Collapse of the Ruble Zone and Its Lessons

POST-COMMUNIST TRANSITION AND MONETARY DISINTEGRATION

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Introduction

Political and economic changes in Central and Eastern Europe (CEE) and the former Soviet Union (FSU) at the end of 1980s and early 1990s resulted in just two episodes of monetary disintegration. Firstly, the end of Soviet geopolitical control over CEE led to the demise of the Council for Mutual Economic Assistance (CMEA or Comecon) and its quasi-currency - the transferable ruble (TR). Shortly afterwards, the political disintegration of the Union of Soviet Socialist Republics (USSR), Yugoslavia, and Czecho-Slovakia also caused monetary disintegrations. The newly independent successor states adopted their own currencies, however only the separation of the Czecho-Slovak crown (koruna) into two new currencies was conducted in and orderly manner, and without major macroeconomic turbulences and trade disruption. This was reminiscent of the monetary disintegration of the former Austro-Hungarian Empire after the World War I when Czechoslovakia was the only successor country thatavoided hyperinflation (Garber and Spencer 1994).

This essay aims to summarise the experiences of the two monetary disintegration episodes, i.e. termination of settlements in TR since 1 January 1991 and the gradual collapse of the Soviet ruble area in 1990–1993. The second section of this paper is devoted to demise of CMEA and TR. The third section describes the collapse of the ruble area in the former USSR based on my earlier publication (Dabrowski 1995). The fourth section analyses macroeconomic consequences of monetary disintegration in the former USSR; and the fifth section examines the policy lessons that can be drawn from both episodes.

Demise of the CMEA and the end of the transferable ruble

The TR was not a real currency. Instead, it was an accounting unit for the purpose of bilateral trade-related settlements between member countries of the CMEA. This organisation existed between 1949 and 1991 and included the USSR, Bulgaria, Czechoslovakia, Cuba, German Democratic Republic, Hungary, Mongolia, Poland, Romania and Vietnam (Albania terminated its membership in 1961), as well as a number of countries with 'observer' status such as Finland, Yugoslavia, North Korea, Angola, Mozambique and Ethiopia. The TR was used as of 1964.

According to the CMEA's Complex Program of Socialist Economic Integration approved in 1971, the TR was to be also used for multilateral settlement purposes, i.e. trade surplus of country A against country B could be used for imports from country C (Smyslov 1989; Vince 1984). In addition, there was proposal to make the national currencies of CMEA countries convertible to the TR and between themselves.

However, these plans never materialised for a number of reasons. Firstly, in the 'classical' central planning system production targets and trade flows, both domestic and foreign, were determined by the government. The government also executed the state monopoly on foreign trade. Thus enterprises had very little, if any, choice as to where to sell their products and where to purchase their supplies or investment equipment. Secondly, the government administratively determined most domestic prices, which differed substantially both from international prices and between individual CMEA countries. Thirdly, communist economies suffered, to various extents, from permanent macroeconomic disequilibria, which mainly manifested themselves in the form of a physical shortage of goods in both consumer and producer markets (the so-called 'shortage' economy - see Kornai 1980), i.e. repressed inflation. Fourthly, the national currencies of CMEA member states remained unconvertible and convertibility was unrealistic as long as macroeconomic disequilibria and price distortions were in place. Fifthly, exchange rates between TR and national currencies were determined in an administrative



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way and did not have any direct impact on domestic prices; differences between transaction prices in TR (or in convertible currencies in trade with non-CMEA partners) and domestic administrative prices were settled in the form of individually determined tax/quasitax rates or subsidies.

In short, the TR was only used as an accounting unit to determine net balances in bilateral barter transactions registered on special accounts in the International Bank of Economic Cooperation in Moscow (a CMEA institution). A deficit in one year was to be repaid by surpluses in subsequent years, and took the form of a technical credit in the meantime. It was the subject of a political decision on the inter-state level. In addition, the International Investment Bank, another CMEA institution, used the TR as an accounting unit in its operations with CMEA member countries (bilateral or multilateral investment projects). Interestingly, the TR only applied to trade transactions. Another set of bilateral exchange rates was used for non-commercial transactions and settlements such as, for example, tourist foreign currency exchanges or private transfers.

