countries, should one advocate some form of cooperation between the monetary authorities in the small economies of Eastern Europe and the Bundesbank? Note first that countries may unilaterally decide to couple their monetary policies to those of the Bundesbank or the provider of any other major currency. Austria is a good example. The Austrian money market has been integrated for many years with the German money market and the Austrian monetary authorities can conduct open market-operations in DMark. This system does not require any form of approval by the German authorities and has resulted in an exchange rate between the Austrian Schilling and the DMark that is as stable as the exchange rate between the DMark and any of the EMS-partners. Hence, we can discuss whether the economies of Eastern Europe should try to emulate the Austrian example without having to wait for consent by the current membership of the EMS.

Some influential experts have advocated an even stronger form of fixed exchange rates. *Allan H. Meltzer*¹ has advocated a monetary authority for the Soviet Union along the lines of the Hong Kong Example. He writes: "credibility for the new monetary policy can be achieved most effectively if the new system is seen to be a major departure from the old, and the opportunities for discretion are severely restricted. The public must be convinced that the central bank and government will honor their commitment to avoid inflation. I suggest that this is done most effectively if you restrict the government's monetary role by establishing a monetary authority like the Hong Kong or Singapore monetary authority. In such systems the exchange rate is fixed. The authorities are empowered to issue money only if they receive convertible currency, and they must withdraw money when they lose convertible currency. They collect seigniorage, but they have no discretionary authority to change the quantity of money and no legal means of doing so. Money can only be issued to the extent that the country earns convertible currency.

This system has several advantages. Most important is the durability of the commitment. Like Ulysses, in the ancient Greek legend, you will have bound yourself tightly. There are other advantages. Let me spell out a few. First, the system focusses attention on the need to compete in world markets. Efficiency in international markets begets domestic efficiency, and increased domestic efficiency encourages exporting. Second, domestic prices would adjust toward world levels. If the exchange rate is fixed to the

¹ Monetary Reform in the U.S.S.R., Moscow Address, September 17, 1990.

dollar or the mark, domestic commodity prices will move toward U.S. or German prices for goods of the same quality. Third, interest rates will fall toward a world level. At first there would be a risk premium but the premium would decline as confidence grows that the system will be maintained. Fourth, budget deficits would be limited. All borrowing, whether denominated in domestic or foreign currency, would have to be financed from domestic or foreign saving ... This would be a strong commitment. The closer you come to it, the more it will be believed. A mixed system in which the exchange rate is fixed but adjustable will be less credible. If people doubt your commitment to monetary stability they will charge risk premiums in interest rates and wages to pay for possible inflation."

In this strong form of fixed exchange rates, credibility and stability are purchased abroad and achieved more quickly than under any alternative scheme. However, the fixed exchange rate implies that domestic inflation is given by world inflation so that not only domestic relative prices are imported from abroad – a very desirable matter – but also domestic absolute prices are given and no longer under much control by the domestic authorities. For a developed economy with a stable or at most slowly changing economic system this may not be a disadvantage. For instance, if there is macroeconomic pressure on average wage costs in industry in the Netherlands to decline relative to production costs in Germany, the magnitude of such a decline will be at most a few percentage points. Given that German wage rates increase at, say, 3 - 5 percent per year there is sufficient room to obtain a somewhat lower rate of increase in Dutch wage costs for one or two years and the desired adjustment in relative cost levels may be obtained.

In Eastern Europe, the economies are currently engaging in an unprecedented economic transformation and it is impossible to predict where cost levels will turn out to be next year, in five years and in ten years time. This uncertainty is starkly reflected by considering current black market exchange rates and relative wages in Eastern Europe, neighbouring countries such as Turkey and Greece and the higher developed economies of Western Europe. At current black market exchange rates it would appear wage costs in Eastern Europe are a small fraction of those in, for instance, Turkey with the differential increasing even further at this time. From a longer turn perspective, which would base relative cost levels on fundamental factors such as educational levels of the work force, institutional stability, infrastructure and natural resources, it might be extreme to expect a continuation of the situation in which wage costs in, for instance, Bulgaria are five times lower than in the industrial sector in Turkey. Hence, there

cannot but be extreme uncertainty about the proper wage cost levels in the economies of Eastern Europe over the next several years.

