

CONFERENCE PROCEEDINGS

Monetary Unions in History

Financial History Conference

2022

Monetary Unions in History

Financial History Conference

Joint Bulgarian National Bank - European Association
for Banking and Financial History (*eabh*) e.V.

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Foreword

The Bulgarian National Bank (BNB) has consistently encouraged academic research from a historical perspective on subjects related to central banking tasks, functions and policies. Initially, a project aiming to publicize highlights from the BNB archives from the Bank's foundation in 1879 till 1990 produced five volumes published from 1998 through to 2009. Manifesting the BNB acknowledgement of the importance of historical research, evolving to more analytical approaches, the BNB in 2006 co-founded, together with the Bank of Greece, the *South-East European Monetary History Network*. The Network's first research output included a volume with 19th and 20th century monetary and financial data for South-Eastern Europe, published in 2014.

Furthermore, since 2014 the BNB marks its anniversaries by organising high-level conferences as the main commemorative event. In 2020 a new publication series '*Bulgarian National Bank Conference Proceedings*' was launched to collect research, speeches and discussions from conferences organised by the BNB.

As part of the same process of expanding interest in economic and financial history, in 2002 the BNB became a member of *eabh* (the European Association for Banking and Financial History e.V.), the global network bringing together academics and professionals from central banks and financial institutions. In 2022 for the first time the BNB hosted the *eabh* annual meeting and events, among them notably the annual conference on '*Monetary Unions in History*'. The present volume collects the proceedings from that conference.

The conference topic selected by the BNB and *eabh* was motivated by the need to study the phenomenon of currency unions in a global historical context with a focus on the challenges brought about by trends of political and economic fragmentation, isolationism and confrontation.

The Global Financial Crisis of 2007-2008 triggered globalisation reversals, notably through disruptions in international trade, resistance to further political integrations and renewed protectionist policies, opposition to immigration, and overall inward redirection of domestic politics.

Those trends have been accelerated by the extensive measures to contain COVID-19 imposed by governments across the world, and the re-emergence of sovereignty (or its trendy rebrand ‘strategic sovereignty’) as a political goal. As evidenced many times in history, structural shocks yield protectionism and political volatilities which further amplify these processes.

In the same way, historically, such shocks have subjected political constructions such as currency unions to tough test. Sovereign states have experimented with, but also withdrawn from, numerous ventures to unify currencies, monetary policies, fiscal policies or financial supervision. Perceived benefits of monetary sovereignty vs. integration have alternated in parallel to the turns in globalisation trends.

Thus the rationale, design and factors explaining the resilience (or the lack thereof) of currency unions were among the themes to discuss: against a backdrop of captivating historical, geographic and institutional experiences. As history continues into modern-day initiatives like the Economic and Monetary Union in the EU, a glimpse into the future of currency unions also engaged the conference agenda.

A publication process takes time but subsequent events since the BNB-*eabh* conference in Sofia have reaffirmed the relevance of its topic. A flare-up of regional war conflicts of geostrategic significance has further backed a trend in fragmentation and divisions in policymaking affecting finance and the economy globally.

Kalin Hristov

Deputy Governor and Chairman of the Publication Council

Bulgarian National Bank

Acknowledgements

The chapters in this volume contain the proceedings from a conference on ‘Monetary Unions in History’, organised and hosted on 1 July 2022 in Sofia, Bulgaria, by the Bulgarian National Bank and *eabh* (the European Association for Banking and Financial History e.V.). We would like to thank Harold James from Princeton University and *eabh*, and Hugo Bänziger, Carmen Hofmann and Gabriella Massaglia from *eabh*, who co-organised the conference, and Ivaylo Nikolov, Daniela Dobрева, Viktor Iliev, Vladislav Nikolov, Eleonora Nikolova, Lyudmila Dimova, Lyudmila Doncheva and Angelina Gradeva from the Bulgarian National Bank who excelled in energy and passion regarding both research content and organisation to accomplish a memorable event.

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Hugo Bänziger is a venture capital investor and financial researcher. The focus of his work lies on the rise of institutional investors and the interrelation between management failure and financial crises. He recently retired from Lombard Odier et Cie, the Geneva-based private bank, where he was one of seven partners. Hugo is also the chairman of *eabh*.

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Speech¹

Harold James

Thank you, Governor Radev, Vice Governor Hristov, it is an enormous pleasure to be here in Sofia today, where we all have started to enjoy a fantastic conference this morning.

This evening, I wanted to reflect on the theme for the conference that the organizing committee set a long time ago: ‘Monetary Unions’.

The story of monetary unions is one full of surprises. So is world history. You might well have had quite different expectations of what the world would look like in 2022. We all had other expectations of 2021 and 2022. Here at our hosting Bank, the Bulgarian National Bank, when we started to prepare for this conference, you were probably thinking of the smooth transition towards European monetary integration in 2024. Everything looked calm and smooth in line with the mantra depicted in the art that surrounds us here in our dinner place: ‘Life is beautiful’².

In 2021 the rate of inflation in Bulgaria was less than that in Germany, less than that in the United States. That made you look like you were in an absolute ideal position, but now, at this moment in time, the rate of inflation is rising like the balloons we can also see pictured on the walls here. This absolutely unexpected and unpredictable rise in rates of inflation is inevitably a challenge to monetary unions. It will make matters more difficult for the European Monetary Union over the months and years to come. It makes

¹ Dinner speech given on the eve of the conference day.

² Reference to the exhibition titled “Life is Beautiful” by Thierry Guetta, known by the pseudonym Mr. Brainwash.

the task for the policy makers at the European Central Bank in Frankfurt of managing the future of the EMU much more complex.

However, we should be careful of not assuming that because the Union faces challenges the sceptics of monetary union were always right. I remember, in the 1990s, when in Princeton University, my then Princeton colleague Kenneth Rogoff said during a seminar on Europe's move to monetary union that as a citizen "he was appalled by what was happening over there (in Europe), but as a social scientist he was delighted by the bold experiment." There was a great deal of scepticism about the European experiment, especially in the United States. The reason is simple, and was well expressed for instance by the Belgian economist Paul de Grauwe when he said: "The Euro is a currency without a country. To make it sustainable a European country has to be created." Thus the Eurozone would need to transform itself into a proper country, acting as one sovereign on many levels. This argument of course goes back a long way, all the way to the question that was posed to Jesus by the Pharisees of whether the Jews should pay taxes to Caesar. Jesus answered by asking one of them to produce a coin that would be suitable for paying Caesar's tax. One of them showed him a Roman coin, and he asked them whose head and inscription were on it. They answered, "Caesar's," and he responded: "Render therefore unto Caesar the things which are Caesar's; and unto God the things that are God's." (Matthew 22:21)

When you look at this Euro coin in my hand, you see the famous depiction by Leonardo da Vinci of man inscribed in a circle... , right? He is certainly not the ruler of Europe. What are you supposed to do if there is no Caesar? There is no Caesar (yet) in the European Union.

There is a lot of feeling that we need some sort of a political reinterpretation of the Union, and this is exactly the situation where I think history can help – and there are two historical stories I should briefly like to think about.

One is the longer history: monetary unions are not new, they are not an invention of the late 20th century, the discussion about these unions is not new. What was new in the 19th century was the idea of national currencies. De Grauwe's idea of a currency needing a state was the new one, in the 19th century when countries unified, when Germany unified, when Italy unified, they had to have national currencies. But at the same time, there was discussion about monetary unions, based initially on the most prominent example the Latin Monetary Union. There was even an idea of a global monetary union, championed in the 1860s by Napoleon III and revived in the late twentieth century by Richard Cooper and Robert Mundell, who should be considered as one of the architects of the European Monetary Union. And

if you go further back to look at cases of de facto monetary unions, there are some currencies that established themselves as international currencies. The currencies of Venice or Florence, Genoa, or Amsterdam circulated widely and internationally. So, the idea of currency union is not unknown in history or inherently problematic.

The second bit of history I wanted to remind you of, is one that I think is in everybody's mind, certainly in my generation – I was born in 1956. The energy crisis and I did my examinations in high school in a Britain that was closed down, with power cuts every other day. The first year I went to university, in 1975, the rate of inflation in the UK was just over 25%. There was really high inflation in the 1970s.

It's worth thinking about whether we are reliving in the 1970s in the wake of a new energy shock. A thought from the 70s that often reappears in discussions today is a famous Milton Freedman saying: 'Inflation is always and everywhere a monetary phenomenon.' Yes, that is true, but inflation was much more than that in the 1970s; back then inflation was sort of a fever thermometer, and an indication for many people that at that time something was deeply wrong politically. And in the 1970s the exact same discussion took place as we have now, about the failure of democracies. It was a period with a surge in terrorism, in Germany, in Italy, in Northern Ireland, and there was a widespread discussion whether these countries had become ungovernable. Inflation was seen as a way of buying off discontent, it was an expression of a political deal in which powerful interest groups put pressure on governments and extracted rewards. Today we have a repeat, in that the initial momentum was produced by the political calculation that the large numbers affected by the unanticipated shocks of pandemic lockdowns and then the consequence of shutdowns arising out of supply shortages should be protected or compensated.

But the lesson from the 1970s was that buying off powerful interests doesn't work over a longer time: you can't do that too much, and if you act too much, if you have the kind of government-generated inflation that the UK or the United States had in the 1970s. Instead of healing social wounds, you are going to rip them open and cause more injury. The temperature of the fever patient rises.

Central banks are thus not as independent as they sometimes present themselves as being. They also operate across the world in quite different institutional and political settings. In the UK and the US, the governments and the central banks are responding to the political pressures created by apparently hopelessly divided societies. Extreme political polarization leads

to discussion of whether the union can continue. The debate of the 1970s about the UK's ungovernability is picking up again. Scotland and Northern Ireland can see an alternative path to leaving the British Union and joining (or rather rejoining the European Union). A slew of recent books prophesy civil war in the US.

Europe has a variety of the same threat of disintegration. The ECB is slower than the Fed or the Bank of England in raising interest rates, in part because the character of the inflation push is different, and more obviously related just to the increase in energy costs. There is less pressure on the labor market, though in some European economies there are the same dramatic shortages in some categories of skilled work. The hesitation also stems from the fear that a rise in borrowing costs is interpreted by markets as a threat to government and banking stability in countries in southern Europe with much higher government debt levels, and where the debt is held by the banks. A rise in government borrowing costs thus delivers the double whammy or doom loop familiar from the European debt crisis, where indebted governments have to pay higher risk premia and are threatened with insolvency, the value of their bonds falls, and hits the balance sheet of banks that hold those bonds.

One of the mantras of the long drawn out Euro debt crisis was that the US and the UK were in a much stronger position because they had a single government and a single central bank, whereas in Europe there was no fiscal union, no single government. The sustained fragility produced something like a tentative move in the pandemic to a partial and limited fiscal union (the NextGenerationEU), but it remains incomplete. The pandemic and the geopolitical crisis of 2022 have brought a reminder that even fiscally unified states don't have all the answers and are vulnerable to disintegration.

The problem in the United States and the UK was in the 1970s, and also is now, fundamentally a fiscal problem. And if you look at the UK after the COVID, look at the government deficit, it is exactly corresponding to the quantity of the government securities purchased by the Bank of England. So there is one coordinated balance sheet, and having one coordinated balance sheet, having a country and a currency, doesn't mean you have a free pass, even though because of the international role of the dollar, the famous "exorbitant privilege," many in the United States might think that they have more of a free pass.

So that leads me to one more thought on historical inflations and what inflations can do.

In extreme circumstances inflations destroy countries, particularly in federal systems. Inflations destroy federal systems. We had a nice illustration on this this morning, when we were talking about Italian central discounts in the 1920s. If you looked at the figures from the paper of Marianna Astore, Maria Stella Chiaruttini and Federico Barbiellini Amidei carefully you could see how the discounts in the capital Rome, soared during the first World War, and the aftermath of the War, relative to those in other cities, during a period of war time inflation and high deficits, and enabling a central authority to claim power.

Even more extreme versions of the same process happened in Germany after the First World War, happened in Yugoslavia in the 1980s, it happened in the Soviet Union after the end of the 1980s. In Germany for instance, in the early 1920s, the belief of people in the Rhineland or Bavaria or Saxony was that the inflation was being run by people who had good connections in the centre, in Berlin: that produced a push to separate. Escaping inflation thus meant escaping from the central authority in Berlin. In the Yugoslav Federation it was exactly the same, with Belgrade being at the centre of the inflation machine and you wanted to get away from it. Or in the former Soviet Union Moscow was at the centre of it.

So, if this is right, that inflation, or better said, high rates of inflation, create suspicion of central authority, then that is something you might want to think about ... Famously, President Putin considers the break-up of the Soviet Union the greatest geopolitical catastrophe of the twentieth century. And the thought of this is not far from his mind that a new rise in these inflationary pressures would also create tensions in the countries of the European Union, across the Atlantic, across international partnerships and act as a powerful solvent. Then the next powerful potential shock would be the break-up of the West as a consequence of high rates of inflation...

This is exactly the kind of risk that seems to me that we are dealing with at the moment. We are dealing with inflation that is so threatening that affirmations of 'Life is beautiful' and 'Love is the answer'³ are no longer substantial enough when you think of the current system, what we are living in is falling apart. We mustn't imagine that inflation is a way of healing it, it's actually a powerful solvent, it's the solvent of monetary union, but it's also a solvent of other unions and of cooperative and multilateral life in general.

³ Reference to the artwork at the dinner place titled "Einstein - LOVE IS THE ANSWER" by Thierry Guetta, known by the pseudonym Mr. Brainwash.

I think it's right to sum up that when we think of a sovereign monetary union, that you have quite unique challenges at the moment, challenges that are way more extreme than the challenges of the European debt crisis. We shouldn't think that these challenges are unique to monetary unions. They are characteristics of societies that really need a stable money. If you think of it, that's exactly what the European common currency was supposed to provide: stable money. Stable money is the basis of a stable political system, stable money keeps systems, unstable money destroys systems.

Well, that is not a very comfortable message to leave you with, but I think it is an important message with which to start this very important conference.

Opening Remarks

Kalin Hristov

*Dear Members of the Association,
Dear conference participants,
Ladies and Gentlemen,*

It is an honour to welcome you to this conference which the Bulgarian National Bank organises in cooperation with the European Association for Banking and Financial History. I am also delighted to have this event, together with yesterday's workshop on the "Digital rebirth of historical datasets", taking place in Sofia alongside the annual meeting of the Association. This year marks twenty years since the Bulgarian National Bank became a member of the Association; this is the first time, however, that an annual meeting and events of the Association are hosted in Bulgaria. Let me, therefore, extend words of gratitude for the excellent cooperation with the Association regarding the organisation of this series of events.

The Bulgarian National Bank is one of the oldest central banks in the world, thirteenth by order of its establishment in 1879. Our institution has understandably cultivated a profound respect for banking and financial history, as seen from our topical publications and research projects we take part in.

For us history is also vibrantly present today – exactly twenty-five years ago, 1 July 1997 was the day of introduction of the currency board in Bulgaria. Our currency board has been operating smoothly ever since, over various economic and financial cycles in both good and bad times, proving the cornerstone of monetary, financial and macroeconomic stability in Bulgaria's most recent history. We can make an assessment that the currency board is

the most successful time consistent policy commitment regime for achieving price stability that we have had since the restoration of the Bulgarian state.

Our currency board is an undisputed success story. Historically, however, the Bulgarian National Bank has engaged in a number of monetary policy regimes. Notably monetary unions – the focus of the conference today – have repeatedly appeared as centres of gravity. In the late nineteenth century Bulgaria adhered to the Latin Monetary Union by means of unilateral commitment to its principles. In the second half of the twentieth century Bulgaria was part of the Comecon (the Communist Bloc's Council for Mutual Economic Assistance) where a common international currency evolved to serve international payments between the participating members. At the turn of the last century the newly created euro replaced the Deutsche Mark as the reserve currency of the currency board in Bulgaria.

To sum up, our own experience is part of the global history of alternating monetary policy regimes. It motivates our interest in both the history and future of monetary unions. As central bankers we do look forward to the papers and discussions today, since the historical perspectives therein should also bring out rather relevant contemporary insights for policy.

After the COVID19 outbreak disrupted our usual ways of communication and in-person contacts, this may be among the first international conferences on financial and economic history to take place physically again. To be more precise – almost entirely physically – since some of our speakers have had to deal with last-minute unforeseen circumstances and will present their research remotely.