The above described system of CMEA trade was terminated at the end of 1990 as a result of political and economic changes in the region. As of 1 January 1991 CMEA member states decided to replace (i) the artificial CMEA prices with world market prices; (ii) the TR with convertible currencies; and (iii) inter-governmental trade protocols with decentralised trade decisions on the enterprise level (Rosati 1995). These changes eliminated previous differences between intra-regional trade and trade with other partners, for example, countries of the European Economic Community (EEC). In countries that had already launched market-oriented reforms and introduced the convertibility of their currencies for export and import purposes (Hungary, Poland, Czecho-Slovakia), enterprises could decide whether and whom to export to or import from.

The termination of the CMEA trade regime generated a negative output shock for CEE economies, in addition to the shock resulting from other macroeconomic, structural, and institutional changes brought about by the transition process (Rosati 1995; Gacs 1995). Its cumulative size depended on the previous exposure of a given country to CMEA trade,¹ the

product and price structure of that trade and the ability to quickly reorient trade relations to other partners (in the first instance, the EEC/EU). The shock was largely related to two factors – the loss of an export market (several goods exported previously to CMEA partners proved uncompetitive on a world market) and the deterioration in terms of trade (Soviet oil and gas was sold to CMEA partners below the international price level).

It is not analytically easy to disentangle the effects of terminating the CMEA trade regime from the subsequent disintegration of the USSR, output decline in the USSR and FSU countries (which cut demand for imports from former CMEA countries), and transition-related domestic factors, so all existing estimates should be treated with caution. According to Rosati (1995), GDP losses related to collapse of trade with the USSR in 1991 varied between less than one-third of the total GDP decline in Czecho-Slovakia and over a third in Bulgaria, and were negligible in Romania.

With the benefit of hindsight, one can argue that the collapse of the CMEA trade regime was unavoidable because it was incompatible with the new political and economic realities of post-communist transformation. Furthermore, it can be seen as a kind of Schumpeterian 'creative' destruction that, despite its initial price, the CMEA trade regime allowed and speeded up trade reorientation towards EEC/EU, internal structural and institutional changes and opened the door to CEE membership in the EU in the decade to follow. Eventually, strong intra-CEE trade relations reemerged within the Single European Market and trade relations between CEE and FSU were rebuilt on a new market basis.

The TR never played an active role in intra-CMEA trade arrangements and its termination should be considered as a change of trade regime, rather than an episode of monetary disintegration.

Collapse of the Soviet ruble

Economic and political preconditions of the common currency

The rationality of a common currency for a given territory can be discussed from both an economic and a political point of view. The theory of an optimum currency area (OCA) developed by Mundell (1961) and

According to Rosati (1995), Bulgaria was the most dependent on CMEA trade, Poland – the least (in terms of share of CMEA trade in total trade).

McKinnon (1963) analyses the economic conditions under which a common currency can function effectively. According to this theory, a major challenge to a common currency area (CCA) may originate from asymmetric (idiosyncratic) shocks, which affect various parts of this area in an uneven way. In the absence of exchange rate flexibility between those parts, there are two possible ways of adjustment: (i) *via* labour and capital mobility, or (ii) *via* fiscal transfers.

Looking at the former USSR through the lens of OCA theory, one can conclude that it remained very vulnerable to asymmetric shocks due its large and diversified territory and its central planning system. In particular, socialist industrialisation led to the excessive territorial specialisation of oversized and internationally uncompetitive production units. In terms of response to asymmetric shocks, the free mobility of goods, labour and capital never existed in the former Soviet economy because the allocation of resources depended on central planning and administrative decisions. Furthermore, long distances and weak transportation infrastructure made the smooth internal movement of production factors technically difficult and costly.

