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CURRENCY SPLITS: WHEN A MONETARY UNION FALLS APART
The experience of former Yugoslavia in 1990–92[1]

by Neven Mates[2]

With the euro zone grappling with a sovereign debt crisis, the risk of partial or total dissolution is no longer negligible. Policy makers can benefit from examining the experience of previous cases of disintegrating monetary unions. This information can help in deciding on whether to persist in keeping the euro zone alive at any cost, as well as in finding ways to make it less disruptive should dissolution become unavoidable.

The most interesting recent cases are the three socialist federations that disintegrated in the early 1990s: the ***Soviet Union, Czechoslovakia and Yugoslavia.*** *Of less interest are older cases from when monetary unions were formed and dissolved within an overall framework of the gold standard.*

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Summary

Currency splits are disruptive events. In the past, they occurred in most cases simultaneously with the dissolution of federal states, and their causes were therefore not primarily of economic nature. In such situations, marginal costs of monetary reforms might not be very high, given the disruptions created in any case by the political disintegration. But the great problems of sovereign debt might also make monetary reform a preferred option, given the alternatives.

The most challenging issue in such events is the scope of mandatory conversion of claims, and particularly cross-border claims. Depending on modalities, the reform will always include redistribution of wealth. (One should take note that in the past, many monetary reforms had components of expropriation.)

The second most important issue is how to react to capital outflows in cases where a country exits the union from a position of weakness, and particularly how to react to the sudden overhang of monetary assets stemming from the monetary reform. Partial freezing might in such circumstances be the preferred solution, as it might reduce the initial overshooting of the exchange rate.

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Why Yugoslavia's experience matters

What makes Yugoslavia's case interesting for today's situation is the similarity between its decentralized monetary system, which included 8 central banks at the level of republics and provinces, and the decentralized system of the euro zone. Moreover, as in the euro zone, all refinancing operations in Yugoslavia were conducted by the central banks in republics and provinces, based on decisions and rules set at the level of National Bank of Yugoslavia (NBY).

Furthermore, settlements with central bank money operated in an almost identical way as in Target 2. The corresponding institution, called the Social Accounting Agency (SAA), was even more decentralized than Target 2, as it had headquarters in each republic and province, in addition to the one at the federal level.

The decentralized arrangement played a role in the dissolution in two ways. First, as political conflicts escalated, the rules for central banking operations began to be violated, which further accelerated the disintegration. Second, the dissolution was eventually made easier as each republic already had important institutional infrastructure.

The usefulness of Yugoslavia's experience should not be overestimated, however. First, Yugoslavia had a simple financial system. Although it was more complex than in the Soviet Union and Czechoslovakia because its two-tiered banking system with about 70 commercial banks was well established long before the dissolution, compared to modern market economies its financial system was still rudimentary. For example, financial markets were practically nonexistent, commercial banks operated mostly locally in individual republics, capital account transactions with non-residents were heavily restricted, and cross-border claims by non-residents existed only in the form of loans denominated in global currencies. As I discuss later, the issue of cross-border claims creates one of the greatest challenges during monetary reform. Only the existence of a large stock of foreign currency deposits held by households with domestic banks made the system more complex, and this raised important issues during the dissolution.

Second, Yugoslavia disintegrated primarily for political reasons. While the abysmal economic performance in the 1980s contributed to setting in motion the centrifugal political forces that eventually led to wars and disintegration of the country, when it finally took place the economic issues no longer played an important role.

Macroeconomic background

A short overview of the macroeconomic background should help in understanding the dynamics of the disintegration process.

Throughout the 1980s, Yugoslavia experienced a deep and protracted economic crisis. In 1983, the country had to restructure its foreign debt. In nine years (1980-89), cumulative GDP growth was only 4%, while in per capita terms GDP declined by about 2%. Inflation gradually accelerated, reaching an annual rate of 700% in 1990.

One of the peculiarities of the inflationary processes was that commercial banks were continuously incurring large exchange rate losses as a result of implicit subsidies to their

borrowers. Banks were accepting foreign currency deposits from households, which reached more than 50% of bank total liabilities by 1990. They were not, however, allowed to extend foreign currency denominated loans. In the environment of persistent depreciation, banks therefore accumulated large exchange rate losses, which they were allowed to book as claims on the NBY. The NBY was in principle obliged to cover the loss of an individual bank if the level of foreign currency deposits started to decline, but before the pre-disintegration crisis in 1990, these deposits had continuously grown. (The NBY was partly compensating banks for loss of interest income.)