Thus, today we will have the opportunity to appreciate a series of papers and presentations, commencing with the keynote speech by Thomas Mayer. He will lay ground by pairing the two main functions of money. On the one hand, money is a means of transaction that stores value over time and space while being a standardised unit of account to record this exchange. On the other hand, the printing or minting of money has been a potent funding instrument and a symbol of the state. Therefore, we expect to hear what motivates sovereign states to choose to adopt a common currency in a monetary union. We have seen in history how newly established states are eager to reaffirm independence in their internal political discourse by creating a national currency, but then resort to pegging to global currencies if, for example, in need to rein inflation or gain overall policy credibility. Sometimes they even adopt a foreign currency as their own unilaterally, as demonstrated by recent examples in close parts of Europe (Kosovo and Montenegro).

After the introduction and the keynote, the conference explores four directions of thought on the topic of monetary unions in history. A panel is devoted to each of them. The first panel will explore the link between monetary unions and economic integration by offering a glimpse in their history. The second session will focus on twentieth century monetary unions following the great and continuous economic stress of the First World War. The third panel will examine monetary unions as facilitating tools for greater customs and economic integration within the Comecon and the Austro-Hungarian Empire. Finally, the last session will address the question to what extent the political relations transcend in the monetary unions as well illustrated by the Great Britain and the member-states of the European Union. This program will break for a discussion between leading academics and policy-makers on the issue of the parallel currencies in history.

I would not crowd out the precious conference time by dwelling on each piece of research to be presented and discussed today.

Let me pause here, to give way to interesting and open exchange of opinion and deliberations which I believe this conference will stimulate.

And once again – welcome to Sofia and enjoy your stay in Bulgaria!

Thank you.

Session 1: Monetary Unions and Economic Integration

How Successful was Germany's First Common Currency? A New Look at the Imperial Monetary Union of 1559

Prof. Oliver Volckart

Abstract

The paper starts out from the insight that the success of the common currency, on which the diet of the Holy Roman Empire agreed in 1559, cannot be assessed against how modern currencies are functioning. Rather, the benchmark is provided by historical criteria: first by the aims of the political authorities that joined the union, and second by how other currencies of the time were functioning. The analysis finds that there were two overriding aims: 1) preventing high-ranking economic agents from exploiting their social standing in order to push up prices and rents, and 2) removing the conditions that allowed Gresham's Law to undermine monetary stability. The participants in the union tried to reach the first aim by retaining regional small change in addition to the Empire-wide larger units. While there is limited evidence for the common currency preventing the functioning of Gresham's Law within the Empire up to the immediate run-up to the Thirty Years War (1618-48), it failed to prevent inflation and the inflow of foreign coinage. However, in neither respect the post-1559 Empire differed from other contemporary polities. On balance, therefore, the Empire's common currency can be considered a success.

Key words: Currency unions, early modern monetary policies, Gresham's Law.

JEL codes: E42, E52, N13, N43.

1. Introduction

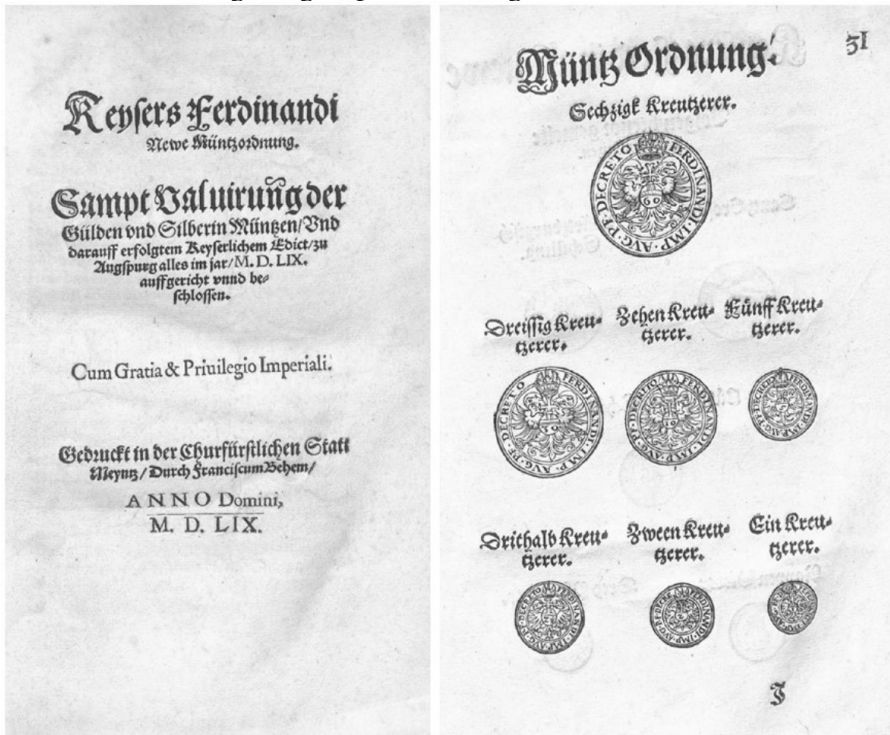
About a decade ago the editors of a planned volume on key events in German financial and banking history offered me the chance to contribute a chapter: I was to write something on the failure of the common currency of the Holy Roman Empire in 1559, the year Ferdinand I published the 'Augsburg Imperial Coinage Ordinance' (cf. Figure 1, p. 3). I was of course flattered to be asked, delighted to be suggested a topic that so closely matched my research interests, and cheerfully set about producing a paper that did not draw on any new archival sources but that I thought offered a nicely rounded political economy-based explanation of why the Empire's currency did not succeed (Volckart, 2013, for the text of Emperor Ferdinand I's ordinance see Leeb, 1999: 1953-1988).

The episode is indicative of how the monetary policies of the Holy Roman Empire are perceived: They are widely considered a failure. This applies not only to the attempts to create a common currency in 1524 and 1551 and to Ferdinand's bill of 1559, but also to its amendments of 1566 and -71 that were designed to bolster it. Such a view is not restricted to Germany. A prestigious exhibition on German history the British Museum put on between October 2014 and January 2015 illustrated the country's early modern political structure with a map to which dozens, maybe hundreds of coins of the various estates of the Empire were affixed: as striking an image of diversity you could wish for (Blackbourn, 2014). Specialists in the field – economic historians – argue in a more nuanced way. In the 1960s Friedrich Lütge (1966: 370), the doyen of German economic history, stated that policies aimed at regulating currency questions were the most successful of all the Empire pursued in economic matters. Friedrich Wilhelm Henning (1991: 552-553), whose three-volume textbook on German economic history appeared in the 1990s, claimed that all in all, the attempts to harmonise the Empire's currency were fruitful, though it proved impossible to prevent individual estates from debasing their coinage. By contrast, Hermann Kellenbenz (1977: 222-223), long a dominant figure in German economic historiography, refrained from assessing the Empire's

success or failure in this field, which given the fanciful character of his account was probably wise. Franz Mathis (1992: 70) finally, author of the volume on sixteenth-century economic history in the widely used 'Enzyklopädie deutscher Geschichte' textbook series, argued that in the final analysis, the 'ambitious project' of creating a common currency failed.

Figure 1

The 'Augsburg Imperial Coinage Ordinance', 1559¹



While general economic historians are divided where the success of the common currency is concerned, specialists in monetary history lean to the view that it was largely a failure. Fritz Blaich (1970: 239-246), who published the first modern analysis of the Empire's monetary policies, implies that the 'Augsburg Imperial Coinage Ordinance' of 1559 was

¹ (1559), title folio and fol. 31 recto. Note that the currency this bill introduced was the first in Europe whose units indicated their 'face' values.

widely implemented but shies back from trying to determine how effectively this was done. Herbert Rittmann (1975: 186, 204), whose target readership is numismatists, claims that Emperor Ferdinand's Augsburg Imperial Coinage Ordinance of 1559 did not enjoy any lasting or sweeping success. According to Bernd Sprenger (2002: 102-103), whose survey is directed at economic historians as well as at the general public, the ordinance did not achieve a 'decisive breakthrough' and failed to do away with the 'fragmentation of the coinage' that was a legacy of the Middle Ages. Hans-Jürgen Gerhard (1994: 164), the leader of a major research project on the monetary policies pursued by the imperial circles (the administrative districts into which the Empire was subdivided, see Figure 2, p. 13), which the Volkswagen-trust financed in the 1990s, concluded that none of the bills intended to create the common currency was ever really implemented. And Philipp Robinson Rössner (2014: 310, 312), the most prominent of the younger generation of German monetary historians, claimed that the absence of monetary integration and stability post 1559 was evidence for the failure of the 'attempted' harmonization of monetary policy at the level of the circles that the Imperial Coinage Ordinance demanded.

This largely negative picture has recently begun to change. In a number of articles, Michael North (2016a, b) explored how the North-German imperial circles implemented the Empire's currency bill, while after discovering (and publishing, alongside many other pertinent documents, see Volckart, 2017a) the minutes of one of the monetary policy conferences that the imperial diet convened in order to draft the bill, I was for the first time able to trace in detail how the common currency was created (Volckart, 2017b, 2018, 2020, 2021). The emerging new view of the effectiveness of monetary policies in sixteenth-century Germany is in line with the reassessment of the role the early modern Holy Roman Empire played in German history. Far into the second half of the twentieth century, the Empire was considered moribund and essentially no more than an obstacle on Prussia's way to fulfil its destiny: the creation of a German nation state (Scales and Whaley, 2018). Joachim Whaley, one of the foremost experts in the field, summarises how much ideas have changed since the 1970s: 'From the outside, it' – that is, the Em-

pire – ‘does look chaotic’, he admitted, ‘particularly if you look at an historical atlas, where you see a blaze of colour, and little bits of territory here there and everywhere, everything looking very confused, but I think on the whole it worked as well as many other early modern states’ (MacGregor, 2016: 80). Strikingly, though, where monetary policies are concerned the jury still seems to be out. North’s work concerns parts of the Empire only, while my own research has so far been focused on the political processes ahead of the publication of Emperor Ferdinand’s common currency bill of 1559. This is where the present chapter contributes to the debate. It questions the success or failure of the monetary union created in that year and offers a re-appraisal of the currency introduced by Ferdinand’s bill and subsidiary legislation in 1566 and -71. The period the analysis covers ends with the run-up to the Thirty Years War in the second decade of the seventeenth century.

The paper begins by outlining the criteria needed for assessing the success or failure of the monetary union of 1559. Its starting point is the insight that this cannot be measured against how modern currencies are functioning. Rather, the benchmark must be provided by historical criteria, first and foremost by the aims of the political authorities that joined the union. The evidence indicates that two such aims stand out: preventing socially high-ranking individuals from using the introduction of a new currency as a chance for rising prices or rents, and removing the conditions that allowed Gresham’s Law to undermine monetary stability. While there is some evidence for the common currency preventing the functioning of Gresham’s Law within the Empire until the last decade before the Thirty Years War, it failed to prevent the inflow of foreign coinage. Inflationary pressure continued. However, in both respects the post-1559 Empire functioned no different from other contemporary polities that experienced inflation and where the money supply was international, too. The paper thus contributes to ‘normalising’ the Holy Roman Empire in its European context.

Below, the conditions shaping its monetary policies are examined first (Section 2). Thereafter, the aims of the estates joining the union are examined (Section 3). Sections 4 and 5 take a closer look at how they

tried to reach these aims and at the extent to which they were successful. Section 6 concludes by summarising the main findings of the paper.

2. Which conditions shaped monetary policies at the level of the Empire?

In order to demonstrate what the imperial estates that formed the monetary union of 1559 tried to achieve it is necessary first to establish the historical context. This is provided by five fundamental conditions that shaped the Empire's monetary policies before the agreement of 1559.

1. The first (and rather obvious) of these is the fact that a large number of authorities within the Holy Roman Empire were issuing coins in parallel with each other. To be sure, originally the emperors had regarded coinage as their exclusive prerogative. However, there had always been some rulers who did not share this view and minted their own money without imperial consent (for example the dukes and electors of Saxony, Schwinkowski, 1917: 141, 144). Moreover, in regions the emperors controlled more closely they began using the right to issue coins as a reward for political support. From the eleventh century onward maintaining monetary uniformity proved impossible (Sprenger, 2002: 60), and by the mid-sixteenth century there were up to 100 estates of the Empire that minted their own coins (Volckart, 2021: 10). While it was widely bemoaned that 'everybody, even nuns and monks' enjoyed the privilege to do so (Volckart, 2017a: 303), when it came to changing this some rulers urged caution: The elector of Saxony, for example, argued in 1544 that forcing estates to give up their right to issue coins would cause great discord in the Empire 'where there is more than enough discord as it is. And if, in addition to that, discord about the coinage would arise the total break-up and downfall of the Empire might follow' (Eltz, 2001: 335). This was an alarmist position. Neither the emperor nor the imperial diet – nor the two of them acting together – had any realistic chance of withdrawing privileges like the right to mint from estates some of which were among the most influential in the Empire.

2. Monetary diversity was even larger than this would lead one to expect. The German lands did not consist of neatly defined currency

regions separated by clear and well-monitored borders. Some estates did occasionally attempt to ban at least certain types of coins issued elsewhere, but normally it was up to the consumers to decide whether and on what terms they were prepared to accept money minted elsewhere (Rössner, 2012: 564-568). Moreover, what applied within the Empire applied to its external borders, too: They were wide open. People, goods and coin crossed them without being hindered, registered or taxed. Germany's monetary diversity was therefore not only the result of decentralisation, but also of the import of money from abroad. When the imperial diet convened a commission of experts who were to analyse the coinage current in the Empire in 1551, the panel tested the gold- and silver-content of almost 340 different types of coins: c. 190 golden ones, about 100 of which had been minted in the German lands, the rest in silver, again with c. 100 German types (Volckart, 2017a: 318-342). Thus, more than half of the gold and about one-third of the silver units analysed were from abroad – evidence of the fact that high-purchasing power gold coins played a larger role in long-distance trade than silver, which tended to be more often used in local and regional exchange (for reasons discussed below this changed in the first half of the sixteenth century). This lack of currency borders was the second condition the Empire's monetary policies had to consider.

3. None of the princes or towns minting in the Empire had a bureaucracy sophisticated enough to withdraw old coins from circulation when they issued new ones of a different standard. Old and new coins would then circulate side by side, and as authorities were generally too weak to enforce their circulation at specific values they would normally do so at varying rates that consumers negotiated in the same way in which they reached agreements about the acceptance of foreign or unfamiliar coins (Rössner, 2012: 564-568). Again, the report of the expert panel convened of 1551 gives evidence of this: The oldest dateable coin tested was from between 1424 and -37 (Volckart, 2017a: 322, §7.3, cf. Rössner, 2014: 302). That state capacities were not sufficiently developed to withdraw old coins from circulation was the third essential condition. Finally, we must take two macroeconomic conditions into account: one historians have been aware of for a long time, and another that has

been detected only in recent years:

4. Since the nineteenth century, we have known of the quick rise in price levels that the sixteenth century experienced. While much of the research done since the mid-twentieth century focused on shifts in relative prices, in our context these are less important than the fact that virtually no good – not even labour – became cheaper between 1500 and 1600. This is true not only if we look at nominal prices, but also if we control for changes in the bullion content of the coinage: silver prices went up, too (Sprenger, 1984: 138). As we will see, contemporaries were well aware of this development.

5. The other macro-economic condition relevant for monetary policies was the increasing economic integration of the lands of the Empire and its neighbours. Recent research has found that like commodity markets in general, currency markets were far more closely linked in the early sixteenth century than they had been a hundred years before – very likely in consequence of the reforms of the imperial constitution that increased legal security and made it more attractive and profitable to engage in currency arbitrage or invest capital in larger quantities and over longer distances (Chilosi et al., 2018, Chilosi and Volckart, 2011, Federico et al., 2021). High-purchasing-power coins – mostly gold – had of course been used for a long time in long-distance trade. What seems to have been new in the first half of the sixteenth century was that even small-value units travelled huge distances. Thus, in 1553 the government of Lower Austria raised the issue of foreign small change with Charles V's brother Ferdinand, who was at that time king of the Romans (and as such Charles' designated successor) as well as king of Bohemia and Hungary:

'Most gracious lord, we are herewith sending your Roman Royal Majesty copies of two letters together with a purse of coins from Henneberg, which we have received from your Royal Majesty's councillor and governor of Carinthia, Christoph Khevenhüller, and said two letters describe how this coinage from Henneberg has flooded Carinthia and is increasing to such an extent that the common man cannot obtain any other money whatsoever, which is a

great hardship for the country folk'.²

People in Carinthia were using these coins as 2-*Pfennig* pieces, which definitely made them small change. While 'flooded' is certainly no more than rhetoric hyperbole, enough of them entered circulation to cause a stir: unsurprisingly, considering that the distance between Henneberg in modern Central Germany and Carinthia is more than 300 miles and that the main range of the Alps runs across the way. A Saxon currency ordinance of 1511 shows what complications the inflow of foreign small change created for the population. According to the law Saxons had to deal with 37 different types of coins below the size of a Groschen, only four of which were domestic. Consumers were expected to be able to correctly identify the non-Saxon pieces they were offered, learn their official values in Saxon money and remember them (Rössner, 2012: 381-386). What these conditions imply is a high degree of uncertainty about monetary values among the consumers, which in turn implies high transaction costs. For political actors, they had further consequences to which I will come below.