Thus, internal fiscal transfers were the only remaining adjustment tools in case of asymmetric shocks. For example, when international oil prices increased sharply in the 1970s the Russian Federation (RF), Turkmenistan and Kazakhstan (who were major oil and natural gas producers) stood to become the potential winners, while other Soviet republics were the potential losers. However, the Soviet authorities decided to leave domestic energy prices at their previous level. As a result, the size of inter-republican fiscal and quasi-fiscal transfers, which was already high, increased even further (see Selm and Dölle 1993; Orlowski 1993). Inter-republican transfers were continued until mid-1993 when the Government of the RF and Central Bank of the Russian Federation (CBRF) decided to stop this practice. Unsurprisingly, this decision led to the ultimate demise of the ruble area (see below).

Large inter-regional fiscal transfers require either political consensus (in democratic regimes) or coercive political power (in authoritarian regimes). Obviously, the second case applied in the USSR. Clearly, most common currency areas (CCAs) in human history have been created as result of exogenous political developments such as the formation and territorial ex-

pansion of states, colonization, political decisions to form federations, etc., rather than as a result of economic choice based on OCA theory.² Thus once political factors justifying the CCA disappear (for example, territorial disintegration of a state or the collapse of a colonial empire) monetary disintegration will follow. This was precisely what happened with the Soviet ruble in the early 1990s.

The first stage of monetary disintegration (1990–1991)

Mikhail Gorbachev's glasnost and perestroika brought more political freedom and less administrative and police repression in the USSR at the end of the 1980s. It led, in turn, to the renaissance of independence movements among some nations living in the USSR. The Baltic republics were the leaders in this movement. Here too the first ideas of republican economic autonomy and republican economic reforms were presented. In 1988, the pro-independence Sajudis movement in Lithuania proposed a comprehensive economic reform package oriented, among other things, towards greater republican autonomy (Samonis 1995). The future republican central bank and republican currency were an integral component of this proposal.

In 1987 and 1988 a group of Estonian economists (Lainela and Sutela 1995) proposed a similar intellectual concept described as the New Economic Mechanism (Estonian acronym IME). Both republics started to gradually build their future central banks but did not abandon republican branches of the State Bank of USSR (Gosbank). However, some conflicts surrounding credit emission between both republics and the Gosbank were observed as early as 1989 and 1990. Latvia announced its plan to introduce a national currency and open its own central bank in 1990 (Lainela and Sutela 1995).

Although Mikhail Gorbachev and other Soviet leaders were not ready to accept the independence of the Baltic republics at that time, they did not openly oppose the idea of stronger republican economic autonomy, including separate republican currencies. This probably reflected a lack of understanding of the political implications of such an autonomy and, more generally, a dearth of ideas on how to reform the Soviet economy.

² The euro project may be seen as an exception. While political considerations played a role (advancing political integration within the EU) economic arguments such as decreasing transaction costs, increasing competition inside the Single European Market and supporting financial integration were equally important.

Insofar as striving for greater economic autonomy only concerned the Baltic republics, it did not present a real threat to the integrity of Soviet monetary and fiscal policies. It looks like a historical paradox, but the decisive attack against the Soviet economic and political unity came from Russia. In the spring of 1990 the new RF parliament elected Boris Yeltsin as its speaker and the formal head of the RF. Yeltsin, who was the former member of Politburo of the Central Committee of the Communist Party of the Soviet Union and former First Secretary of the Moscow party organisation, was seen as the main challenger to Mikhail Gorbachev at that time. He gained the support of the Russian democratic movement, which wanted to go beyond the limited *perestroika* reforms.

The declaration of sovereignty of the RF from 12 June 1990 was the first major step towards the disintegration of USSR taken by the new Russian parliament. It was followed by similar declarations on the part of other Soviet republics, and in some cases even by the lower level territorial units. Russian declaration of sovereignty also featured some general statement about its own monetary system. The declaration itself did not have an immediate impact on monetary and fiscal policies. However, the logic of political struggle between Russian and Soviet authorities had to lead to serious consequences.