Under such circumstances fixing the nominal exchange rate imposes all necessary macroeconomic adjustments on nominal wages. It might be necessary to alter nominal wage levels by very substantial amounts over several consecutive years. This, in my view, will impose great hardships on wage earners and will also make it impossible in the meantime to ask wage earners to engage in longer-term nominal contracts such as home mortgages.²

What about fixing the exchange rate for a briefer period and without going to the extreme of the Hong Kong model? Early evaluations of the Polish experiment strongly suggests that fixing the exchange rate for a longish period on the basis of the most recent black market exchange rate results in an initial undervaluation. For, the black market exchange rate was formed in a period of great uncertainty about the future exchange rate regime and possibly during conditions of incipient hyperinflation. Currency substitution will be extremely important under such circumstances and the demand for domestic money very low. In fact, estimates suggested that two thirds of the currency circulating in Poland was foreign currency rather than domestic currency. Additionally, fixing the exchange rate will not reduce domestic inflation as measured in domestic currency to world levels overnight. Probably domestic inflation will continue to be substantially above world inflation and this again will influence the initial setting of the fixed exchange rate. Combining these two factors may well result in a severe undervaluation which is costly because it leads to wrong decisions by producers and consumers and is in itself a source of inflationary pressure. This would suggest great caution in fixing the exchange rate for a longer period of time and not necessarily following the most recent black market rate.

There is an obvious trade-off between attempting to achieve immediate credibility for the monetary authorities through fixing the exchange rate but imposing great costs on the labour market, or opting for a less fixed

² Some form of indexation of savings and mortgage contracts would help: Under indexation the real rate of interest is fixed when the claim is bought or sold in the primary market, and additionally inflation is compensated for once or twice a year. It must be possible to combine indexed long-term savings with indexed home mortgages, but it will be difficult for the banks to assume any mismatch of maturities in such an indexed market under a fixed exchange rate with great uncertainty about future rates of inflation. For under a Hong Kong type system the banks will have nominal (non-indexed) reserve instruments dominate. It is hard to see how banks could then offer indexed mortgages to new home owners, without some governmental institution providing insurance of all default risk on such assets as well as providing help with any mismatch between indexed savings and indexed mortgages.

exchange rate regime which will be easier on wage formation in the labour market but implies that credibility for monetary and exchange rate policy will take longer to achieve.

At the other extreme end of this spectrum would be a purely floating exchange rate. This has not been the institution of choice for the trading nations of Western Europe, the sole exception being Switzerland. In North America, however, Canada has maintained a floating exchange rate with respect to the U.S., even though the United States is a more dominating trading and investment partner for Canada than any nation in Western Europe with respect to Germany. Hence, a floating exchange rate is a feasible option, but most smaller nations prefer a fixed exchange rate with a major partner or participation in a fixed exchange rate system such as the EMS. For Eastern Europe a pure float would appear to have an overriding disadvantage, namely that it would be viewed as indicating a lack of discipline in the area of fiscal policy. Currently, statistics on budget deficits and the way in which they are financed are scarce and of poor quality so that international financial markets are very uncertain about the fiscal policies being followed. The transition to a market economy generates continuing uncertainty about budgetary policies for many more years: How quickly will subsidies be abolished, how easy will it be for displaced workers to find new employment, how much infrastructure is required to attract foreign direct investment and to make a more attractive home for domestic savings, and finally, how much of the government's expenditures can be covered with domestic taxation? None of these questions will have predictable answers for several years to come.

If the authorities choose a floating exchange rate it will be regarded as a sign that they do not wish to give up the option of covering part of future deficits through money creation with its consequences for the value of the currency. Because the monetary base as a stock is small in respect to the annual uncertainty regarding the government budget deficit, any news about future budget deficits and the extent to which they may be financed through Central Bank creation of new money will have a major impact on the market's expectation of the future monetary base. Hence, great uncertainty regarding the exchange rate will result and the foreign value of the currency will fluctuate with each piece of news regarding future budgetary policy. Such uncertainty about exchange rate movements even in the very short run will be costly for businesses and individuals.