3. What was the common currency intended to achieve?

Like the success or failure of the bill of 1559 and its later amendments, this issue is debated, with four hypotheses having been advanced. First, some historians speculate that the common currency was a project driven by Charles V and King Ferdinand, and that the aim was political integration: What was to be achieved was a closer unity of the imperial estates that was to augment the emperor's power (Vorel, 2006: 20). Evidence – documentary or otherwise – supporting this idea does not seem to exist. A second opinion was advanced by Blaich (1970: 13), who argues that the core aim the imperial diet tried to reach with the introduction of a common currency was putting a stop to inflation. There is good evidence that the imperial estates discussing the creation of a common currency did indeed think of this issue. At the imperial diet of Worms of 1545, for example, the monetary policy committee argued that 'it was to be hoped that a good, honourable, upright and silver-rich coinage would cause lower and more seemly prices of all

² ÖStA, HHStA Wien, RHR, Miscellanea Münzwesen 2: Münzwesen im Reich, 1551-1564, fol. 443r.

things' (Aulinger, 2003: 959). Everyone concerned was aware of the fact that trade reacted to debasements by increasing nominal prices (cf. e.g. Eltz, 2005: 224, Rössner, 2014: 318), and that had to be avoided. Still, as we will see in a moment this was not the main aim; moreover, political decision makers were primarily thinking not of a rise in general price levels but rather of a specific kind of price hikes that required specific counter measures.

As for the main aim of the common currency, most research has adopted – or rather: has taken for granted – a third hypothesis. It is widely believed that like other premodern monetary unions, it served the same aim as its modern counterparts: helping economic integration (cf. Schrötter, 1912: 99-100, Lennartz, 1913: 1, Kamann, 1928: 259, Blauch, 1970: 15, Probszt, 1973: 397, Schön, 2008: 467, Boerner and Volckart, 2011: 63, Rössner, 2014: 309, Kümper, 2020: 180). In fact, this seemed a perfectly reasonable idea. It is the angle taken by economists, none of whom doubts that monetary harmonisation reduces the costs of negotiating commercial agreements between regions that used to have different currencies. Currency unions thus help interregional trade. What is disputed is merely whether their creation is a purely political act or whether they can be introduced only where markets already are fairly well-integrated (Rose, 2000, 2001).

It is only very recently that this hypothesis has been called in question and superseded by a fourth one. It is being suggested that like many other pre-modern monetary unions, the one based on Ferdinand's Augsburg Imperial Coinage Ordinance of 1559 was designed not to help but to hinder commerce, or at least one type of commerce: the one contemporaries called the 'trade in coinage' ('kauffmanschafft inn der muntz', e.g. Volckart, 2017a: 129). In fact, this trade – which flourished before the background of the multiplicity of old and new coins, the lack of currency borders and the increasing economic integration – presented the imperial estates with serious problems that concerned their revenues as well as their reputation. There is abundant evidence for traders involved in it focusing on collecting relatively high-value coins issued by one estate in order to deliver them to the mint of another.

er where they would be melted, mixed with base metal and re-issued as more or less accurate copies of the better originals. A memo the councillors of King Ferdinand drafted in June 1543 is typical of the evidence reflecting this commerce. It stated that

‘everyone knew his royal Majesty’s silver-rich coin ... had not benefited his Majesty’s land and people, but that the money had all been exported like a commercial good, melted elsewhere and re-minted into poorer coins which, together with other light coins, had then been re-imported into the country and become common’ (Eltz, 2001: 341).

In short, what we are observing here is Gresham’s Law at work. This was so common that the German language had adopted a technical term of its own to describe the process: Melting another authority’s coins and using them as raw material for base imitations that then flooded the market was called ‘breaking’ money (Hirsch, 1762: 123).

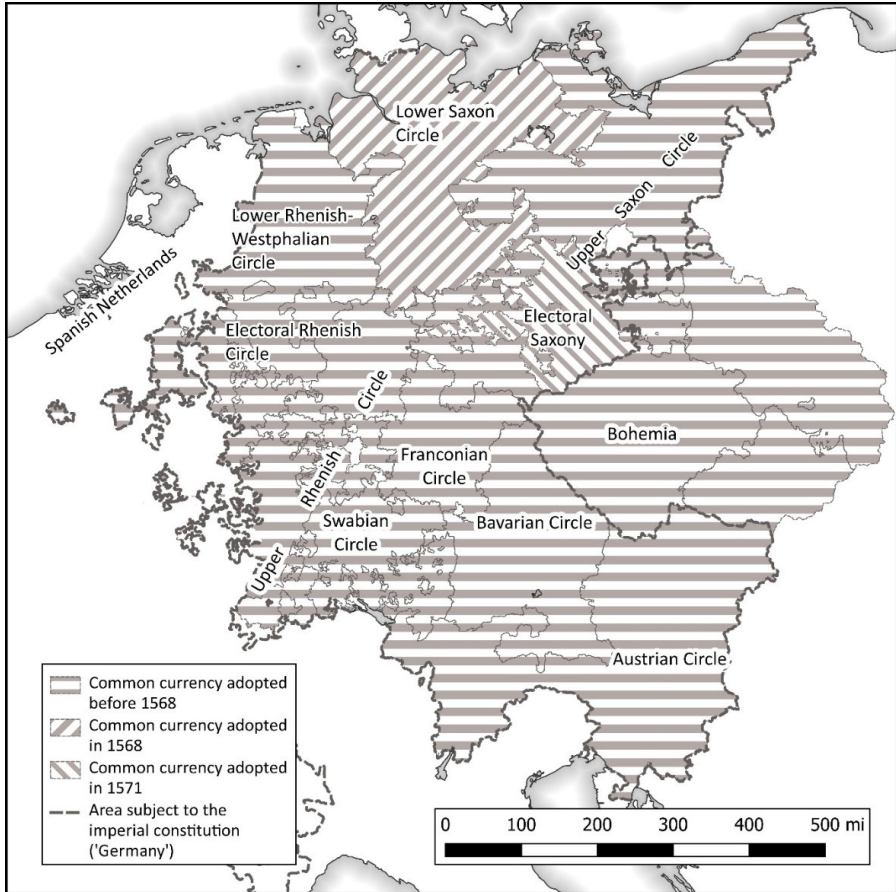
We learn from the duchy of Pomerania what this implied. Its coins were exported to neighbouring Mecklenburg where they were used as raw material for those issued for example by the town of Rostock – coins that were practically indistinguishable from the Pomeranian originals. After some time the underweight imitations became dominant in Pomerania; by the 1550s, the dukes were complaining about the requirement to pay their dues to the Empire in good money while they received their revenues in bad coins (Volckart, 2017a: 415). Moreover, the Rostock mint was able to offer a higher nominal price for the bullion it purchased than the Pomeranian mints, whose supply of specie therefore dried up, and with it the seignorage the dukes had received (Volckart, 2017b: 759, 2017a: LIV-LVI). The breaking of coins thus had unambiguously negative revenue effects, which were particularly painful in an age of growing governmental and courtly expenses. Being unable to issue their own coins moreover robbed the estates of a chance to shape their public image, and finally, their reputation with their peers was bound to suffer, too.

The sources reflecting the talks about the introduction of the Empire’s common currency leave no doubt about the fact that preventing the

trade in coins that were used as raw material for base imitations – and thus the circulation of such base imitations – was the main aim the imperial estates tried to reach. The memo submitted by Ferdinand of Austria's councillors in 1543 stressed that a 'common, orderly and stable' currency was needed to 'prevent and suppress the evil, deceitful and self-interested business' that the diversity of coins allowed (Eltz, 2001: 339). Two years later, the currency committee of the imperial diet of Worms argued that a 'good, honourable, upright and silver-rich coinage' would serve to prevent 'self-interested people, who seek their own advantage and have sought and made their own unjust profit, from doing business with the irregular and uneven coins' (Aulinger, 2003: 960). Or as the delegates of the elector Palatine put it on a later occasion: 'One thing is certain: When all estates mint according to the same standard that they faithfully observe, the breaking of coins is impossible because it can no longer be done without incurring a loss' (Volckart, 2017a: 405). In particular, a common currency would prevent 'abusing other minting authorities' seals, coats of arms and coinage designs' – issuing imitations that were easy to confuse with the originals would no longer be possible (Aulinger, 2003: 959-960). 'A uniform, good, even and stable coinage' had to be created, 'so that debasements and also the great damage, harm and deception done in the trade in coinage were averted and in future prevented, and the common weal thereby greatly advanced' (Aulinger, 2003: 962). In short: It was not the desire to support political or economic integration that gave rise to the wish to create a common, Empire-wide currency; rather, it was the need to slow down inflation, and even more importantly, to eliminate the conditions that allowed Gresham's Law to spread poor imitations of better coins. By the 1550s, there was a broad consensus about this among the imperial estates, and once the diet had passed Emperor Ferdinand's 'Augsburg Coinage Ordinance' in 1559 and the Saxon Taler was integrated (as Reichstaler) in 1566, the common currency was widely adopted (Figure 2).

Figure 2

The common currency zone, 1559 to c. 1610



4. Did the common currency prevent arbitrary increases in prices and rents?

While there is no doubt that mid-sixteenth-century political decision makers worried about inflation and tried to slow it down or reverse it, I have suggested above that general price levels were not uppermost in their mind. Rather, they were primarily concerned about a specific kind of price hikes. In order to see what these were, we need to consider how contemporaries were perceiving and explaining inflation. A

good starting point is a chapter on ‘The Great Dearth of the Time of Charles V’ that the Frankfurt type setter Christian Egenolff added to the new edition of his *Chronica* – his chronological world history – in 1534. Egenolff claimed that

‘in times gone by, no dearth continued for longer than a year or six months, but now the world has lost faith to an extent that we can no longer be rid of dearth, so much is the price of everything increasing Never in history (except in times of war and when there was dearth in Egypt) have we read of such dearth in all things, and there is no one who does not complain, no one who is glad, and the rich man – according to his station in life – feels just as poor as the beggar ...’ (Egenolff, 1534, fols. CLXI verso to CLXII recto).

This sounds unexceptional enough, and moreover, Egenolff was clearly correct at least as far as living memory was concerned. Seasonal price fluctuations had always existed and were expected; what was new since the 1520s was that an underlying sustained upwards movement of prices had begun. The interesting aspect in our context is how Egenolff explained what he and many others were observing: He ascribed

‘this dearth solely to the lack of faith among people and to usurious speculators, who purchase everything the common man owns. And then, when they hold it in their fist, one has to sing their tune and pay for everything according to their whim’ (Egenolff, 1534: fols. CLXI verso to CLXII recto).

In a way typical of the time – we find similar arguments for example in Luther’s publications – the usurious practices of specific, identifiable individuals (more common than in the past because of a spreading lack of piety) were held responsible (Rössner, 2015: 121-123).

The problem was perceived as particularly acute due to the strongly hierarchical character of German society. Among the imperial estates, this is nicely reflected by the way people addressed each other. A textbook that taught letter writing to secretaries working in the chancelleries of the estates listed 49 graded forms of address for spiritual personages, from cardinal to common priest, and 180 for temporal persons

from emperor down to bailiff and cellarer (counting German recipients only). 142 of these forms of address applied to imperial estates (Zwengel, 1568: fols. XIII-XXX). And of course, any communication directed at someone higher up in the pecking order had to be peppered with 'submissive', 'most submissive' (if the social distance was more than one rank) and similar expressions of deference. No wonder English travellers such as Fynes Moryson (1617/1907a, p. 46) from Cadeby in Lincolnshire, who visited the Empire in the 1590s and was used to a less graded society, found the Germans 'ever tedious in their stiles or titles'. One consequence of this hierarchy (which extended to the bottom of society) was that individuals higher up in the ranking had a good chance of using their standing vis-à-vis lower-ranking persons to pressure their transaction partner into paying more (or accepting less) than supply and demand would have justified. In particular the 'common man' often felt cheated in this way, whether a merchant paid him for a good he sold or he himself paid his landlord for the right to farm his land holding (Rössner, 2012: 574-575).

What political decision makers discussing the creation of a monetary union feared was that higher ranking individuals would misuse the introduction of a new currency as an opportunity to increase prices and rents over and above what changes in the intrinsic value of the coinage warranted – a situation that in some ways recalls the one after the introduction of Euro coins and banknotes, when there was the widespread (and mistaken) perception that trade exploited the situation to drive up prices (Brachinger, 2005: 1007). In the sixteenth century this was especially worrying where everyday purchases of consumer goods and regular dues such as rents were concerned, that is, transactions between merchants or landlords on the one side – people whose relatively high social status gave them a strong bargaining position –, and the 'common man' – mainly peasants – on the other. In the mid-1550s the peasant war of 1524-25 was still within living memory, and political authorities remembered well that back then, the insurgents had regularly complained about matters of coinage (Rössner, 2012: 486, 513, 553). Small change was particularly important in this context. As the instructions the delegates of the elector of Saxony received for mone-

tary policy-talks with the other estates in early 1549 stressed, this had to be regulated carefully because if it was neglected, ‘it would be burdensome for the common man and might easily cause an uprising in the Empire’ (Volckart, 2017a: 10).

The solution the imperial diet found was to allow a certain number of estates to retain their traditional small change; this should merely be modified so far that clear and fixed numerical relations with the larger denominations valid all over the Empire were established. Already in 1545, the monetary policy committee at the diet argued that this would help: ‘One would be able to take this into account in future transactions, contracts, purchases and sales so that the prices of commodities down to the *Pfennig*-bread’ – a generic term used for all cheap and everyday goods – ‘are not being increased, because one retains the small *Pfennig* at every place and can use it to determine how much more or less should be paid in the new coinage’ (which consisted of the larger denominations only).³

The core insight that follows from this is that the monetary union created in 1559 never aimed at creating complete uniformity. That some traditional small change was to be retained was not disputed, not even by those who advocated that at some unspecified point in the future it should be replaced by a common imperial *Pfennig*.⁴ Who should be allowed his own small change was a different question, and one that made it easier for the imperial diet to convince initially reluctant but influential estates of the advantages of monetary union: These estates were granted a number of medium-sized units of their own, too (though in 1559 this number was drastically reduced from that which Charles V’s failed ordinance of 1551 had permitted). After all, it made sense to show consideration for the higher ranking and more influential princes, whose support for the common currency was needed and part of whose prestige had for centuries rested on having their own

³ StA HHStA, RHR, Miscellanea Münzwesen 1: Münzwesen im Reich (2. Konvolut), fol. 221 r.

⁴ An anonymous and undated memorial found between other such reports from about 1550 advocated that ‘the other *Pfennigs*, as each one has them and as they are common in each one’s land, should also stay current; it was then to be expected that over time they would disappear and the imperial *Pfennig* would prevail’. ÖStA, HHStA, Reichshofrat, Miscellanea Münzwesen 2: Münzwesen im Reich, 1551-1564, fol. 24-28.

coinage. That is why at a conference convened by the imperial diet in 1549 to draft the common currency bill the delegate of the elector of Brandenburg insisted on Brandenburg being treated in the same way as electoral-Saxony where regional small change was concerned (Volckart, 2017a: 141). The idea to introduce Empire-wide larger coins but to retain regional small change was thus a pragmatic compromise that took both the wishes of some of the imperial estates and the needs of the common man into account.