The Law on the CBRF and Law on Banks and Banking Activity of December 1990 were the first concrete steps along this path. The newly created CBRF began to take personnel and administrative control over all regional branches of the Gosbank of USSR on Russian territory. Furthermore, it offered commercial banks liberal licensing conditions. As a result of this competition, most commercial banks in the RF were re-registered under the jurisdiction of CBRF over the following few months. The CBRF did not respect the Gosbank decisions in relation to credit emission, interest rate policy, reserve requirements, etc. It started to finance the republican budget deficit and Russian enterprises through fully autonomous credit emission.

The monetary and banking war was followed by the fiscal war. The RF government started to consolidate control over Union enterprises on its territory, offering them lower tax rates. The taxes collected went to the republican budget instead of the Union budget. Some other republics followed this practice. In 1991, the Union budget (especially in the second half of the

year) was left without revenues and with the expenditure side only (it still financed the army and security forces, central administration, subsidies, investments, etc.). This led, of course, to uncontrolled monetary expansion, because Gosbank had to finance the huge Union budget deficit.

The Russian parliament and government also competed with Soviet authorities in the social policy field by multiplying various social privileges and benefits. This populist competition was additionally stimulated by political events – the Spring 1991 referendum on the continuation of the Soviet Union³ and June 1991 presidential elections in Russia won by Boris Yeltsin. This last event led to the *coup d'état* in August 1991.

The Soviet government of Valentin Pavlov desperately tried to improve the macroeconomic equilibrium by the non-equivalent exchange of 50- and 100-ruble banknotes in January 1991 and by the administrative price increase in April 1991. Both steps were taken from the traditional command economy arsenal and not accompanied by more comprehensive reform measures. Additionally, the first decision was badly calculated and implemented, and only served to increase economic chaos.

The unsuccessful *coup d'état* in August 1991 organised by the communist party hardliners against Gorbachev, Yeltsin and the most nationally emancipated Soviet republics (Baltics republics and Georgia) with the aim of saving the USSR accelerated the process of political and economic disintegration. The last Soviet administration – Inter-republican Economic Committee (*Mezhres-publikanskii Ekonomicheskii Komitet* – MEK) – played the role of a liquidation committee, rather than of a real government. The Gosbank of USSR definitely lost control over monetary policy in Russia and Baltic states during this period.⁴

The last attempt to negotiate a new Treaty on Economic Union with the Soviet republics following the idea of the EU (Havrylyshyn and Williamson 1991) did not end successfully. Although the Treaty was signed in Novo-Ogarevo in October 1991 by 10 republics, but was never implemented due to a failure to agree on the political union treaty.

³ This referendum was formally won by Mikhail Gorbachev - most of electorate voted in favour of upholding the Soviet Union. The result of referendum, however, could not stop the disintegration

⁴ The Soviet government recognised the Baltic states' independence on 6 September 1991.

There was a referendum on 1 December 1991 in Ukraine, and the latter's independence led to the Belavezha agreements on the dissolution of the USSR and the creation of the Commonwealth of Independent States (CIS). In mid-December 1991, President Yeltsin decided to close down the Gosbank of USSR. The ruble area entered a new phase when 15 central banks jointly managed the common currency.

The second stage of monetary disintegration (1992–1993)

The common ruble area survived the USSR by almost two years. One can identify four phases of its dissolution:

- 1. In the first half of 1992, all 15 FSU countries (including Baltic states) continued to use the Soviet ruble. Their newly-created central banks issued non-cash rubles in the form of central bank credit to government, commercial banks, and direct credit to non-financial enterprises. In the absence of central political power, or at least of an effective coordination mechanism of national monetary policies, it led to 'competition' between central banks, who issued more non-cash rubles at the expense of their neighbours, thus exhibiting typical 'free riding' behaviour (Sachs and Lipton 1992). The National Bank of the Ukraine was particularly active on this front, being the first central bank in the former USSR to initiate (in June 1992) the multilateral clearing of inter-enterprise arrears with the help of an additional supply of credit. Although Russia retained its monopolist position in the emission of cash rubles, other FSU countries such as the Ukraine, Lithuania and Azerbaijan began to introduce parallel cash currency (coupons) to circumvent Russian constraints and 'protect' their domestic consumer markets (which continued to suffer from physical shortages of goods) against buyers from other republics. As a result, Russia was flooded with non-cash rubles issued in other FSU countries in 1992 (especially the Ukraine), which was one of the reasons why its 1992/93 macroeconomic stabilisation policies did not achieve the results expected (Dabrowski and Rostowski 1995).
- 2. On 1 July 1992 the CBRF introduced the requirement of a daily bilateral clearing of settlements between Russia and other FSU countries using the ruble. The CBRF accepted other countries' payments to Russia only to the amount available on their correspondent accounts. In practice, this meant the end

of the ruble as a single currency in non-cash settlements and the creation of national non-cash rubles. However, until the spring of 1993 this change was softened by technical credits, abundantly provided by the CBRF to other FSU countries. As result of the daily settlement mechanism and the limited size of technical credits, FSU importers increasingly used cash rubles to pay for imports from Russia which, in turn, led to a reduction in the delivery of cash rubles by the CBRF and the further expansion of monetary substitutes (coupons) in FSU countries.

- Between summer 1992 and spring 1993, five FSU states fully exited the ruble area by introducing their own currencies. Estonia was the first state to exit in June 1992, followed by Latvia, Lithuania, Ukraine (in the second half of 1992), and Kyrgyzstan (May 1993).
- 4. At the end of July 1993, the CBRF organised the exchange of ruble banknotes on the RF territory. As a result, all remaining FSU countries, except Tajikistan, introduced their own currencies in the second half of 1993 (Table 1). Technical credits were stopped and outstanding credit balances on the CBRF accounts were transformed into intergovernmental credits.

Decisions by individual FSU states to leave the ruble area (and their timing) were guided by both political and economic considerations. Baltic states and the Ukraine decided to exit in order to demonstrate their political sovereignty. However, economic arguments also played a role. The monetary policy pursued by the CBRF was too inflationary for the Baltic states and Kyrgyzstan, which wanted to stabilise their economies quickly, and too restrictive for the Ukraine and Belarus. The last group to introduce national currencies in autumn 1993 (Kazakhstan, Uzbekistan, Turkmenistan, Moldova, Armenia and Georgia) was simply pushed out from the ruble area by the exchange of ruble banknotes in July 1993.

Unsuccessful attempts to rebuild the ruble area (1992–1994)

After the dissolution of the USSR in December 1991, there were numerous attempts to prevent the disintegration of the ruble area and, once this happened, to rebuild it. They included, among others:

 The Agreement on a Uniform Monetary System and Unified Money, Credit, and Currency Policy in the States Using the Ruble as a Legal Medium of

Table 1

Country	Date of the full separation from the ruble zone	Name of currency unit	Remarks	
Estonia	06/22/1992	Kroon	Currency board, with peg to the German mark	
Latvia	07/20/1992	Lats	Latvian ruble <i>(rublis)</i> at the beginning, gradually replaced by <i>lats</i> (from March 1993) peg to SDR	
Lithuania	10/01/1992	Litas	Talonas at the beginning, replaced in June 1993 by litas; currency board from April 1994, with peg to US \$	
Ukraine	11/11/1992	Karbovanets	Replaced with <i>hryvna</i> in September 1996	
Belarus	November 1992	Belarusian ruble	Soviet ruble was accepted until July 1993	
Kyrgyzstan	05/15/1993	Som		
Georgia	08/02/1993	Coupon		
Turkmenistan	11/01/1993	Manat		
Kazakhstan	11/15/1993	Tenge		
Uzbekistan	11/16/1993	Sum		
Armenia	11/22/1993	Dram		
Moldova	11/29/1993	Leu	Before, in July 1993 Moldovan coupon became de facto national currency	
Azerbaijan	12/11/1993	Manat		
Tajikistan	May 1995	Tajik ruble	Replaced with somoni in October 2000	

Sources: Odling-Smee and Pastor (2001); author's data.