Immediately before the disintegration, inflation was rampant (24% per month on average in 1989). The last federal government under Prime Minister Ante Markovic tried to implement exchange-rate based stabilization in early 1990, but the attempt failed. The official exchange rate soon became even more grossly overvalued relative to the market rate than it had in the past.

At the same time, household foreign currency deposits at commercial banks started declining. As the NBY was not willing to provide foreign exchange and cover the realized loss, the commercial banks ceased paying out these deposits. Instead, they offered Dinars at the official exchange, but most depositors decided to wait.

Owing to restrictions on capital account transactions, other forms of capital outflows did not play a major role, but the country was also quickly losing access to foreign commercial financing. In the same year, Yugoslavia also stopped servicing its medium- and long-term foreign debt.

The opening act of the dissolution of the monetary system

It must be remembered that at the time Yugoslavia consisted of 8 republics or autonomous regions, each having a national bank with significant independence within a federal system overseen by the NBY.

In late 1990, the government of the Republic of Serbia, controlled by Slobodan Milosevic, was short of money. The official explanation was that money was lacking for pensions. At Milosevic's order, the Serbian parliament secretly approved a law instructing the National Bank of Serbia to extend an emergency loan to the Serbian government.

The National Bank of Serbia disbursed the loan, although it meant breaking federal laws. In principle, its officials could have been prosecuted, but they were not. The federal government and other republics fumed but did not take any effective measures against the offenders. Subsequently, Serbian state-owned banks used a great deal of these resources to purchase foreign currency from the NBY, in this way strengthening foreign assets available to the Serbian government. This event convinced many people, both in Yugoslavia and abroad, that the federation was beyond repair.

Making a parallel with the euro zone framework, it would be as if one or more euro zone central banks extended credit under the Exceptional Liquidity Assistance facility (ELA) without permission from the European Central Bank (ECB), to directly finance their government’s budget.

The interim period June–October 1991

A somewhat contradictory system was maintained during June–October 1991, after Croatia and Slovenia announced their decisions to become independent states and before they introduced their own currencies later in the year. These two republics indicated that their decisions in June were not effective immediately, reflecting the position of the international community that negotiation on the future of Yugoslavia should continue. Nevertheless, the Council of the NBY introduced sanctions against these two republics, under which the NBY stopped selling foreign currency to banks in the two republics and stopped supplying new banknotes.

Interestingly enough, the payments through the SAA system continued. Moreover, the central banks in Slovenia and Croatia continued to operate refinancing facilities, which were increasing high-powered bank money, in line with the rules set by the NBY.

Disruption in the banknote supply did not affect Croatia, as its central bank happened to have an ample amount on stock. In Slovenia, the government approved some surrogates (coupons). The NBY sanctions prompted the two republics to accelerate preparations for introducing their own currencies.

First member leaves the union: What to do with the system for settling central bank money?

Slovenia introduced its currency (Tolar) on October 8, 1991. The reform was not ex-ante coordinated with Croatia, although the two countries otherwise cooperated to some extent. Croatia stayed in the Dinar system until December 1991.

The Slovenian monetary reform opened the issue of what to do with the payments through the SAA. Many officials considered that giving up on the established payment system would cause unnecessary disturbance. However, experts in the Croatian National Bank argued that payments via SAA should no longer be accepted, as they would increase reserve money and inflationary pressures in Croatia. At the same time, the Croatian entities would lose claims on Slovenian entities in Slovenian currency, which was expected to become stronger. True, if payments were accepted, the Croatian balance in the SAA system would go up, but everybody understood that these claims would never be recovered. (Eventually, this was indeed the case, and the balances of the SAA system were never settled.)

Such a view quickly prevailed, and Croatia and Slovenia reached agreement to abolish payments via the SAA system. However, the negotiators still agreed to a transitory period of 15 days for settling old obligations. As one could have expected, during this period there was a rush to settle obligations with old Dinars. Eventually this caused some bad will between the authorities in both countries. (In a similar manner, the Czech Republic and Slovakia tried to preserve the old system of settlement, but also had to quickly abandon it.)