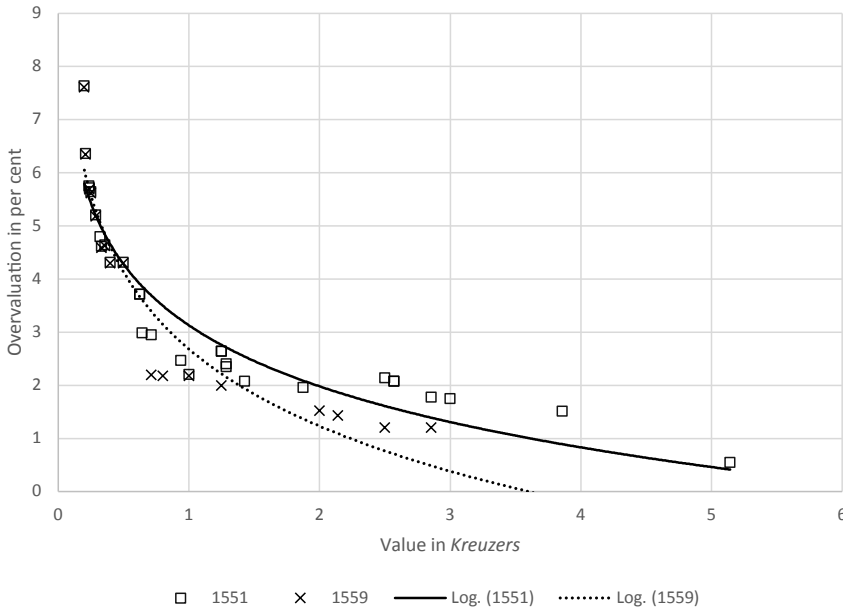
The question of whether the Empire reached its aim of preventing inflation is an entirely different matter. In this respect, there is no denying that monetary policies failed. Inflation continued unabated, though from 1559 onward we must distinguish between wholesale and retail prices. This is because while the larger units of the common currency that were used across the Empire and in long-distance and wholesale trade remained intrinsically stable, the regional small change continued to be debased. The reason was straightforward. Relative to the total nominal value minted, it cost more to produce small change than larger units, with the wages of the moneyers playing the decisive role (cf. Sargent and Velde, 2002: 53). Rulers typically left the decision which types to mint to their mint officials, who took this into account. The consequence was that if nothing was done, mints focused on issuing high-purchasing power units rather than small change.

Most authorities addressed the problem by reducing the pure silver content of small coins. Their aim was offsetting the higher labour costs of minting small change with lower costs for the bullion needed as raw material. This turned small coins into official tokens that were overvalued relative to their bullion content. In the Empire, both the 'Augsburg Imperial Coinage Ordinance' of 1559 and its predecessor of 1551 applied this principle. Such a policy was a balancing act, though. If the pure silver content of small change was not lowered sufficiently, producing it was still so expensive that the mint would focus on issuing the larger pieces; if it was reduced too much, markets would be swamped with small change. Figure 3 shows that both in 1551 and 1559 coins were the more strongly overvalued the smaller they were.

This helped covering the relatively higher labour costs their production involved. The trend lines also show a clear difference between the two bills, with the one of 1551 overvaluing small change too much and that of 1559 not enough.

Figure 3

Overvaluation of small change relative to the large coins, 1551 and 1559



The consequence was that the few estates that adopted the bill of 1551 issued too much small change, whereas after 1559 too little was being produced, with for example electoral-Saxony hardly minted any at all (Wuttke, 1897: 248-249). Elsewhere – for example in the Lower Rhineland and Westphalia – the imperial circles coordinated the response, agreeing on a concerted debasement of their regional small change (Lennartz, 1913: 10-11). This was progress in so far as debasements did no longer take place in a completely arbitrary way, but it still had adverse consequences: As state capacities were too underdeveloped to force consumers to use money at its face value, it caused the appreciation of the larger, Empire-wide units (Reichstalers and -gulden) in the regional units some estates were allowed to issue (cf. Table 1).

Table 1

Taler- and Gulden rates in regional small change, 1559-1619⁵

	Taler				Gulden		
	Albus	Groschen	Kreuzer	Schilling	Albus	Groschen	Kreuzer
1559 (legal rate)			68.0		23.3	21.0	60.0
1565-69			69.0	29.1		21.0	60.0
1570-74		24.0	67.0	30.9	27.0	21.0	
1575-79			72.2	31.0			
1580-84	32.6		70.7	32.0			
1585-89	34.0		71.4	34.0			60.0
1590-94	35.5		72.0	37.0	27.0		62.0
1595-99	36.3		73.4	38.0			64.0
1600-04	37.3	25.0	75.0	39.0			64.4
1605-09	39.4	27.1	79.1	38.6			68.4
1610-14	38.1	29.9	85.4	38.8		22.5	75.1
1615-19	41.1	32.1	89.9	42.6			80.1

The asymmetric development of wholesale and retail prices reflects the appreciation of the large units. For example, in Frankfurt the retail wheat price index (based on payments in small denominations) increased from 1 to 1.8 between 1560 and 1610, while the wholesale index (based on Reichstaler-prices) only rose to 1.3 (Sprenger, 1977: 63). Evidently, concerning the prevention of retail price inflation the Empire's monetary policies failed to reach their aim. However, its currency was by no means the only one where large and small units were only weakly linked. Take the English one, for example: A late-seventeenth-century report complained that

‘[i]n Consequence of the Vitiating, Diminishing and Counterfeiting of the Currant Moneys, it is come to pass, That great Contentions

⁵ (Hoffmann, 1692: 'Auf- und Absteigungs-Tafel', Steinen, 1755: 1075, 1090, Hirsch, 1756: 25, 46, 379, 1759: 50, 54, 1761: 135, 155, Kruse, 1766: 163, 193, Klotzsch, 1780: 492-494, 521, Evers, 1798: 56, Löbe, 1845: 37, Grote, 1864: 38, Popelka, 1930: 167, Pribram, 1938: 28, Altmann, 1976: 272, Schneider, 1981: 54, 1990: 74, Weisenstein, 1991: 93-94).

do daily arise amongst the King's Subjects, in Fairs, Markets, Shops, and other Places throughout the Kingdom, about the Passing or Refusing of the same, to the disturbance of the Publick Peace...; Persons before they conclude in any Bargains, are necessitated first to settle the Price or Value of the very Money they are to Receive for their Good' (Lowndes, 1695: 115).

The Pound Sterling of the years after the Glorious Revolution did not fundamentally differ from the common currency of the Empire a hundred years before. In fact, small change was everywhere only in a loose and uncertain way integrated with the higher denominations of the currency, no matter whether it was issued in the form of tokens for example by merchants or as part of the official currency by political authorities (Helleiner, 2003: 23-24).

5. Did the common currency prevent Gresham's Law from undermining monetary stability?

What did the imperial estates do to reach the main aim of the common currency, that is, make it impossible for Gresham's Law to undermine monetary stability? In principle, after 1559 there was still scope enough for the Law to become effective. At that time, up to almost 150 authorities within the Empire were minting (Prokisch, 1993: 1-244). For the common currency to work, each of them had to maintain the imperial standard, with the danger being that if one of them deviated from it and issued underweight money, the trade in coinage with all its consequences would restart. The question was, how could this be avoided?

One fundamental issue was the way the production of coins was financed. In the late Middle Ages, rulers often outsourced their mints. In practice, this meant that for example in France, the government saved the initial outlay of money that running a mint required by auctioning off the right to issue coins of a prescribed standard to the highest bidder; this was normally done for a year at a time. In fifteenth-century Germany, four to six years were common (Spufford, 1988: 17). Often, the successful bidders – the 'mint farmers' – seem to have been the mint masters themselves who had a hand in the trade with precious metals. Charles V's common currency bill of 1551 prohibited the prac-

tice, and this was one of the complaints the delegates of the elector of Trier raised against the ordinance during monetary policy talks in Speyer in 1557 (Volckart, 2017a: 370). On that occasion, the envoys of Württemberg summarised the common objections to mint farming. They considered it

‘most harmful and serving to nothing but to allow the mint masters to look to their self-interest and hinder the common weal, as daily experience has – with all due respect – shown almost anywhere in practice’ (Volckart, 2017a: 412).

Mint farmers were obviously tempted to debase the coinage without the government’s knowledge, thereby increasing their share in the profit. Calling a practice ‘self-interested’, as the Württembergers did, was typically sufficient to close the matter, and that was the case here, too. Ferdinand’s amended currency bill of 1559 prohibited outsourcing mints just as its predecessor had done (Leeb, 1999: 1985).

A mint’s financial autonomy that the practice of mint farming implied made governmental supervision harder, but in principle mint masters working as government officials faced the same incentives as mint farmers did. Their wage consisted of a share of the coins they produced, and they could increase this by clandestinely debasing the coinage. In the late Middle Ages, rulers had begun to realise that supervising mints was necessary and had begun to appoint officials tasked with checking their mint-masters’ work (Spufford, 1988: 24). However, not all of them had done so. Most were struggling to make do with their regular revenues, and having to pay the salary of another official was something that particularly poor ones tried to avoid (for example, the mint of Königsberg in Prussia operated without a supervisor in the 1520s. Volckart, 1996: 409). In 1559, a supplement bill to the Coinage Ordinance – the so-called ‘Probation Ordinance’ (probation is the technical term for testing coins) – made having a technical supervisor mandatory; moreover, it closely regulated what this official had to do. An essential part was checking that the alloy the mint master prepared contained the correct proportion of pure gold or silver and base metal and that the coins minted from it had the correct weight (Leeb, 1999: 1991-1992).

So far, legal requirements did not deviate from tried and tested practices. However, the imperial estates realised this was not enough. After all, mint masters and their supervisors faced incentives to collude: They could agree on a debasement and share the profits. The law of 1559 prohibited this (Leeb, 1999: 1998), but how could it be prevented? Here, the imperial diet found a solution that was not only innovative and effective, but ideally suited to a decentralised polity like the Empire. Phrased in the ceremonial language of the time, the relevant paragraph of Ferdinand's bill read,

‘so that Our and the Holy Empire's Coinage Ordinance is obeyed and observed the more strictly, the minting authorities in each of the Holy Empire's circles shall ordain that common probation diets and tests of the common imperial coins shall be held twice every year ..., for which reason we have ordered a particular Probation Ordinance to be set up. We also wish that soon after this imperial edict has been published, each circle's minting authorities agree on a common place to meet, where the first probation shall be held on the first day of May and the second on the following first of October, as defined in said our Probation Ordinance’ (Leeb, 1999: 1980).

Making the circles responsible for supervising the coinage was a master stroke. The Probation Ordinance ordered every imperial estate issuing coins to send one or two councillors experienced in monetary politics together with its mint master and assayer to the probation diet of its circle; estates that did not mint should at least send someone experienced in monetary matters, and those who failed to do so three times were to forfeit their right to mint (Leeb, 1999: 1993). Later imperial assemblies added a few more provisions: Each circle was to shut down all except three or four mints, and neighbouring circles were to ‘correspond’, that is, to cooperate in currency questions (Lanzinner, 1988: 1246-1247, Hirsch, 1756: 106).

Probation diets solved the incentive problems of mint-supervision. The assayers the estates had to bring samples of every batch of coins minted since the last meeting – samples marked with the date they had been produced – that were now analysed in the presence of all coun-

cillors, mint masters and other supervisors. If they had produced coins of which they did not bring specimens, this would likely be noticed. After all, estates that were not minting but using the money produced by their neighbours were present, too, and these estates faced strong incentives to report rule violations, which then could no longer be hushed up even if all minting estates colluded.

In recent years, historians have begun to examine how well the circles performed. One that has received special attention is the Lower-Saxon Circle, much of which consisted of lands that in the late Middle Ages were politically 'distant' to the emperor. To some extent, this was still the case in the mid-sixteenth century. Lower Saxony was the only circle not represented at the monetary policy talks that prepared the common currency. After the imperial diet had passed the bills of 1559, there was trouble, too, with the Lower-Saxon estates refusing to implement the Coinage and Probation Ordinances. This changed only once the imperial diet had accepted the Taler as part of the Empire-wide common currency in 1566. Two years later the Lower-Saxon estates agreed to implement the amended version of the laws passed nine years before (North, 2006: 225). From then on, the common currency was as well-managed in Lower Saxony as it was further south, for example in Bavaria, Franconia or Swabia.

Probation diets did not hesitate to proceed against estates if deficiencies came to light. For example, at an Upper-Saxon diet held in December 1571 in Jüterbog close to the border of electoral-Brandenburg and Saxony, it was noted that

'a mint master expelled from the Lower-Saxon circle is operating an illicit mint on behalf of counts Volrath and Charles of Mansfeld, where good coins are being melted and turned into bad and poor ones, so that at that place the Imperial Coinage Ordinance is being violated in many ways' (Hirsch, 1756: 119-120).

The probation diet decided not only to notify Emperor Maximilian II (Ferdinand's son and successor), but also called on the director of the Upper-Saxon circle, Elector Augustus of Saxony, to intervene. In 1572 electoral-Saxon officials destroyed the illicit mint and arrested its

staff (Nicklas, 2002: 128). Moreover, when the circle implemented the decision of the imperial diet to shut down all except three or four of its mints, they chose Leipzig, Berlin and Stettin, leaving the counts of Mansfeld empty-handed – and this despite the counts controlling one of the most important silver mining districts of the Empire (Krüger, 2006: 55, North, 2006: 226). Other circles proceeded in a similar way, with the Lower-Rhenish-Westphalian one choosing Cologne, Aachen, Münster and Emden – later supplemented by Cambrai – as their common mints, the Franconian one Würzburg, Schwabach, Wertheim and Nuremberg, and so on. (Hirsch, 1756: 129, Lennartz, 1913: 12).

How effective were these measures? The problem in answering this question is that we have no way of quantitatively assessing the volume or value of the coinage traded as raw material for the mints maintained by the estates. Qualitative evidence of the type quoted above seems to become gradually more frequent in the decades leading up to 1559 but does not necessarily imply that the trade in coinage was becoming more important. It may just as well reflect the better preservation of sources. As for the post 1559 period, the frequency seems to decline, but a comprehensive survey of the surviving evidence has never been attempted. What is undeniable is that the trade in coinage continued to be an issue. The concluding document of the diet of Speyer of 1570, for example, claimed that it was ‘evident’ that several estates had debased their small change and used it to buy up the ‘good imperial coinage, to throw it into the crucible and turn it into base Pfennigs and Hellers with which they fill all lands’ (Lanzinner, 1988: 1234).

However, the widely implemented decision to limit the number of mints per circle is likely to have had some effect. It implies that the remaining mints struck coins on behalf of several – and sometimes of a large number – of estates. As minting those of one estate only to melt down the product to use it as raw material for the coins of another would have made no sense, we can assume that the scope for engaging in the trade in coinage was massively reduced – at least as long as the number of mints was restricted in the way described above. This seems to have been the case for some decades, but in the last years

of the sixteenth century illicit mints began to re-appear: In the Upper-Rhenish circle, there were twenty next to the four legal ones in about 1600, and the Upper-Saxon circle gave up minting according to the common currency ordinance of 1559 in 1610 (Schrötter, 1930: 256-257, Wuttke, 1897: 243). In the same year, complaints about the export of good money that was used as raw material for poor imitations resurfaced in Hamburg (Schneider, 1981: 53). Still, regarding its main aim – eliminating the conditions that allowed Gresham's Law to operate – the imperial monetary union by and large achieved what it was supposed to achieve – at least for thirty or forty years, and at least within the Empire.

Relations with neighbouring countries – among them most importantly the Netherlands that were economically closely linked but politically increasingly distant – were a different matter. Of this, the emperor's councillors were strongly aware. A memo that the imperial Pfennig-master – the official tasked with collecting the contributions the estates made to the upkeep of the imperial chamber court – Georg Ilsung submitted in 1571 lauded the Coinage Ordinance; the problem was that local authorities, especially in the border regions of the Empire, did not put a stop to the import of base foreign coins (Rauscher, 2004: 113). This was particularly relevant in the regions neighbouring the Netherlands as the Dutch exported rijksdaalders – underweight imitations of the Empire's high-value Reichstalers – to pay for their growing import of grain and other food. By about 1600, the province of Holland alone sent at least 2 million such pieces per year to the grain-producing regions on the south-coast of the Baltic (Attman, 1989: 67, North, 1996: X, 59-60, cf. Bergerhausen, 1993). Now, Ilsung was certainly right, but what were local authorities supposed to do? Keeping foreign money out of circulation required monitoring the borders, and for that state capacities were too rudimentary even at the end of the sixteenth century.