Exchange signed in Bishkek on 9 October 1992 by Armenia, Belarus, Kazakhstan, Kyrgyzstan, Moldova, RF, Tajikistan, and Uzbekistan. It called for maintaining the ruble as a common legal medium of exchange, although it also allowed for the continued use of monetary surrogates, and did not exclude the introduction of national currencies in the future (Gurevich 1992). It also created the Interstate Bank (Mezhgosudarstvennyi bank) in charge of multilateral settlements. Despite repeated political endorsements during the subsequent CIS summits, this bank never started its operations.

- The Economic Union Treaty signed during the CIS summit in Moscow on 14 May 1993 (Kozarzewski 1994) followed by the negotiations on the New Style Ruble Area (NSRA).
- The agreement on the NSRA of 7 September 1993, signed by Russia, Kazakhstan, Uzbekistan, Tajikistan, Belarus, and Armenia, which covered the coordination of monetary and fiscal policies, banking and currency regulations (in particular, maintaining stable exchange rates between national currencies and the Russian ruble). Mandatory indicators to be set by Russia included the money supply, the consolidated budget deficit, interest rates on central banks' refinancing credit, and minimum reserve requirements. The next step involved the signinature of standardised bilateral agreements between Russia and other NSRA participants. According to them, at the transition period to the NSRA (end of 1994), the ruble was to be the only legal medium of exchange in signatory countries, its exchange rate against con-

- vertible countries was to be unified and common international reserves were to be established.
- The Agreement on the Unification of the Monetary Systems of the Republic of Belarus and the RF, and on the Conditions of Functioning of a Common Monetary System of 12 April 1994. The Russian ruble was to become a common currency and the National Bank of the Republic of Belarus was *de facto* to become a branch of the CBRF. Furthermore, the economic systems of both countries were to be harmonised, including the adoption by the Belarus of Russia's import tariffs, its budget system and wage and salaries system for public employees, the elimination of tariffs and transition fees in bilateral trade, etc.

None of the above agreements were ever implemented partly because some of them were too general, lacked implementation details and were sometimes internally inconsistent; and partly because countries' economic systems started to differ (for example, Belarus and Uzbekistan were less advanced than Russia in market reforms), but largely due to the reluctance of FSU countries to surrender at least part of their newly obtained sovereignty.

In this context, the question arises as to what kind of arguments stood behind the attempts to delay dissolution of the ruble area and consequently rebuild it? Those FSU countries interested in staying in the ruble area wanted large fiscal or quasi-fiscal transfers from Russia to continue, including purchases of energy and

raw materials at below world market prices, and easy market access for their substandard manufactured products. However, these expectations were not realistic. In Kazakhstan, there was also political interest in avoiding tensions between native and Russian speaking parts of its population in case of the complete economic separation of Kazakhstan from Russia. In Belarus, this was just part of 1994 election campaign of then Prime Minister Vyachaslav Kebich, who presented monetary union as a means to achieve Russian living standards.

In Russia, political forces interested in the at least partial reconstruction of the Soviet empire (Kozarzewski 1994) supported the ruble area. Publicly they cited the need to avoid potential hardships to Russian nationals living in FSU countries and preserve economic links between enterprises on the post-Soviet territory. Obviously various industrial lobbies in Russia were also interested in continuing exports to other FSU countries financed by the unlimited credit emission of their central banks. The opponents of the CCA included leading economic reformers who understood the economic costs for Russia related to keeping the common currency.