To facilitate settlements of outstanding commercial debt in a context in which neither the Tolar nor Dinar were convertible, Slovenia and Croatia agreed to allow their corporations to open non-resident accounts in local currencies, thus, allowing Croatian exporters to open Tolar accounts with Slovenian banks, collect their claims from Slovenian companies, use them for most purposes except conversion, and vice versa. This solution worked nicely for a while, as it reduced disputes about settling the outstanding commercial debts.

This system, however, implied that for a time both debtor's and creditor's currency could be used to settle outstanding obligations at the exchange rate at the moment of monetary reform. Given that the market rates of Tolar and Dinar relative to DM or USD soon started to deviate, this exchange rate was not identical. But given that most cross-border claims were short-term and stemming from commercial transactions, no major conflicts were triggered by this ambivalence. However, this issue of which liabilities are converted and which stay in the original contracting currency might be of high importance in more complex financial systems (see below).

A year or so later, payments between Slovenia and Croatia were switched to internationally accepted reserve currencies and settled via foreign banks.

Following Slovenia's lead, other successor countries introduced new currencies: Croatia in December 1991, Macedonia in April 1992, Serbia and Montenegro on July 1, 1992. The last, Bosnia and Herzegovina, implemented reform later in July 1992. In the meantime, it was flooded with old Dinar banknotes, something similar to what happened in Austria after the dissolution of Austro-Hungarian Empire at the end of WWI.

The main issues of introducing the new currency in Croatia

Two issues dominated the agenda in preparations for monetary reform in Croatia. The first was whether a new currency could be introduced in the absence of official foreign reserves. The second was the issue of household foreign currency deposits.

In the run-up to the disintegration of Yugoslavia, Croatia did not have any official reserves. (All foreign exchange reserves were managed by the NBY.) Moreover, Croatian commercial banks had less than 200 million USD in their accounts abroad, which was a miniscule amount compared either to Croatia's annual imports (4 billion USD), or the stock of foreign currency deposits (3 billion USD), which depositors were trying to withdraw.

Some economists considered that obtaining a foreign loan to finance official reserves was necessary for ensuring the credibility of the new currency. Nobody at that time was willing to lend to Croatia, however.

In the end, Croatia had no other option but to switch to the new currency. The Yugoslav Dinar was rapidly depreciating. The supply of new banknotes had ceased. Trade with other republics was dwindling in the context of armed conflicts, and settlements via the SAA system were becoming less important. The new currency, the Croatian Dinar, was therefore introduced on December 23, 1991. (The Croatian Dinar was subsequently replaced by the current Croatian Kuna in 1994 when the currency was redenominated as a result of rapid inflation over the previous several years.)

The absence of foreign exchange reserves clearly precluded fixing the exchange rate. It was correctly perceived that any rationing of foreign currency or mandatory sales of foreign proceeds to the Croatian National Bank at non-market prices would have disastrous effects on the economy.

The second important issue was the need to address the banking sector default on foreign currency deposits and their accumulated foreign exchange losses. Neither the government nor the

national bank had liquid foreign exchange assets to finance the outflow of forex deposits. Mandatory conversion of these deposits into the new currency would create enormous inflationary and exchange rate pressures, as holders would immediately try to convert them back into foreign currency. It would also be highly unpopular. Needless to say, expropriation or letting all banks go bankrupt were not options.

The best solution, therefore, was to freeze the household foreign currency deposits. Banks were to pay interest to depositors annually, but principal would only be available in equal installments, after a grace period, over the following 10 years beginning in June 1995.

The government would simultaneously compensate banks for the accumulated exchange rate losses (previously shown as claims on the NBY), which were almost identical in size to the stock of household foreign currency deposits. For this purpose, banks received government bonds, denominated in German Marks, with the same maturity and interest rates as the frozen deposits.

Later, the government would also take over the liabilities that several large state-owned corporations owed to domestic commercial banks. As a result, by end-1993, half of commercial bank assets, equivalent to 42% of GDP, were claims on the government, all of them stemming from measures to recapitalize banks.

The combination of monetary reform, floating the exchange rate, freezing the foreign currency deposits and recapitalizing banks proved to be a success. The public accepted the new currency, the foreign exchange market started functioning well, confidence in the banking system was preserved and new foreign currency deposits soon started to flow into the banking system.