This did not only apply to the Empire: It is all too rarely realised that territorial currency monopolies were only established in the nineteenth century. The Empire may have been 'a beautiful garden with

no fence around it', as a prominent merchant of Leipzig called it in a monetary policy memo drafted in 1592, but so were all other countries (Gerhard, 1994: 156, Helleiner, 2003: 21, Cohen, 1998: 4, 6). England, for example, was no exception. A dialogue probably authored by the member of parliament John Hale in about 1550 complained about foreign merchants and

'coine made beyond the seas, like in all thinges to oure coine, which they brought ouer in heapes; and whan they see that esteemed as siluer, thei bringe that for oure commodities; ... And the stuffe is good cheape that they make yt off' (Lamond, 1929: 45, cf. Deng, 2009).

In France in the 1560s foreign coins proved so popular that they generally circulated at a premium (Richet, 1961: 368). When in 1640 to -42 the French crown ordered Spanish, English, Dutch, German and Italian coins to be withdrawn and re-issued as French money, they collected gold to a value of 45 million livres. This alone matched 20 per cent of the total French quantity of money, and we do not know how much foreign silver, which was not re-minted, we need to add (Glassman and Redish, 1985: 44-45). In short, monitoring cross-border monetary circulation required resources that no early modern ruler had or wanted to spend. Still, within the Empire, the aim of preventing the trade in coinage, the breaking and reminting of coins was to a certain extent reached. In so far, the common currency can be considered a success – not without weak points, but a success nonetheless. Moreover, concerning the large coins valid across the Empire – primarily Reichstalers and –guldens – the success of the monetary union was unqualified. Intrinsicly these units were perfectly stable, and while prices continued to rise this was a consequence of the growth of the quantity of money rather than of monetary instability (Sprenger, 1984: 137-139).

6. Conclusion

Contemporaries and later observers praised the monetary union. In 1571 an anonymous author noted that Emperor Ferdinand's Ordinance of 1559 and its amendment of 1566 were 'imposing and well

considered' and could 'hardly be improved'; twenty years later another admitted that while they had met some opposition ('like all good proposals'), they took all relevant circumstances into account and were 'highly useful measures' (Hirsch, 1761: 87, Friese and Spangenberg, 1592: 204-205, cf. Hirsch, 1756: 102). There were weak points that contemporaries addressed, for example the fact that the integration of the Netherlands failed (Volckart, 2017a: LXXIV, Bergerhausen, 1993: 192). As we have seen, they also complained about the lack of stable numeric relations between small change and the higher denominations and about the continuing inflow of foreign coins into the Empire. Measured by the original aims of the reform, the introduction of the common currency was no more than a partial success. However, its deficiencies were by no means unique. In fact, all other premodern European currencies suffered from the same defects, primarily from the weak integration of small change into the monetary system and from the circulation of foreign coins next to the domestic money. Moreover, it is undeniable that the creation of the monetary union of the Holy Roman Empire massively improved everyday life. Let's hear an eyewitness: Fynes Moryson, who had travelled the Empire in the 1590s. In the account of his journey he published in 1617, warned other travellers. In Germany, he said, the lands of princes were of small extent, 'and each of these Princes doth coyne small pieces of brasse money'. He cautioned:

'It behooveth the passenger to take heede, that he spend each Princes brasse moneys within his Territory, or else that upon the confines hee change them into brasse moneys currant in the next Territory; which if hee neglect, the subjects of the new Prince ... will not receive them without great gaine, they being of themselves little worth, and onely by the prerogative of each Prince, currant among their owne subjects' (Moryson, 1617/1907b: 133).

By the 1590s the estates had debased regional small change to 'brass', which no one outside their home territories was willing to accept. Such coins were fiat money people used because they trusted in the integrity of the authority issuing it and knew they would be able to exchange

them for silver. It is likely that this trust was rooted in the estates' continued observance of the legal standard of the larger coins that were valid all over the Empire.

Many small territories, each with its own small change that could be used nowhere else: measured by modern standards this sounds like a nightmare. However, considering conditions before the reform of the Empire's monetary system, it was a distinct improvement. After all, earlier in the sixteenth century, small change from Henneberg had circulated as far afield as Carinthia, while the subjects of the electors and dukes of Saxony were expected to learn to recognise dozens of different types of small change, most of which were foreign, and not merely to recognise them, but also to use them at the value the Saxon governments had determined. Such conditions created uncertainty and complicated transactions. This had changed. Now, for example consumers in the landgraviate of Leuchtenberg in the Bavarian circle used the copper Hellers and Pfennigs that the landgrave's mint produced for small purchases and larger units that were valid all over the Empire for large transactions (Moryson, 1617/1907a: 34). For most people, conditions had become much simpler and clearer than they had been for their grandparents. In so far, the Empire's common currency was a resounding success – which is why after roughly a decade and much archival research, I stand corrected: Today, I would no longer write a chapter like the one I published in 2013 on 'the failure of the Empire's common currency'.

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Session 1: Monetary Unions and Economic Integration

Financial Flows in the Latin Monetary Union: A Machine Learning Approach

Thomas Pellet and Giovanni Sciacovelli

Introduction

If we could go back in time, we could generate all the data we need to answer the questions that haunt us today. But data collection cannot happen retrospectively. Economic historians are thus dependent on their predecessor's goodwill. How to access historical records of national accounts at times when the notion of national accounts did not exist? How to access records of bilateral financial flows across nations when nation states were still in their infancy? Historical records might not exist because their underlying economic concepts were yet to be discovered.

Accepting these intrinsic data limitations would greatly reduce the range of questions an economic historian can answer. The main danger is to fall for the "drunk and the lamp-post" fallacy, asking the questions one can answer instead of the questions one ought to ask.

One way forward is of course to keep searching for more data sources, discover new historical records. And there are still treasures in archives around the world to discover. It remains that this strategy is constrained by what contemporaries decided to record at the time they lived. Some variables of interest have simply never been recorded so that the precise information is lost forever. It is not possible to run a randomized control trial in the past tense, or introduce the concept of national accounting in antic Rome. And yet it might still be the information we need to answer important research questions.

A solution is to find clever ways of reinterpreting existing data in a new lights, to help us measure today what they missed then. The risk is that these

natural proxies capture something else entirely. And it is not always possible to find natural proxies for the question one wants to answer.

Another solution, and the main focus of this paper, is to extract more information from the data we already have to generate synthetic proxies. In many historical applications, despite a missing variable of interest, many others variable are available. Building proxies given a set of observables is fundamentally a conditional prediction exercise. And this is exactly the type of settings where machine learning models perform well. The generalization of these methods in economic history could therefore relax the data availability constraint the same way that it did in other fields like finance (Jasova et al., 2021).

To illustrate the point, this paper considers the literature on the Latin Monetary Union (LMU), a currency union created in 1865 by France, Italy, Belgium and Switzerland to unify their monetary systems under a common bimetallic standard. Long forgotten with the global take-over of the gold standard at the end of the XIXth century, the literature on the LMU revived after the creation of the Euro area, its indirect descendant.

The LMU literature focused on establishing an extensive historical account of the events that led to its creation and later collapse (Einaudi, 2000; Willis, 1901; Einaudi, 2001) and few papers try to identify causal effects of the LMU (Flandreau, 2000; Timini, 2018). Despite being monetary and financial in nature, the literature has focused exclusively on trade in goods. The most likely explanation for this state of affairs is data availability: bilateral trade indicators are readily available, while dis-aggregated financial indicators are not.

This paper takes a different route. The LMU was effectively a common currency regime with fixed exchange rates, reducing foreign exchange risks and possibly enhancing financial market integration among its members. International financial flows rather than trade flows are for these reasons a more pertinent variable of interest. The problem is that the data does not exist at the bilateral level and only recently researchers have released measures of aggregated capital accounts for the period (Reinhart et al., 2016). Can we find a way to create a synthetic proxy for bilateral financial flows that would be good enough for causal inference applications?

This is where machine learning models can come to the rescue. By estimating the relationship between a large set of observables and our variable of interest in modern times, we are able to generate a proxy for our variable of interests in historical times, which can then be used for standard causal inference exercises.

To validate the methodology presented in this paper, we first estimate in post-WW2 data a model of trade flows for which we have 19th century data. This exercise confirms that some machine learning models perform well out of sample, even decades before the estimation period. The best synthetic proxy has an out of sample R^2 of 0.53 in the 1861-1913 period and errors remain relatively homogeneous around 10-15% of the average true value in each given year.

With this new dataset, we are able to estimate the impact of the LMU on bilateral financial flows in a panel setting with country-year and country-pair fixed effects. This paper finds that the LMU had a significant impact on bilateral financial flows for its members, increasing them by 5% during the entire 1865-1913 period.

The structure of the paper is as follows. Section 2 presents the historical context. Section 3 present the available data. Section 4 describes the algorithm used to estimate the machine learning models. Section 5 discusses how we select the best performing model. Section 6 presents the main results of the paper. Section 7 concludes.

2. Historical Context

The Latin Monetary Union (LMU) was established in 1865 by France, Belgium, Switzerland and Italy¹. The agreement revolved around the standardization of gold and silver coinage among member countries, with the goal of reducing exchange rate uncertainties and strengthening the commercial and political relations of neighbouring nations. Both economic and political reasons led to the establishment of the Union. In the following sections, we will review both of these reasons and provide a historical recollection of the main events that characterized the life of the LMU.

Economic Reasons

From an economic point of view, Willis (1901)² emphasises the importance of French monetary history in the 19th century to understand the reasons leading to the institution of the LMU. In 1803, France established a new law setting the ratio of exchange between gold and silver to 1:15.5. The rationale behind choosing this ratio was that, at the time, it was broadly consistent with the market value of the two metals. The consequence of setting such a fixed

¹ Over time, additional countries joined the Union. Appendix A provides additional details on the LMU chronology.

² This work represents one of the most comprehensive reconstructions of the history of the Latin Monetary Union together with Einaudi (2001). These volumes are the main sources of the historical summary we provide in this section.

internal rate of exchange was that, in the years following the introduction of the law, changes in the relative market value of gold and silver led to rapid outflows of the undervalued metal. In particular, the adoption of the gold standard by England in 1816, together with the establishment of ratios equal to 1:15.873 and 1:16 in Holland and the United States, respectively, led to an increase in the world market value of gold short after the introduction of the French 1803 law. As a consequence, gold was massively exported out of France in the first half of the 19th century, and the country's internal medium of exchange consisted predominantly of silver coins up until 1848. From this year thereafter there was a flow reversal, since the market value of gold relative to silver dropped below the 1:15.5 ratio: silver began to outflow France, while gold started to be the most widely used medium of exchange within the country.

As a consequence of this rapid change in the nature of the prevailing stock of coin, the French public debate in the late 1850s was characterized by a growing interest in assuring a more convenient and stable medium of exchange. This interest culminated in the appointment, in 1858, of a commission³ whose goal was to study how to solve the *monetary issue*. The commission highlighted the negative consequences that the current system had on commerce, and proposed policies aimed at stabilizing the internal medium of exchange by attacking money speculators. Despite the work of the commission, the recommended policies were not implemented by the French government.

In 1850, France, Belgium, Switzerland and Piedmont⁴ unofficially agreed to have coins with the same nominal value. However, as the market values of gold and silver fluctuated, creating problems similar to the ones experienced by France, Switzerland (in 1860) and Italy (in 1862) decided to unilaterally reduce the fineness of their coins. Such unilateral practices led to a diverging currency fineness among neighbouring countries, so that arbitrage opportunity arose and the instability of the domestically used mediums of exchange was reinforced. The situation called for a collective response, which was invoked by Belgium in 1864 and that eventually took place with the monetary convention of 1865 involving France, Belgium, Switzerland and Italy, leading to the creation of the LMU.

Willis (1901) highlights that, unfortunately, the Union had the consequence of extending the *status quo* in France (conversion rate of 1:15.5 established by the 1803 law) to other smaller European countries. Importantly, while the

³ Commission Chargée d'Étudier la Situation monétaire.

⁴ Italy was unified in 1861.

LMU solved exchange rate problems among participating countries, it did not address the underlying issues of the French system. Although the Union was formally dissolved in 1927, Willis (1901) argues that, as a consequence of the structural instability of the French system, which was passed to the Union, it *de facto* ceased to exist already in 1885, when additional changes in the market prices of gold and silver⁵ led member countries to substantially revise the original LMU agreement. In particular, in the years before 1885 there had been a reduction in the market value of silver and, similarly to the pre-LMU French experience, this had led to massive outflows of gold from LMU countries (especially France and Belgium) due to the official overvaluation of the metal imposed by the rules of the Union. As a consequence, countries reacted by reducing the possibility of silver conversion, undermining the LMU architecture.

Political Reasons

While the above reconstruction of the LMU history highlights the economic reasons that led to its creation, other authors have emphasised that political considerations also played an important role. Flandreau (2000), relying on notes by French senior officials from the Quai d'Orsay's archives, maintains that the Union represented "the starting point for an active French diplomatic campaign that aimed to introduce a franc-based international currency". According to his reconstruction, during the first half of the nineteenth century, French officials were concerned with the much greater prosperity of England relative to France, and tended to associate it with England's financial advancement and primary role as capital exporter. In particular, the rationale behind this belief was the idea that "investing abroad was spending at home" (Flandreau, 2000, p.34): by investing abroad, the investing country would stimulate a demand increase from the borrowing country, which would then buy goods from the lending nation. According to this view, then, the LMU, by imposing the French monetary system to its neighbouring countries and, therefore, easing financial exchanges, helped France in its goal of serving a more important role as lending nation in international markets. At the same time, as French capital exports to LMU members grew, borrowing countries had an incentive to denominate their liabilities in francs to reduce possible exchange rate risk premia, reinforcing the role of the French currency in capital markets.

From a political perspective, however, it is important to note that not only France, but also the other adhering countries had an incentive to join.

⁵ Mostly linked to the emerge of the gold standard as international monetary system (Meissner, 2015; Timini, 2018; Flandreau and Oosterlinck, 2012).

According to Einaudi (2000), “By attempting to join the union, states with poor public finances wanted to facilitate their international trade, improve the standard of their internal currency, acquire monetary credibility, and gain access to international financial markets”. Hence, Einaudi (2000) emphasises several benefits that smaller European states aimed at reaching by adhering to the Union: not only participation by these countries was seen as a way to solve monetary issues, but it was also a way to enhance participation in international trade and finance. In particular, many of these countries, such as Italy, wanted to acquire credibility as borrowers, and being part of the LMU was believed to be helpful in that regard.

The fact that adhering to the Union was also perceived as a way to access international financial markets helps explain why other countries decided not to join the Union. As a matter of fact, soon after the establishment of the LMU in 1865, the French government invited other countries, such as the United Kingdom and the German states, to join the Union. Einaudi (2000), using sources from diplomatic and banking archives, argues that, despite both Britain and Germany considered to join the Union, they lacked the incentives of Southern European countries of importing credibility or of entering international capital markets. Moreover, additional political considerations such as a potential subordinate position in the system to France, eventually led these countries to abandon the idea of adhering to the Union.

Connection to Empirical Analysis

Overall, the historical recollection of the LMU that we have provided highlights that countries that joined the Union expected to benefit from higher access to credit and international markets. Previous empirical work on the LMU has focused on identifying the effects that it had on trade flows across member countries (Flandreau, 2000; Timini, 2018) concluding that it had a very limited impact. But we believe there may be other important dimensions through which the Union may have played a role. In particular, the context surrounding the birth of the Union suggests that access to international financial markets was a critical goal. This observation provides the ground for our empirical analysis, to which we turn in the next sections.

3. Data

In order to implement our empirical exercise we aim to gather as much information as possible to accurately reconstruct a proxy for bilateral financial flows during the 19th century. To achieve this goal, we rely on several data sources, which we describe in the next section. Afterwards, we

describe how we merged these sources into the final dataset used for our exercise.