Interestingly enough, the IMF and its major shareholders did not support the immediate dissolution of the ruble area due to concerns over potential trade and payment disruption in the FSU, partly because of fresh experience with CMEA dissolution. In the first half of 1992, before the meeting of CIS central bank governors in Tashkent on 21–22 May 1992, IMF staff invested quite a lot of effort in drafting a '... cooperative ruble area arrangement in which all participating central banks would have a say in credit and monetary policy' (Odling-Smee and Pastor 2001). This blueprint could not work due to macroeconomic instability, sovereignty concerns, and lack of sufficient trust between member states. The IMF did not start actively supporting the introduction of new FSU currencies until 1993 (Kyrgyzstan was the first case in May 1993).

Major IMF shareholders seemed unprepared to deal with the collapse of the USSR at such a swift pace, and its potential political and economic consequences. The former included fear of disintegration-related conflicts similar to those seen in the former Yugoslavia, while the latter included fear of regional trade disruption and uncertainty over the succession of financial claims on the former USSR (Dabrowski and Rostowski 1995).

In hindsight, attempts to maintain the ruble area in 1992/93 look naive. While the economic arguments for continuing the common currency were not all that obvious (see below), they completely failed to take into consideration the political realities of the situation. There was no political consensus among FSU countries to agree and follow joint monetary and fiscal targets, to create a common central bank, and introduce common legislation on banking, foreign exchange, budget and other related issues. Moreover, these conditions were already absent at the end of 1990 when the process of monetary disintegration really started.

Consequences of the ruble area's disintegration

This analysis of the consequences of the ruble area's disintegration focuses on two issues: (i) trade disruption and output losses and (ii) macroeconomic destabilisation caused by attempts to continue CCA after the dissolution of the Soviet Union.

Trade disruption and output losses

The heavy dependence of some former Soviet republics on inter-republican trade, especially on the part of Belarus and the Baltics (Selm and Wagener 1993; Orlowski 1993), suggested that monetary integration may substantially disrupt trade and result in output losses due to additional transaction costs and exchange rate uncertainty. Indeed, in the 1990s FSU countries recorded large GDP declines ranging cumulatively from 18 percent in Uzbekistan to 78 percent in Georgia and lasting from between four years in Armenia to ten years in the Ukraine (Table 2). However, only a small fraction of this decline can be attributed to the disappearance of the common currency (and is easy to detect statistically). There were other, more powerful, factors at work such as inherited structural distortions (for example, excessive militarisation of the economy), changes in relative prices, the removal of direct and indirect subsidies, the effects of trade liberalisation with the rest of the world, the effects of ownership changes, the emergence of trade barriers between FSU countries (despite the signature of a series of free trade agreements within the CIS), etc. The slow pace of market reforms, a long period of macroeconomic instability (at least until 1995 and then again as result of the 1998/99 financial crisis - see Dabrowski 2016) and violent conflicts in many parts of the FSU (Transnistria, Abkhazia, Southern Ossetia, Nagorno-Karabakh, Tajikistan) can be added to this list.

Table 2

Transition related cumulative output decline in FSU, 1990–1991, in %

FSU countries	Number of consecutive years of GDP decline	Cumulative GDP decline		
Armenia	4	63		
Azerbaijan	6	60		
Belarus	6	35		
Estonia	5	35		
Georgia	5	78		
Kazakhstan	6	41		
Kyrgyzstan	6	50		
Latvia	6	51		
Lithuania	5	44		
Moldova	7	63		
Russia	7	40		
Tajikistan	7	50		
Turkmenistan	8	48		
Ukraine	10	59		
Uzbekistan	6	18		

Source: World Bank (2002).

As in the case of CMEA trade disintegration, the partial disruption of trade between FSU enterprises was unavoidable because it was the product of arbitrary planning decisions in a closed economy and political and administrative bargaining, rather than the upshot of market-based comparative advantages.