IV. Real Rates of Interest

A common policy mistake in many developing countries has been for the authorities to intervene in the credit market and to depress real rates of interest. On the surface, such actions provide borrowers with a reduced cost of capital, but the policy makes no sense because it reduces the amount of savings. Hence, the supply of credit through the official sector of the economy falls so much short of the demand of the government influenced interest rate, that credit rationing becomes a necessity, with all its disadvantages of political bias in favour of large established enterprises and risk of corruption. At the same time, an informal „curb“ market for credit will develop in which borrowers who cannot be satisfied on the official market will try to attract funds at higher – possibly even illegal – rates of interest. Such a two-tier credit market is hugely inefficient.

Government should not be afraid of a high real rate of interest, because with stable political and legal conditions, the current scarcity of capital should imply a very high marginal real return on new capital and hence, a real rate of interest that is high by the standards of the capital-rich industrial countries. Experience in several developing countries has shown that deregulation of the credit market and a move towards higher returns for domestic savers coincided with a take-off of economic growth.

During the transition to a market economy the authorities may wish to either establish a national savings bank or to issue guarantees for the return on savings attracted by private sector or foreign-owned banks. If there is a national savings bank, the authorities therefore have to set a rate of interest for domestic savings. If the rate of inflation over the relevant horizon is uncertain it may be sensible to offer a guaranteed real rate of return and to compensate the domestic savers afterwards for the actual rate of inflation, using a scheme similar to that of the indexed national savings in the United Kingdom.³ With a rate of exchange that is fixed for long periods, domestic short-term interest rates no longer are free policy variables, because the authorities will have to follow a target for the stock of international reserves. To the extent to which the domestic banking system needs to be provided with net foreign assets, solvability of the domestic banks will also constrain the freedom to alter domestic rates of return on savings. With short-term rates needed as instruments to maintain the fixed exchange rate,

³ The real rate of return on indexed retail savings in the U.K. is very slightly positive; simultaneously the U.K. authorities have issued indexed government debt since 1981 on which real rates of return have varied from 2 percent to slightly above 4 percent per annum.

the authorities will have less chance to follow policies at the long-term end of the yield curve that provide high and stable rates of return to domestic long-term savers.

By contrast, a more flexible rate of exchange allows for far greater freedom in following an interest rate policy that is targeted towards encouraging domestic savings and discouraging currency substitution into foreign currencies or capital flight.⁴

With the resource cost of the Hong Kong type system so much larger, because the country has to borrow to set up its central bank and commercial banking system rather than attracting capital for investment in infrastructure, and given the tremendous uncertainty regarding the medium-term evolution of real wage costs, a rather more flexible system seems advisable.⁵ However, a more flexible exchange rate does not mean that fiscal deficits can conveniently continue to be financed through money creation or that the need to move to a domestic structure of relative prices that conforms better to world market conditions is less urgent.

In my view, the best transitional regime for the countries in Eastern Europe may be a rather flexible fixed rate or a rather fixed flexible rate: either a unilateral fix for a relatively brief period or a crawling peg system with quite frequent adjustments. Under either system the domestic banks can operate with reserves denominated primarily in domestic currency and there is no need for the nation as a whole to allocate foreign reserves to serve as reserves to the banking system. In a Hong Kong type system or in any other version of long-term fixation of the exchange rate and full convertibility on current account, the domestic banks will only be able to grow if a substantial part of their capital and reserves either consists of foreign currency or can be converted into such a little notice and with little cost.

⁴ Obviously a devaluing exchange rate leads to higher domestic interest rates, but the “spikes” in interest rates, particularly at the short end, that are so typical for the final stages of a fixed exchange rate that becomes harder and harder to defend can be avoided.

⁵ *Walters and Hamke* have also argued in favour of a Currency Board rather than an independent Central Bank for the ex-socialist countries. Prof. *Tew* pointed out the two problems with such a proposal – how does the Currency Board acquire its foreign assets?; do Commercial Banks also have to own large stocks of foreign assets? – in an intervention in the London “Financial Times” (February 23, 1990).