3.1. Data Sources

The first data source is Tradehist (Fouquin and Hugot, 2016), a dataset that has been recently developed for the empirical investigation of bilateral trade flows during the period 1827-2014. Five types of variables are included in the dataset: i) bilateral trade flows, ii) country-level aggregate exports and imports, iii) GDPs, iv) exchange rates, and v) additional bilateral factors that can favor or hamper trade⁶. Given the fact that Timini (2018), which represents the most up-to-date analysis of the impact of the LMU on trade flows, used a different dataset, it is worth emphasising why we believe Tradehist to be the appropriate data source for our analysis. Timini (2018)'s analysis relies on RICardo (Dedinger and Girard, 2017), a dataset containing bilateral trade flows during the 19th century. Relative to this dataset, Tradehist has two major advantages. First, its coverage is larger than that of RICardo: combining primary sources with data with preexisting datasets (including RICardo itself), Tradehist reports many more observations than those of RICardo. Second, Tradehist combines trade data with additional variables that are important to explain the observed trade flows. This is not the case for RICardo, whose focus is on providing only trade and exchange rate data. Because our forecasting exercise requires as much information as possible, having both more data points and variables represent makes Tradehist more advantageous.

The second dataset we use is the IMF's Coordinated Portfolio Investment Survey (CPIS) that measures bilateral financial asset positions and financial flows. The dataset provides detailed information on these flows, such as the sector of investment (governments, financial corporations, *etc.*) and the type of investment (equity, debt, *etc.*). In order to capture the entirety of financial flows, we download the variable measuring the overall investment of a country in assets of another country⁷. The variable is available for 15 years within the period 1997-2020, where the years 1998 and 1999 are not available. Table A3 in Appendix C provides summary statistics regarding our collected data.

Lastly, we supplement our dataset with a series on long-run interest rates. The rationale for including this series is that, since we are interested in

⁶ Appendix B provides a list of all variables included in this dataset that are used in our exercise.

⁷ The variable we rely upon is "Total investment in foreign assets, Total Holdings", whose CPIS code is I_A_T_T_T_BP6_USD.T.T.

financial flows, such a variable is expected to have an important informative power. In order to create this series, we collected information from different datasets, the most important ones being the Global Financial Dataset⁸ and the Macroeconomic History Database⁹. Table A5 in Appendix D provides a detailed description of the data sources used to construct this series. Table A4 provides summary statistics for our collected interest rate series.

3.2. Final Dataset

In our analysis, to be as close as possible to Timini (2018), we decide to focus on the sample of countries used in his analysis: Belgium, Denmark, Finland, France, Germany, Greece, Italy, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom¹⁰. Hence, we merge data from the three previously described sources, and restrict attention to these countries. As a consequence, our final dataset spans the period 1861-2014 (starting 4 years before the establishment of the LMU in 1865), includes 59 variables and has an overall size of 29,681 observations¹¹. Starting from this dataset, we use the 1997-2014 sample to train our models in predicting bilateral financial flows, and use the 1945-2014 sample to train models in predicting trade flows for the model selection exercise (a more thorough description of these exercises is postponed to section 5).

4. Model Estimation

The goal is to design the best proxy for bilateral financial flows given the observables we have. This is a pure conditional prediction exercise that is well-suited for machine learning methods. The difficulty resides in preserving good out-of-sample performance despite the lack of historical data on financial flows to externally validate our predictions. From Kaggle data science competitions, XGBoost and LightGBM are supposed to perform best in a time series setting¹². Yet, applications to economic history are slightly different from traditional time series forecasting exercises. It is possible that other models would actually perform better. The reason is economic historians are less interested in T steps ahead forecasts and more interested in predicting a variable over an entire historical period. Machine

⁸ Available at <https://globalfinancialdata.com/insights>.

⁹ Available at <https://www.macrohistory.net/database/>.

¹⁰ Timini (2018) includes Austria-Hungary in his sample. However, since we will be reconstructing financial flows data using post-WWII observations, and given that Austria-Hungary doesn't exist anymore, we don't have data for this country.

¹¹ Tables A3 and Table A4 report statistics of our newly assembled data. The remainder of the variables, coming from Tradehist, are thoroughly described in Fouquin and Hugot (2016).

¹² <https://medium.com/analytics-vidhya/xgboost-lightgbm-and-other-kaggle-competition-favorites-6212e8b0e835>.

Learning models are complex objects and it is therefore difficult to know a priori which one will do better. It is also essential that hyper-parameter tuning does not lead to over-fitting and preserves out-of-sample performance over long historical periods. The methodology developed in this paper and described in Algorithm 1 is grounded on two guiding principles to alleviate these concerns.

Algorithm 1 Cross-validation and model estimation

- 1: **procedure** ESTIMATION(N, X_o, X_n) ▷ X_o, X_n correspond to historical/modern data
 - 2: Split X_n sample in N period blocks
 - 3: **for** $F \in \{\text{set of ML models}\}$ **do** ▷ for Lasso, XGBoost, ...
 - 4: Create hyper parameter grid Δ_F
 - 5: **for** random draw $\delta \in \Delta_F$ **do**
 - 6: **for** $i \in N$ **do**
 - 7: Estimate model F_δ over $N \setminus \{i\}$ blocks ▷ Leave one out for cross-validation
 - 8: Compute cross-validation $R_{F_\delta(i)}^2$ over block i
 - 9: Compute average cross-validation score $R_{F_\delta(X_n)}^2$ over all blocks
 - 10: Select best hyper parameter $\delta_F^* = \operatorname{argmax}_\delta R_{F_\delta(X_n)}^2$
 - 11: Re-estimate model on full sample X_n with cross-validated hyperparameter δ_F^*
 - 12: Predict historical data using $F_{\delta_F^*}(X_o)$
 - 13: Compute out of sample $R_{F_{\delta_F^*}(X_o)}^2$ ▷ Possible only for a test variable
 - 14: Select best performing model out of sample $F_{\delta_F^*}^* = \operatorname{argmax}_F R_{F_{\delta_F^*}(X_o)}^2$
-

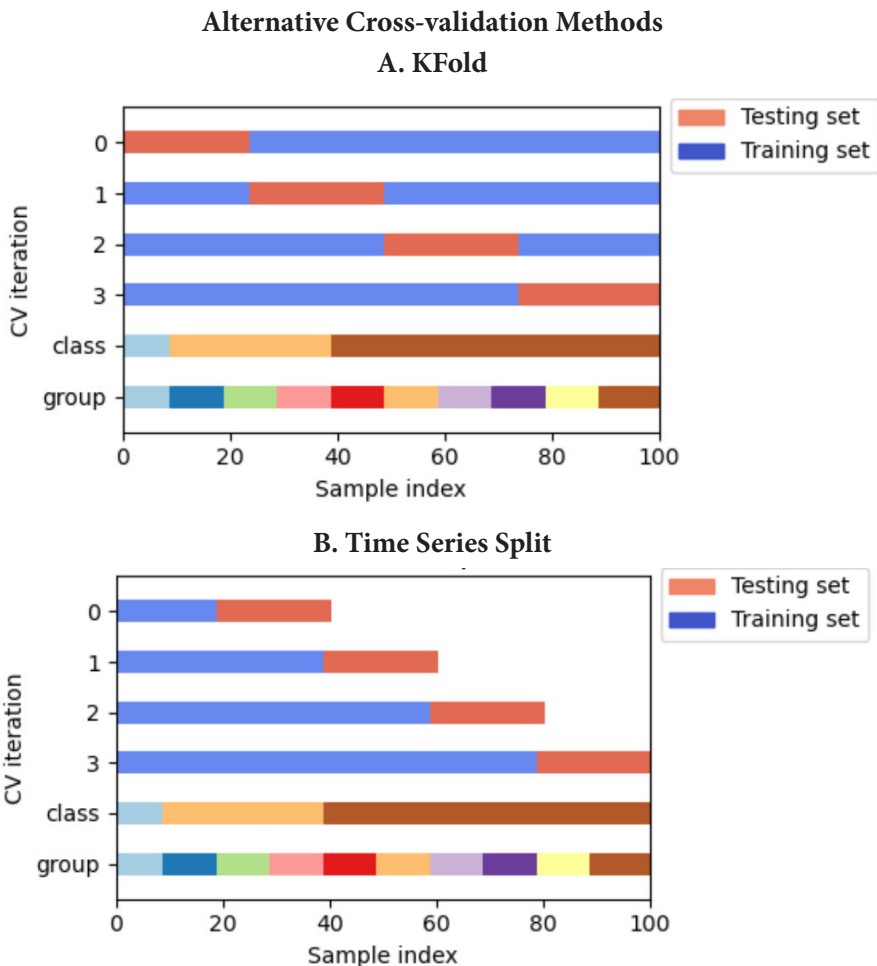
The first is to be agnostic regarding the “right” model and the “right” set of hyper-parameters to use in building our proxy variable. To account for this model uncertainty we benchmark 9 different models with potentially different strengths and weaknesses¹³. We also define a large hyper parameter grid space Δ_F . Using random grid search we explore a hundred hyper-parameter combinations for each model. This guarantees extensive grid search to find a hyper-parameter combination that is relatively close to the global optimum. Otherwise there would be a risk of false negatives, good models that are rejected by our algorithm because the right set of hyper-parameters has not been tried.

The second principle is to select our final model of choice to perform well even many decades prior to the available sample. The algorithm ensures that in two separate steps. First, we select hyper-parameters using KFold cross-validation. Practically, we split the sample of interest into 5 blocks. For each block, we compute a model prediction R^2 based on the estimation

¹³ A description of each model and its characteristics is provided in the appendix E.

over the other 4 blocks. We average those into a cross-validation R^2 that measure how well the model can perform out-of- sample for a given set of hyperparameters. Hyper-parameters are thus selected so that the model has the highest average R^2 when predicting an out-of-sample block. This is the methodology that has been shown to perform best in the finance literature (Bryzgalova et al., 2019; Kaniel et al., 2021; Kozak et al., 2020). It is also better suited than time series split for our purpose given that we are less interested in step ahead forecasts. Figure 1 illustrates the difference between the two methods where year is the “sample index” of our sample¹⁴.

Figure 1



Source: https://scikit-learn.org/stable/modules/cross_validation.html

¹⁴ For a detailed discussion of the different cross-validation methods, the reader is referred to this article from scikit-learn developers https://scikit-learn.org/stable/modules/cross_validation.html.

One possibility would be to simply pick the model with highest cross-validation R^2 and use it to build our proxy for financial flows. This is what is usually done for standard time series exercises. Would that be enough to perform well with wide historical data? Simple KFold cross-validation guarantees that the model performs well out-of-sample, so long as the training set is not too far away in time from the evaluation set. When predicting historical data a century back, this methodology is likely to show its limits.

The second step is to select our final model of choice by comparing prediction performance far out-of-sample for a readily available historical variable. We choose a variable available for the entire 1861-2014 period and to be reconstructed for the 1861-1913 period. Since we want this exercise to be informative about the best performing model for bilateral financial flows, the test variable should be at the same disaggregated level and highly correlated with financial flows. As shown in figure 2, bilateral trade flows is an important predictor of bilateral financial flows. We therefore train our models to predict bilateral trade flows on the 1945-2014 period. We use the same remaining observables and the same cross-validation procedure to predict the test variable and our variable of interest to make the comparison meaningful. Comparing our predictions with the actual data for the 1861-1913 period, we can obtain a measure of out-of-sample performance. Practically we select the model with highest out-of-sample R^{215} . This guarantees that the model not only performs well a few years before the training sample, which is guaranteed by our Kfold cross-validation procedure, but also many decades before that. Doing so we pick the model that best captures long term trends and invariant economic relationships in the data, rather than a good forecasting model at shorter horizon but ill-suited to historical forecasting.

5. Model Selection

Starting from our nine forecasting models, we need to discriminate among them in order to evaluate which has the best forecasting power given the characteristics of our data.

¹⁵ This is equivalent to selecting the model based on the lowest RMSE criterion.

Table 1

Performance on CPIS Financial Flows

	ET	RF	LGBM	NN	XGBoost	Ridge	Lasso	AdaBoost	SVM
R^2 (In-sample)	0.991	0.988	0.979	0.977	0.958	0.880	0.879	0.836	0.815
Folds	120	120	120	120	120	120	120	120	120
N	2483	2483	2483	2483	2483	2483	2483	2483	2483
Years	15	15	15	15	15	15	15	15	15

Notes: Regressors are ordered with decreasing in-sample R^2 values. “ET” stands for Extra Trees, “RF” stands for Random Forest, “NN” stands for Neural Network, “SVM” stands for Support Vector Machine. Iterations measures the number of iterations in our cross-validation exercise. N measures the number of folds available in the sample of our exercise. Years are the number of years we use to train our models (1997-2014, 1998 and 1999 are not available in the original IMF dataset).

Table 1 provides a summary of the performance of our models, which we ordered with decreasing R^2 values. Two important points can be made looking at the table. First, all models perform fairly well in-sample, with R^2 values ranging between 0.815 for SVM, the worst performing model, to 0.991 for Extra Trees, the best performing model. Second, while the overall distance between the best and worst performing model is of 0.176, five of the nine models fall within a range of only 0.033 (ET, RF, LGBM, NN, XGBoost), so that their performance is almost identical. This table is informative about the capacity of the different models to fit the data in sample. And it is not surprisingly that most models do well given how flexible they are compared to a simple OLS. This is not however the way we select the “best” model.

Ideally we would like to rank our models based on their performance at predicting bilateral financial flows over the 1861-1913 period. While we cannot perform any out-of-sample exercise for the variable we are interested in forecasting due to the data limitations problem we are solving, we can evaluate our models on their performance at predicting bilateral trade flows over that same period. Based on these statistics, we choose which models to rely upon to estimate bilateral financial flows.

Table 2

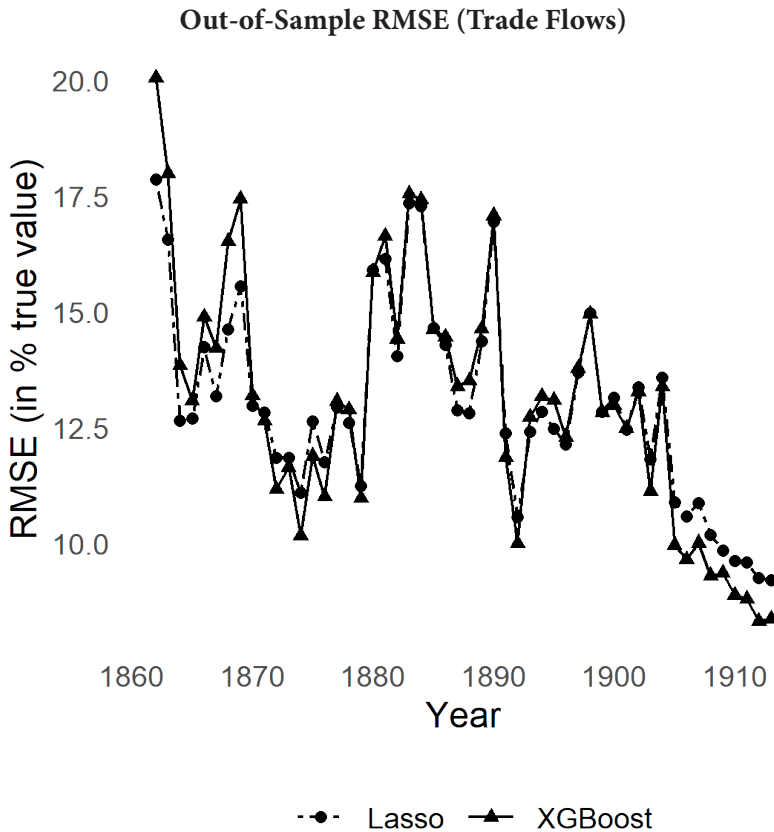
Performance on Trade Flows

	Lasso	XGBoost	LGBM	AdaBoost	ET	RF	NN	Ridge	SVM
R^2 (In-sample)	0.963	0.989	0.989	0.932	0.994	0.988	0.989	0.966	0.778
R^2 (Out-sample)	0.531	0.529	0.313	0.296	0.260	0.213	0.205	-0.082	-2.566
Iterations	100	100	100	100	100	100	100	100	100
N	12381	12381	12381	12381	12381	12381	12381	12381	12381
Years	70	70	70	70	70	70	70	70	70

Notes: Regressors are ordered with decreasing out-of-sample R^2 values. “ET” stands for Extra Trees, “RF” stands for Random Forest, “NN” stands for Neural Network, “SVM” stands for Support Vector Machine. Folds measures the number of folds in our cross-validation exercise. N measures the number of observations available in the sample of our exercise. Years are the number of years we use to train our models (1945-2014).