Macroeconomic consequences of gradual monetary disintegration

The almost three year period of gradual and chaotic monetary disintegration (between end of 1990 and autumn 1993) led to disastrous macroeconomic consequences that are best illustrated by very high inflation/hyperinflation in FSU countries (Table 3). It delayed macroeconomic stabilisation in the FSU, led to high

Table 3

End-of-year CPI inflation in FSU, in %, 1993-1997

Country	1993	1994	1995	1996	1997
Armenia	10,896.2	1,884.5	31.9	5.8	21.9
Azerbaijan	1,350.0	1,792.1	84.6	6.7	0.4
Belarus	1,996.6	1,959.7	244.0	39.3	63.1
Estonia	n/a	- 6.8	28.9	14.8	12.5
Georgia	n/a	n/a	57.4	13.7	7.2
Kazakhstan	2,165.0	854.6	60.4	28.6	11.3
Kyrgyzstan	929.9	62.1	32.1	34.8	13.0
Latvia	34.8	26.4	23.1	13.1	6.4
Lithuania	n/a	n/a	n/a	11.7	8.5
Moldova	837.0	116.1	23.8	15.1	11.1
Russia	839.9	215.1	131.3	21.8	11.0
Tajikistan	7,344.0	1.1	2,144.2	40.5	163.6
Turkmenistan	n/a	1,327.9	1,261.5	445.8	21.5
Ukraine	10,155.0	401.1	181.7	39.7	10.1
Uzbekistan	884.8	1,281.4	116.9	64.4	50.2

Source: IMF World Economic Outlook Database.

actual dollarisation and deeply rooted macroeconomic fragility, as demonstrated by a series of currency crises over the 20 years that followed (Dabrowski 2016), negatively affected microeconomic, structural and institutional reforms, and therefore made a significant contribution to output decline.

For Russia, maintaining the ruble area meant substantial transfer of its GDP to other FSU countries. In 1992, CBFR technical credits to other FSU central banks amounted to 8.4 percent of

Russian GDP, while the supply of ruble banknotes accounted for another 2 percent of GDP (Granville and Lushin 1993). In 1993, CBRF credits to FSU countries amounted to 3.0 percent of Russian GDP (IEA 1995) and were concentrated in the first half of the year. Again, almost another 2 percent of GDP was transferred in the form of cash supply. Technical credits to FSU central banks amounted to 22.3 percent of the overall CBRF credit increase in 1992 and 21.6 percent in 1993 (IEA 1995).

For some FSU countries, and particularly Uzbekistan, Turkmenistan, Armenia, Tajikistan and Kazakhstan, CBFR financial transfers amounted a substantial portion of their GDP in 1992/93 (Illarionov 1993). However, continuation of monetary union with poorly controlled

money supply did not allow them to conduct macroeconomic stabilization (even if part of inflationary pressures was 'exported' to Russia). It also slowed down the structural adjustment of their economies and market-oriented reforms.

Policy lessons

The history of the ruble area and its collapse highlights the role played by the political determinants of monetary union, whether this be a centralised political power on a given territory (as in case of the former USSR); or a political agreement between

largely sovereign states (as in case of the euro area). Once such political foundations disappear, a common currency does not have any chance of surviving. In such situations, monetary disintegration becomes inevitable. This should take place as quickly as possible in an orderly and collaborative manner (the case of the separation of the former Czecho-Slovak crown in February 1993 serves as good example to follow).

If the narrow time window for fast and collaborative disintegration is lost or politically implausible, monetary and, more broadly, macroeconomic management tends to slip out of control and those who leave the 'sinking ship' first suffer less from macroeconomic instability than those who stay in the CCA to the end. The relative advantages of fast unilateral exit (together with ability to establish prudent monetary regime on its own) are illustrated here through closer analysis of Czechoslovakia after collapse of the Austro-Hungarian Empire, Slovenia after collapse of Yugoslav federation and the Baltic states after collapse of the USSR.

Unfortunately, after political dissolution of the USSR most politicians and economists in FSU countries failed to make accurate assessments of their monetary arrangements; nor did they receive adequate technical assistance to solve this problem from the IMF and other Western donors.

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