V. Currency Reform – A Historical Case Study

After World War II the Netherlands regained its freedom in May 1945. A new civilian government came into office at the end of June. Between July and late September a thorough currency reform was unacted. It goes without saying that post-war conditions were in many ways different, both politically and economically, from the situation in which the ex-socialist countries of Eastern Europe find themselves today. But, the currency reform coped with a very substantial „monetary overhang“ and was supported democratically. Also, Holland had to rebuild its economy with very little foreign financial assistance while simultaneously facing a drain on resources because of its costly initial resistance to the independence movement in Indonesia, a former Dutch colony.

An authoritative analysis of the 1945 currency reform was published in 1973 by the responsible ex-Minister of Finance, *Pieter Lieftinck* who after leaving the Netherlands had a distinguished career at the IMF and the World Bank.⁶ When Lieftinck became Minister of Finance shortly after the war, national income was estimated by the Dutch authorities to be 5 billion guilders, but private sector estimates at that time were seven or eight billion, evidencing a substantial uncertainty about the transactions demand for money.⁷ The money supply at war-end amounted to 11 billion guilders, over four times as much as at the start of the war in 1940. With national income in current guilders slightly below the 1938 level obviously the income velocity of money was unsustainably low. At the same time, it was widely felt that much of the increase in the money stock had come into the hands of black market operators or war profiteers, so that a proportional shrinkage of money balances would not be a „just“ solution.

Lieftinck writes: „On July 9th, 1945, as a first measure against hoarding of money made in the black market, all 100 guilder notes were withdrawn from circulation. Subject to a brief time limit, the facility was opened for holders of such notes, to be credited for the amount on a blocked bank account“ (the 100 guilder note was the largest denomination in circulation at the time). On September 26, 1945 the government withdrew all bank notes in circulation and blocked all bank deposits. At the same time the existing bank secrecy law was suspended. „This measure was intended to serve three

⁶ „The Post-War Financial Rehabilitation of the Netherlands“, The Hague, *Martinus Nijhoff*, 1973.

⁷ In 1938 national income at market prices equaled 5.4 billion guilders; the War had reduced national income to approximately 3 billion guilders in early 1945 (annual rate).

objectives. The first was to bring into the open all money holdings, in particular those improperly acquired during the years of foreign occupation ... The second was to register all liquid assets for the purpose of tax assessment under the existing tax legislation and the special reconstruction taxes that were going to be imposed. The third and most important objective was to re-establish an appropriate relationship between the quantity of goods available and the supply of money in circulation.”

During the week following the currency withdrawal and blocking of bank deposits, each citizen received an identical small nominal amount of money and later that same week additional money was released to finance wages earned over the week. In subsequent weeks the government continued to release money for wage payments as well as special releases to meet firms' requirements for working capital. Bank credit remained subject to licensing and often required investigation of all blocked accounts owned by the firm. In *Lieftinck's* words: „By the end of 1945 the ratio between national income and the amount of money in circulation had almost returned to its pre-war level.”

„The government opened different options for the remaining blocked money:

- (1) continuation of these holdings on blocked account in the hope and expectation of future releases;
- (2) transfer of limited amounts to a medium-term savings account;
- (3) use of these holdings for payment of tax arrears incurred during the occupation;
- (4) use of these holdings to fulfil obligations in respect to the new special reconstruction taxes to be imposed;
- (5) subscription to long-term, low-interest bearing Government loans”.

Because the last three options were most popular, the blocked money became available to the Treasury, „were it was held and only gradually released for public spending according to the growing needs connected with the rehabilitation of the economy”.

As a result of these measures, the income velocity of money which had fallen to approximately 0.3 at war end and 0.45 in the summer of 1945, rose to almost 2 (very similar to the 1938 level) in December of 1945 and remained very stable around that level for the next four years. The nominal money supply had been reduced from 11 billion guilders in May 1945 to 4.1 billion guilders at the year-end. „Thereafter it rose steadily and it was practically stabilized at the level of around 7,2 billion guilders in 1948”. Wholesale