Table 2 shows the in-sample and out-of-sample R^2 values of our models. The table, where models are ordered with decreasing out-of-sample R^2 values, shows the importance of relying on out-of-sample forecasts. Similarly to the statistics of Table 1, the in-sample performance of all models is very high, spanning from 0.994 for Extra Trees to 0.778 for SVM, a 0.216 difference. Yet, the picture that we get based on the out-of-sample R^2 is different: the ranking of the models changes, and the distance between their accuracy measures increases substantially. In particular, the two best performing models are Lasso and XGBoost, with R^2 values of 0.531 and 0.529, respectively. LGBM, the third-best model, has an R^2 that differs from that of XGBoost by 0.216, approximately the same difference that exists between the best and worst in-sample fit of all models. Extra Trees, the best in-sample performer, ranks fifth. The out-of-sample fit of some models (Ridge and SVM) is so mediocre that their R^2 values are negative.

Figure 2



Based on the results from table 2, we select Lasso as benchmark model to reconstruct bilateral financial flows. Even though our proxy variable cannot be a perfect measure, there are two reasons why we believe our model will make reasonable predictions. First, its out-of-sample performance on trade flows, a structurally similar variable to financial flows, is high. This is shown not only by their out-of-sample R^2 values in table 2, but also by figure 2. The figure displays a measure of the average error in the yearly predictions of our models: the root of the mean squared error of trade flows predictions, expressed as a fraction of the average observed trade flows values. As we can see, with the exception of the very first year for XGBoost, the errors are

always below 20% of the average yearly trade flows, and often below 15%¹⁶. Second, trade flows are an extremely important variable to forecast bilateral financial flows. Yet this important piece of information is dropped when predicting bilateral trade flows (to avoid autoregression), which suggests our models perform well even with a limited set of bilateral observables. This suggests our bilateral financial flow proxy benefits from an important extra variable, and possibly achieves higher prediction accuracy.

6. LMU Effectiveness on Financial Flows

After having reconstructed bilateral financial flows data using our Lasso model, we are ready to evaluate the effectiveness of the LMU on stimulating financial flows. As emphasised in the historical recollection of section 2, enhancing capital flows across members was an important reason for countries to join the Union. Unfortunately, data availability issues have not allowed researchers to investigate this dimension of the LMU so that, so far, the only focus has been on evaluating the impact that it had on trade flows. Thanks to our new methodology we can instead move on and address this question. In the following, we will first describe the empirical strategy we use to evaluate the impact of the LMU on bilateral flows. We will then show our results.

6.1. Empirical Strategy

In order to evaluate the impact of the LMU on bilateral financial flows, we rely on the best practice guidelines to implement structural gravity models compiled by the WTO (Yotov et al., 2016). In particular, this implies that we will be using a Poisson regression, which is able to deal with zero flows values and is consistent with fixed-effects¹⁷; that we will include in our specification both directional time-varying fixed-effects and country-pair fixed-effects; and that we will use standard error clustered at the country-pair level. Accordingly, the main regression in our analysis is:

$$X_{i,j,t} = \beta_0 + \beta_1 LMU_{i,j,t} + \beta_2 GS_{i,j,t} + \beta_3 SMU_{i,j,t} + \gamma_{i,t} + \theta_{j,t} + \delta_{i,j} + \epsilon_{i,j,t} \quad (1)$$

where $X_{i,j,t}$ are our reconstructed bilateral financial flows, $LMU_{i,j,t}$ is a dummy variable equal to one when both country i and country j belong to the LMU at time t , $GS_{i,j,t}$ and $SMU_{i,j,t}$ are dummy variables equal to one when both countries belong to the Gold Standard and Scandinavian Monetary Union at

¹⁶ The figure provides an additional reason to prefer our Lasso model to XGBoost: as the chart shows, XGBoost tends to have higher RMSE relative to Lasso, especially in the first half of the sample. Since the LMU started in 1865, this is an important period for our analysis.

¹⁷ All regressions are implemented using Stata's PPMLHDFE command (Correia et al., 2020).

time t , respectively (we include these two variables to be consistent with the specification for trade flows of Timini, 2018). $\gamma_{i,t}$, $\theta_{j,t}$, and δ_{ij} capture importer time-varying, exporter time-varying, and country-pair fixed-effects.

6.2. Results

Table 3 displays the results of our empirical exercise, where bilateral financial flows are estimated through Lasso, our preferred model. Since the 6 specifications reported in the table follow the main empirical exercises in Timini (2018) for trade flows, table A2 in Appendix F provides Timini (2018)'s results, the most recent on the effects of the LMU, for comparison.

Table 3

Bilateral Financial Flows (Lasso)

LMU	0.051*
	(0.021)
GS	0.248***
	(0.042)
SMU	-0.249***
	(0.048)
N	7169

Notes: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$. Dependent variable: Estimated bilateral financial flows. Regression includes a constant, importer-year, exporter-year and importer-exporter fixed-effects. Clustered standard errors at the importer-exporter level.

The column shows the results of our main regressions, displaying the coefficients of equations 1. The LMU coefficient is positive and significant at the 5% level, with participation in the LMU being associated with an approximate 5% increase in bilateral financial flows. This represents the main result of this study on the effectiveness of the LMU of bilateral financial flows. Differently from the literature on the effectiveness of the LMU on trade flows (Flandreau, 2000; Timini, 2018), we find evidence in favor of a positive impact of the LMU on financial flows.

Finally, although this is not our focus of interest, we note that the coefficients on participation to the Gold Standard (GS) are positive, statistically significant and fairly stable across specifications as we would expect. The coefficients on participation to the Scandinavian Monetary Union (SMU) are negative, statistically significant and stable across specifications, similarly to the results of Timini (2018).

7. Conclusion

This paper emphasizes that a lot more information and correlation patterns can be extracted from existing historical data. Machine learning models can extract that information in a systematic, comprehensive and replicable way, creating synthetic proxies for a wide range of variables that cannot be measured otherwise. Accordingly, bringing these methods into the economic history literature, similarly to what has been done in other fields, could allow to tackle important research questions that tend to be neglected because of data availability issues.

One such example is the literature on the Latin Monetary Union, which has been concerned with trade flows precisely because of data availability issues. From both a theoretical perspective and the historical accounts at the time, the LMU was monetary and financial in nature. A natural exercise would have been to study the effect of the LMU on financial flows absent existing data limitations.

Relying on machine learning techniques, we were able to circumvent that data limitation by reconstructing a proxy for financial flows across 14 countries between 1861 and 1913. It makes possible the measurement of the impact of the Latin Monetary Union on the pattern of European financial flows through standard causal inference methods.

Our main finding is that, differently from what has been found for trade flows, the Latin Monetary Union did favor financial flows among its members, increasing bilateral financial flows by 5% between 1865 and 1913.

Overall, these results provide new insights about the history of the Latin Monetary Union, showing that it did help member countries achieve some of the goals that had pushed them to join the Union in the first place.

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Appendices

A LMU membership

The following table and map provide a summary of the countries that participated to the Latin Monetary Union, together with the time period during which they were part of it.

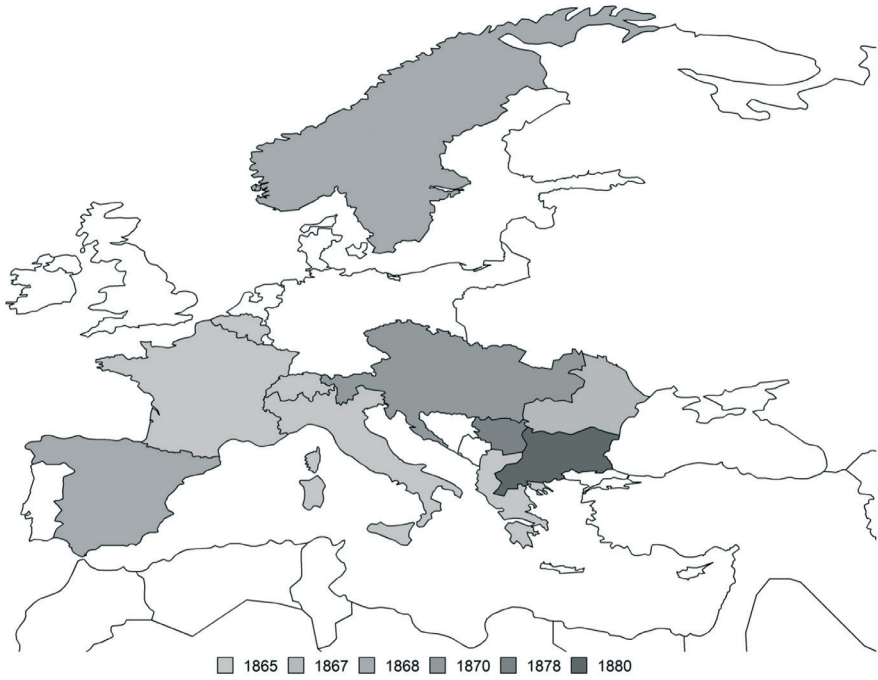
Table A1

LMU Membership

Country	Condition	Date	Period
Belgium	LMU founding member	23 December, 1865	1865-1927
France	LMU founding member	23 December, 1865	1865-1927
Italy	LMU founding member	23 December, 1865	1865-1927
Switzerland	LMU founding member	23 December, 1865	1865-1927
Greece	LMU member	18 November, 1868	1867-1927
Algeria (French colony)	Shadowing	23 December, 1865	n.a.
Austria-Hungary	Shadowing	n.a.	1870-1914
Bulgaria	Shadowing	9 August, 1877	1878-1914
Peru	Shadowing	31 July, 1863	n.a.
Poland	Shadowing	1926	1926
Pontifical State	Shadowing	1866	1866-1870
Romania	Shadowing	1 January, 1868	1867-1914
Russia	Shadowing	n.a.	1886-1865
Serbia	Shadowing	11 November, 1878	187*-1914
Spain	Shadowing	19 October, 1868	1868-1914
Sweden	Shadowing	n.a.	1868-1872
Tunisia (French colony)	Shadowing	23 December, 1865	n.a.
Venezuela	Shadowing	11 May, 1871	n.a.

Notes: This table is taken from Appendix II in Timini (2018), and is here reported for simplicity. The sources of the table are Willis (1901); Einaudi (2007); Helleiner (2003).

Figure A1
LMU membership by year of accession (1880 administrative boundaries)



B Tradehist data**Table A2****Variables from Tradehist**

Variable	Dimension	Description
iso	country	Origin (destination) country
year	year	Year
FLOW	country-pair-direction-year	Bilateral trade flow
GDP_o(d)	country-year	GDP of the country
SH.PRIM.o(d)	country-year	Share of primary sector in the country's GDP
SH.SECD.o(d)	country-year	Share of secondary sector in the country's GDP
IPTOT.o(d)	country-year	Total imports
XPTOT.o(d)	country-year	Total exports
BITARIFF	country-pair-direction-year	Tariff imposed by country d on imports from country o
TARIFF_o(d)	country-year	Average tariff imposed by country o(d)
Distw	country pair	Population-weighted-great-circle distance
Dist_coord	country pair	Great-circle distance between main cities
Dist_o(d)	country	Internal distance of the origin (destination) country
SeaDist_SHRT	country-pair-year	Shortest bilateral sea distance
SeaDist_2CST	country-pair-year	Shortest bilateral sea distance
Comlang	country-pair	=1 if at least one language is spoken by more than 9% of the population in both countries
Contig	country-pair	=1 if the countries are contiguous
Curcol	country-pair-year	=1 if the origin and the dest. are in a colonial relationship
Curcol_o(d)	country-year	=1 if the country is a colony
Evercol	country pair	=1 if countries ever were in a colonial relationship
XCH.RATE.o(d)	country-year	British pounds per local currency unit
POP_o(d)	country-year	Population of the country
CONTL.o(d)	country	Continent of the country
REGIO.o(d)	country	Sub-continental region of the country
OECD.o(d)	country-year	=1 if the country belongs to the OECD
EU.o(d)	country-year	=1 if the country belongs to the E.U.
GATT.o(d)	country-year	=1 if the country belongs to the GATT/WTO

Notes: The description of the variables follows Fouquin and Hugot (2016).

C CPIS Statistics**Table A3**

CPIS Statistics				
	Countries	Observations	FF (Mean)	FF (StD)
Total	93	258459	2650.25\$	108148.27\$
Advanced Economies	31	16765	64800.65\$	188875.05\$
Non-Advanced Economies	62	121091	575.75\$	47257.14\$
Advanced/Non-Advanced		120603	4179.84\$	157339.48\$
Timini	15	4368	6766.55\$	16927.48\$

Notes: FF stands for Financial Flows. The rows “Advanced Economies” and “Non-Advanced Economies” report value where bilateral financial flows involve only advanced or non-advanced economies, respectively. The row “Advanced/Non-Advanced” reports value for bilateral financial flows among advanced and non-advanced entities. The row “Timini” reports values for bilateral financial flows the subsection of countries considered in Timini (2018).

D Long-term Interest Rates

Since the Tradehist dataset does not contain many financial variables, we supplement it with long- term interest rate data assembled using different sources. The tables below provide summary statistics for our reconstructed variable, and a description of the sources used.

Table A4

Long-Run Interest Rate Series: Statistics

Country	Mean	StD
Austria-Hungary	5.65%	2.46%
Belgium	4.81%	2.43%
Denmark	5.62%	3.65%
Finland	5.50%	1.30%
France	4.97%	2.79%
Germany	4.81%	2.11%
Greece	9.45%	4.86%
Italy	6.40%	3.51%
Netherlands	4.37%	2.08%
Norway	5.05%	2.58%
Portugal	6.38%	4.12%
Spain	7.09%	4.24%
Sweden	5.00%	2.73%
Switzerland	3.88%	1.22%
United Kingdom	4.87%	3.18%

Table A5

Long-Run Interest Rate Series: Sources

Country	Source	Series
Austria-Hungary	GFD	10y government bond yield (close), 1861-2017
Belgium	GFD	10y government bond yield (close), 1861-2017
Denmark	DS & GFD	DS: <i>Kursog rentetabeler for obligationsmarkedet, Tabel 6</i> GFD: 10y government bond yield (close), 1861-2017
Finland	Autio & JST	Autio: <i>Liite 1, Oblig. Tuotto</i> 1863-1869 JST: Long-term rates 1870-2017
France	GFD	10y government bond yield (close), 1861-2017
Germany	GFD	10y government bond yield (close), 1861-2017
Greece	GFD & GCB	GFD: Mortgage lending rate (close) 1861-1941, 2003-2013; GCB: Long-term loans by commercial banks 1951-2002
Italy	GFD	10y government bond yield (close), 1861-2017
Netherlands	GFD	10y government bond yield (close), 1861-2017
Norway	GFD	10y government bond yield (close), 1861-2017
Portugal	GFD	10y government bond yield (close), 1861-2017
Spain	GFD	10y government bond yield (close), 1861-2017
Sweden	GFD	10y government bond yield (close), 1861-2017
Switzerland	SNB & JST	SNB: mortgage rates 1861-1880 JST: Long-term rates 1881-2017
United Kingdom	GFD	10y government bond yield (close), 1861-2017

Notes: GFD stands for Global Financial Data, available at <https://globalfinancialdata.com>. JST stands for the Jordà-Schularick-Taylor Macrohistory Database, available at <https://www.macrohistory.net/database/>. For Finland, Autio refers to Autio (1996). For Greece, GCB stands for the Greek Central Bank, whose historical interest rate data is available at <https://www.bankofgreece.gr/en/statistics/financial-markets-and-interest-rates/bank-deposit-and-loan-interest-rates>. For Switzerland, SNB stands for the Swiss National Bank, whose historical interest rate data is available at: https://www.snb.ch/en/iabout/stat/statrep/statpubdis/id/statpub/hiszt_archt2. For Denmark, DS stands for Danmarks Statistik (1969), available at <https://www.dst.dk/Site/Dst/Udgivelses/GetPubFile.aspx?id=19918sid=kreditm>.

E Description of ML Methodologies Used

Our goal is to reconstruct bilateral financial flows during the second half of the 19th century as accurately as possible. In order to achieve this goal, we rely on several machine learning techniques, which have been developed precisely to obtain high performance forecasts. In this section, we briefly summarize the characteristics of the methods we use in our analysis¹⁸.

Lasso and Ridge. The first two methods we use are those of standard Lasso and Ridge regressions (Tibshirani, 1996; Hoerl and Kennard, 2000). These are well known penalized regression methods whose prediction accuracy, when the set of regressors is large relative to the amount of available observations, is enhanced through variable selection (in the case of Lasso) or variable shrinkage (in the case of Ridge). In both cases, the goal is to increase out-of-sample prediction accuracy by limiting the in-sample fit of the model.