The government also allowed for frozen deposits to be used to buy state property (apartments and shares in companies under privatization), and a secondary market in frozen deposits soon developed. More than half of the originally frozen deposits were eventually extinguished via privatization.

While high inflation continued until an exchange-rate based stabilization in 1994, the economy sailed successfully through the war and the first years of its independence.

The main lessons from the Croatian monetary reform

Croatia and Slovenia's exit from the Dinar was from a position of comparative strength, relative to the currency of the old monetary union. The public expected that the new currencies would perform better than the Yugoslav Dinar, despite the small or nonexistent official reserves of the two new countries. Holders of assets denominated in the old currency therefore willingly accepted conversion of their claims into the new currency. Indeed, financial discipline in the new countries was strong, and the new currencies performed better than the one they replaced.

Nevertheless, the new currency could not compete credibly with global reserve currencies. In the absence of foreign exchange reserves, the presence of large open foreign exchange positions of commercial banks, outflows of deposits, and the overall uncertainty created by military conflicts, restrictions had to be imposed on capital account flows. In this particular case, the most important was the restriction on access of households to their foreign currency deposits.

Mandatory conversion would have led to large de-stabilizing monetary overhang and huge overshooting of the exchange rate. Therefore, the restriction on household access to foreign currency deposits was not only a crucial condition for preserving the stability of the monetary and banking system, but also for preserving the real value of household deposits.

Exits of more complex financial systems

We pointed out that that the financial system of former Yugoslavia was a simple one. Financial claims between private sector entities in former republics (previously appearing as claims among residents, but now becoming claims among non-residents) were limited to trade credit. Non-residents outside former Yugoslavia did not have any cross-border claims denominated in the old currency. While this made the whole monetary reform much simpler, it also gives us some useful hints about issues that would be unavoidable for more complicated financial systems.

1) Leaving the union from a position of strength

When thinking about dissolution scenarios, it is useful to distinguish whether a country is leaving from a position of strength or a weakness.

A country leaving the union from a position of strength would expect its currency to appreciate relative to the currency of the union. Both resident and non-resident creditors in such situations would prefer to see their financial assets automatically converted into the new currency. (Croatian exporters, for example, preferred to have their claims denominated in Slovenian Tolars as the stronger currency.) Debtors, however, might prefer otherwise, and defining liabilities that would automatically be converted to the new currency would therefore not be a simple task.

Certainly, the exiting country would replace all its banknotes with the new ones. It would also be expected to do the same with all sovereign debt instruments issued domestically.

However, the government of the exiting country might be tempted to avoid conversion of its debt instruments issued abroad and denominated in the currency of the union. By taking the position that the place of issue is what matters, it may insist that these obligations be settled in the currency of the (still existing) monetary union. But this position would almost certainly damage its reputation.

Following the doctrine of legal tender, the exiting country would also most likely impose mandatory conversion of all claims and liabilities among domestic residents into the new currency, presumably including all residents' deposits in domestic banks.

On the other hand, it is less clear how far a government should go in imposing mandatory conversion of cross-border liabilities of the domestic private sector. The private sector might object to having its liabilities to non-residents converted automatically into the new currency. For example, a resident of the exiting country might have issued a bond, contracted a credit or signed a purchasing contract in a country that is staying in the monetary union. Such contracts might have even been concluded in a third country that was not a member of the monetary union, but still denominated in the currency of the union. Such liabilities would therefore most likely remain denominated in the old currency, or at least this is what debtors would try to achieve. The place of contracts and the agreed jurisdiction might play crucial role in this.

This issue would be particularly sensitive with respect to banks and other financial intermediaries, which would suddenly face large open currency positions. While most of their liabilities would be converted into the new currency automatically, many of their foreign assets would remain denominated in the old one. With the new currency appreciating, this would create large losses. The problem would be particularly pronounced if the country is a global financial center, with large financial obligations as well as assets. Thus, it might be tempting for the exiting country to avoid granting automatic conversion to the new currency of all non-resident claims on its residents. This position could lead to a legal nightmare.

2) Leaving the union from a position of weakness

A country could leave the union from the position of weakness, either voluntarily, by being forced out, or a combination of both. Such a situation would obviously be connected with sovereign default (or the risk thereof) and a loss of access to refinancing of commercial banks with large capital outflows.

Whether the new currency would be immediately devalued and then fixed relative to the currency of the union or it would be left to float, would depend on many factors, including the availability of foreign reserves. In any case, the exchange rate would depreciate, but the extent of depreciation would, to a large extent, depend on the modalities of the reform.

The crucial issue in monetary reform in such cases is how far to go in imposing on all contracts mandatory conversion into the new currency. Creditors, as opposed to debtors, would now obviously prefer to keep their claims denominated in the old currency. The government, on the other hand, would like to see the new currency acquiring the status of legal tender as soon and as much as possible.

Facing the sovereign debt problem, the country might be prompted to convert all its debt issued domestically into the new currency. Regarding the debt issued abroad, it would have to go into the standard debt restructuring procedure. In some circumstances one could expect that the exit and modalities of restructuring would be agreed in advance of the monetary reform. The deal involving a substantial debt reduction would reduce the importance of converting the debt issued domestically into the new currency, and might even make it unnecessary.

One should, however, take note that creditors of the defaulting country that stays in a wider economic union sharing the same legal system (such as the European Union) would have better recourse to seizing sovereign assets than in the standard cases of sovereign default. Therefore, default for a union member country might be more difficult than for a country outside of the union. And if the union would be willing to grant the defaulting country some protection from creditors, such protection (by lowering the costs of sovereign default) might be seen as increasing sovereign risks of other countries in the union.

To complicate matters even more, in addition to the government sovereign debt, the stock of outstanding obligations of the exiting country's central bank toward the central banking system of the union would also need to be resolved. As the capital flows out in expectation of the reform, and these outflows are compensated by the ECB financing (it is immaterial whether this financing is delivered through ECB's regular facilities or through the ELA facility), the outstanding stock of

inter-central bank credits might become quite large. In extreme cases, one can actually expect speculation in which the private sector incurs liabilities in the exiting country in advance of the reform to finance its speculative investment abroad.

Moving now to other financial assets, the first to note is that the population would not be willing to exchange banknotes of the union into the new banknotes, as in the case of the monetary reforms in successor states of former Yugoslavia. The banknotes of the two currencies would therefore continue to circulate in parallel.

The most interesting question would be how far the exiting country should go in imposing mandatory conversion of other claims into the new currency. A minimal, and possibly the least disruptive, approach would be to refrain from imposing mandatory conversion of existing financial claims, as opposed to automatically re-denominating prices for goods and services.

Regarding bank deposits, the exiting country might face a similar situation to Croatia and other successors of former Yugoslavia. A mandatory conversion of all deposits might lead to drastic overshooting on the exchange rate, as demand for deposits denominated in the new currency would certainly drop relative to demand for deposits in the union's currency. But if these deposits are left in the currency of the union, banks will certainly not have liquid funds to finance the likely outflows, given that their access to the ECB would cease. Partial freezing might therefore be an optimal solution as it would reduce overshooting of the exchange rate. A combination of partial freezing and partial conversion might also be considered.

Interestingly, if the exiting country imposes mandatory conversion on all bank liabilities, the banks might suddenly find themselves with substantial positive net foreign assets and exchange rate gains. In addition, conversion of bank loans to the non-financial sector would also create substantial gains. Taxing these gains might be very difficult technically, however. This strengthens the case that the financial claims are not automatically converted.

In summary, the experiences of the former Yugoslavia, combined with those of the former Soviet Union and the former Czechoslovakia, suggest that although there are difficulties in dissolving currency unions, these difficulties are not insurmountable even in the context of broader political disruptions. These experiences provide a useful guide to the areas that should be focused on to ensure a reasonably smooth process should continuation of the euro prove to be unsustainable.

CERGE-EI (Center for Economic Research and Graduate Education - Economics Institute) was founded in 1991 and is located in Prague, Czech Republic. A partnership between Charles University and the Economics Institute of the Academy of Sciences of the Czech Republic, CERGE-EI offers merit-based PhD and MA programs in economics, taught in English, to students primarily from Central and Eastern Europe, the former Soviet Union, and other emerging-market economies. In addition to training the next generation of economic leadership, its scholars engage in research in both theoretical and empirical economics, especially in public policy issues, experimental and behavioral economics, development, transition, and macroeconomics. CERGE-EI has been recognized as a Center of Excellence by both the EU and the US government.

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