Support Vector Machine. Moving away from linear methods, the Support Vector Machine algorithm can implement non-linear regression analyses (Boser et al., 1992) and achieve higher prediction accuracy. The idea behind this method is to classify the training data by creating hyperplanes in a high-dimensional space, which are then used to predict observations out-of-sample in a flexible way.

Random Forest and Extra Trees. Both the Random Forest algorithm (Breiman, 2001) and the Extra Trees algorithm (Geurts et al., 2006) consist in creating several independent regression trees, and then averaging across their predictions. Each regression tree implements a classification of the data through recursive binary partitions of it. The difference between the two methods relies on the fact that, in Extra Trees, each tree is trained using the whole sample while, in Random Forest, trees are trained on a random subset of the sample.

AdaBoost, LightGBM and XGBoost. Similar to Random Forest and Extra Trees, these methods also rely on averaging the results from independent regression trees (Freund and Schapire, 1999; Chen and Guestrin, 2016). Albeit with some minor differences in the way the algorithms are implemented, all three of them sequentially evaluate the performance of regression trees, and assign a weight to these based on the accuracy of their forecasts. Through this iterative procedure, the algorithms build a model as a weighted sum of the predictions of the independent trees, enhancing their

¹⁸ This is in no way a detailed description of the algorithms we are using but, rather, an intuitive description of their main characteristics. We provide references to studies providing a more formal description of these methods.

individual forecasting ability. The main difference across the algorithms is indeed linked to the way in which the weighting is implemented.

Neural Networks. Multi-layer Perceptrons (MLP) regressors are function approximators characterized by hidden layers of basis functions stacked on top of each other between an input layer and the output layer. Each layer is composed of neurons, which are weighted linear summations of the output of previous layer's neurons plus a non-linear activation function. We use up to 4 hidden layers and 100 neurons per layer in the cross-validation step of the algorithm.

Table A6 below provides a summary of the main pros and cons of the ML methods we use.

Table A6**Characteristics of ML Models**

Method	Category	Pros	Cons
Lasso	Regularization Algorithm	Model selection	Linear
Ridge	Regularization Algorithm	Model shrinkage	Linear
Support Vector Machine	Instance-based Algorithm	Memory-efficient	Unsuited for very large datasets
Random Forest	Ensemble Algorithm	Effective large data handling	Expensive cross-validation
Extra Trees	Ensemble Algorithm	Faster than Random Forest	Expensive cross-validation
AdaBoost	Ensemble Algorithm	Low overfit	Sensible to noise
XGBoost	Ensemble Algorithm	High-accuracy	Overfitting
LightGBM	Ensemble Algorithm	Faster than XGBoost	Overfitting
Neural Networks	Artificial Neural Network	High-accuracy	Difficult interpretability

F Results from Timini (2018)

Chart A2 below is taken directly from Timini (2018), and is provided here to ease comparison with our results.

Figure A2

Table 2. Bilateral trade flows and monetary agreements, 1861–1913

	(1) LMU 1861–1913	(2) LMU 1861–1913	(3) LMU 1861–1885	(4) LMU 1861–1885	(5) LMU 1861–1874	(6) LMU 1861–1874
LMU	-0.127 (0.094)		-0.182* (0.095)		-0.158* (0.094)	
LMUFrance		-0.132 (0.093)		-0.209* (0.095)		-0.147* (0.094)
LMURest		0.0817 (0.159)		0.129 (0.166)		0.0810 (0.163)
LMU1885			0.155*** (0.0336)			
LMUFrance1885				0.167*** (0.0330)		
LMURest1885				-0.222*** (0.059)		
LMU1874					0.205*** (0.055)	
LMUFrance1874						0.205*** (0.055)
LMURest1874						-0.105 (0.093)
lnPOP	1.665*** (0.190)	1.665*** (0.190)	1.664*** (0.190)	1.654*** (0.189)	1.663*** (0.190)	1.658*** (0.190)
SCU	-0.441*** (0.092)	-0.441*** (0.092)	-0.459*** (0.093)	-0.449*** (0.093)	-0.473*** (0.094)	-0.467*** (0.094)
GS	0.295*** (0.040)	0.295*** (0.040)	0.259*** (0.039)	0.253*** (0.039)	0.262*** (0.039)	0.264*** (0.039)
AllianceTreaty	-0.157*** (0.025)	-0.156*** (0.025)	-0.158*** (0.024)	-0.132*** (0.025)	-0.155*** (0.025)	-0.140*** (0.025)
N	6,503	6,503	6,503	6,503	6,503	6,503

Notes: Poisson regressions. Dependent variable: Imports (value). All regressions include a constant, importer-year, exporter-year, and dyad fixed effects, not reported for the sake of simplicity. Robust standard errors in parentheses; *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Source: Author's elaboration.

Session 1: Monetary Unions and Economic Integration

Application Of Latin Monetary Union Standards and Practice in Serbia (1868–1918)

Sonja Jerković and Saša Ilić

Abstract

Having acquired autonomy within the Ottoman Empire in 1830 and 1833, Serbia embarked on the process of economic emancipation, reflected, *inter alia*, in the efforts to restore national coin minting after more than four centuries. Following European trends which sought to standardize the money in order to upgrade international exchange, Serbia adopted the standards of the Latin Monetary Union and applied them first in minting small copper coins put in circulation in early 1869, and then also in minting silver coins (1875) and 20-dinar gold coins (1879). Though Serbia's three attempts to formally become a member of the Union proved futile, it adhered to the Union rules concerning coin fineness, weight and size.

Key words: Serbia, money, dinar, Latin Monetary Union, National Bank of Serbia, minting.

JEL Classification: E42, E58, N13, N14, N23, N24, N43, N44.

Introduction

After the Ottoman conquests, the Serbian medieval state ceased to exist in the second half of the 15th century. With the loss of state independence, the minting of domestic money stopped, and the conquered territories entered the Ottoman government system and new economic relations, including monetary relations. When the expansive period of the Ottoman Empire,

during which taxes and other levies were tolerable, was replaced by a decline and crisis, dissatisfaction of the conquered people grew. Early 19th-century Serbia was in a state of unrest amid interfaith differences and the disparity between the conquerors and the conquered, difficulties caused by war failures (primarily with Austria and Venice), weakening of the central government and anarchy in the border areas of the Empire, but also due to the influences that flowed through Europe after the French Revolution. The repression by local Muslim leaders caused a revolt of Serbs, which manifested itself in the uprisings of 1804 and 1815, during which the Serbian Revolution was carried out (Ranke 1991), i.e. the process by which changes in socio-economic relations were made through national liberation, including a change in the ownership structure. In negotiations that replaced the armed struggle, the leader of the Second Uprising, Miloš Obrenović, provided Serbia with the autonomy and the status of a principality (1830 and 1833), and the process of modernisation began.

Despite the internal turmoil embodied in dynastic conflicts and the efforts of local leaders to limit the Prince's autocracy, Serbia sought to develop a civil society by affirming the process of building state institutions and the army, achieving church autonomy, creating an environment for free trade, ensuring equal property and civil rights of its subjects before the law (the Civil Code of 1844 introduced legal security and inviolability of private property), encouraging the development of culture and supporting education by opening schools and providing foreign scholarships for students. Further impetus to social progress followed during the second government of Prince Mihailo Obrenović (1860–1868), an educated ruler, determined to change relations in foreign and domestic politics in the spirit of enlightened absolutism. He managed to send off the last Turkish military garrisons in Serbia and keep the annual tax and flag on the Belgrade fortress as the only symbols of vassalage. He concluded agreements with Montenegro, Greece, and Romania in order to create a Balkan alliance. Internally, he passed laws on the National Assembly and the army. Although the economy was of a natural type (over 90% of the population were peasants), there was an economic boom in Serbia, and part of the trading class, which became rich by selling agricultural products to the neighbouring Austria, actively participated in the political life in order to bring examples of European progress to Serbia. (Stojančević et al. 1981: 135–142).

Monetary Issue

Money is one of the characteristics of a state with an economy based on the division of labour, especially of a nation state. Its function of a general asset or unit of account in the exchange of goods and calculation of debts and loans, however, is mostly conditioned by the definition (in terms of value) which reflects, among other things, state policy (Milić 1975, 821; Davies 2002, 29). The first Serbian insurgent government during the armistice (1807–1809) began interventions in the field of monetary relations. The money circulation in the rebellious Pashalik of Belgrade needed to be normalised in conditions of constant decline in the value of Turkish money and increase in trade in European gold and silver money. The insurgents banned the entry of paper money into the country, due to mistrust, and limited the amount of silver and gold that could be taken out because they needed to make special purchases. Also, in 1808, the value of “various money” was regulated. This would have been the first Serbian tariff (exchange rate list), but it was not preserved (Kunibert 1901, 27; Vučo 1955, 166).

After the Second Serbian Uprising (1815), Serbia gradually acquired the status of a vassal principality, but without its own money. However, it tried very early to implement its own monetary policy, first by setting monetary tariffs (exchange rates). Namely, in early 19th century, as many as 43 gold, silver or copper currencies were circulating in Serbia, which were denominated in grosh.¹ They were roughly divided into imperial (European) and Turkish money. Imperial, especially Austrian money was considered better, so the Turkish government tried to suppress it, and vice versa. That is why money tariffs in Constantinople and Vienna changed frequently, limiting economic activity and the circulation of money. The Serbian Prince Miloš was persistent in his attempts to suppress the increasingly worthless Turkish money, also seeing this to weaken the Ottoman government’s influence. Objective circumstances also helped, because according to the Sultan’s firmans, Turkish money was constantly sliding against the Austrian ducat, losing slightly more than half of its value in the 1812–1831 period, i.e. dropping from the exchange rate of 11 grosh and 20 paras to 24 grosh for one ducat (M. Petrović 1897: 496–497).

According to some authors, Serbian monetary tariffs were determined immediately after the Second Uprising, and the earliest one recorded is from 1819 (V. Petrović, N. Petrović 1882, 290; Milić 1974: 365). However, in all

¹ Grosh was not a type of money or means in circulation, but a unit of account. It was introduced during the Austrian rule in the northern part of Serbia (1717–1739) and served to calculate all payments, regardless of which circulating currency was used. One grosh was worth 40 paras. (Dugalić 1999: 15).

probability, they fully adhered to the rate prescribed by the Sultan. As early as 1821, and especially since 1822, Prince Miloš did not agree to fully adhere to the tariff imposed by Constantinople, which sought to artificially strengthen the value of the deteriorating Turkish money (V. Petrović, N. Petrović 1884: 464–465, 478–479, 489, 497, 501; M. Petrović 1897: 489–490). Although a compromise solution was found in the negotiations with the Sultan's vizier (different tariffs for calculating taxes intended for the Turkish authorities and for internal trade), this essentially established the first partially independent monetary tariff, thus introducing a double exchange rate into Serbian economy through the back door (Gavrilović 1909: 403–405; Kosier 1924: 266–267; Milić 1975: 826).²

Opposing aspirations of the Serbian and Ottoman authorities led to Serbia officially introducing a double exchange rate – tax and market grosh in 1833. In daily trade or when collecting taxes with imperial money, the grosh's value stayed unchanged (40 paras), while in the case of paying taxes with Turkish money, its value was halved. Serbian subjects and the state treasury benefited from that because revenues increased without a real increase in the tax burden, but so did the Prince who manipulated with tariffs (M. Petrović 1897: 492–494; Milić 1975: 826).

Domestic Money Minting and the Standardisation Issue

Over the next decades, Serbia continued to build institutions and strengthen statehood, including elements of monetary policy, but in the conditions of heightened internal tensions. The arbitrariness of the Serbian Prince and the resistance to absolutist ruling methods, combined with the conflict between two Serbian dynasties (Karadžorđević and Obrenović), led to the expulsion of Prince Miloš (1839), the coming of his sons Milan (1839) and Mihailo (1839–1842) to power, the overthrow of the Obrenović dynasty and bringing to power of Prince Aleksandar Karadžorđević (1842–1858), then the return of Miloš (1858–1860) and again Mihailo (1860–1868). However, political tensions, although aggravating, did not stop social and economic development.

During the second reign of Prince Mihailo, there were even more currencies in circulation than before. Not counting the copper coins which were used only to return change, as many as 47 different currencies (8 gold and 39 silver) were circulating in Serbia. As so many currencies and the double

² Miloš tried to suppress the weakened Turkish money in favour of the imperial money, so he recommended collecting taxes in that money only. Although he agreed to pay taxes to the Sultan at the prescribed rate, after pressures of the Ottoman government, he managed to ensure trade at the real exchange rate (M. Petrović 1897: 488–490; Gavrilović 1909: 403).

exchange rate of grosh did not affect the stability of the money market, the government tried to strengthen the money tariff by strengthening its legal framework. Hence, instead of previous public acts in the rank of tariffs and decisions (from 1855, 1858, 1859, 1861 and 1865), on 13 April 1866³ the Act on Monetary Tariff was passed. The act did not abolish the double exchange rate, but only confirmed it. In fact, the law determined the tariffs of currencies in tax grosh, while the exchange rate of market grosh was left to the market, i.e. to “free agreement” between natural persons. However, for the needs of the part of public trade carried out at the market exchange rate, the Minister of Finance was to determine the exchange rate of currencies in the market grosh as well. This was done on 14 April 1866, when the Minister of Finance Kosta Cukić determined the monetary tariff in the “market exchange rate”. The difference between the two exchange rates was somewhat more than double (1 imperial ducat was worth 28 tax or 60 market grosh).⁴

Apart from the difficulties in payment operations due to the presence of many currencies, the fact that the grosh was divided into 40 paras posed a special difficulty in calculating money. Therefore, already in late 1850s, the idea of introducing a decimal system appeared in the National Assembly.⁵ At the same time, the question of minting domestic money and establishing an issuing bank was constantly raised among the Serbian trade and political elite.⁶ This was viewed not only as an economic issue, but as a national one as well. The introduction of domestic money was supposed to be a step further from the Ottoman government and closer to Europe. Therefore, the National Assembly, held in October 1867, concluded that it was necessary to mint Serbian currency and consolidate measures as soon as possible (introduce a metric system), and it was assured by the Minister of Finance that serious work was being done in that respect (Protocols, 1868: 293-294).

The minting of domestic copper coins in small denominations was supposed to simplify daily trade, limited due to the multitude of currencies and the impossibility to return change. In February 1868, the Prince sent Minister Cukić to Vienna to obtain the consent of the authorities to mint Serbian money in the Vienna minting house. The Minister obtained support, and the minting, which had not only economic but also political implications, was assessed as

³ *Srbske novine*, [Serbian Gazette], No 38, 5 April 1866. (The Julian calendar was used in Serbia until the end of World War I. In the 19th century, it deviated from the Gregorian calendar by 12 days, and as of the 20th century by 13 days. The dates in this paper are written in the current calendar, while the dates in the sources are written in the original (Julian) calendar.)

⁴ *Zbornik zakona i uredba Kneževine Srbije* [Collection of acts and decrees of the Principality of Serbia], No 20, Belgrade, 1867: 43-47.

⁵ MP Kosta Antula made a remark about the inadequacy of the then system (Protocols, 1859: 34-35).

⁶ Ugričić wrote about ideas in the press, projects discussed in the Assembly and foreign offers (1967: 54-56).

a “monument of Serbian freedom and progress”⁷ On that occasion, another important economic effect was achieved, aimed at encouraging foreign trade relations, and that was the adoption of French minting standards from 1865.

Although it was long believed that Serbia accepted the French minting standard in the Act on Minting of Serbian Silver Coins of 1873, recent archival research has confirmed that this was done in 1868 after the Deputy Minister of Finance, Milan Petronijević, submitted the draft project on solving the monetary issue to the State Council⁸ on 23 March 1868. Based on that project, on 26 March, the Council recommended that the French minting standard be adopted in its entirety, based on decimal metrics, free minting and melting of gold and silver coins of 900/1000 fineness, and a fixed ratio of monetary gold and silver, i.e. bimetallism, which the Prince accepted and confirmed in a decision of 27 March 1868. This decision also determined the types and appearance of the denominations whose minting began in Vienna. The adopted standard would be applied not only to the minting of copper, but also to future minting of first small silver, and later large silver or gold coins.⁹

The standard accepted by Serbia was the backbone of the convention on uniform standards of minting, which was accepted by Italy, Belgium, and Switzerland at the initiative of France in December 1865. The press soon renamed the convention as the Latin Monetary Union (LMU). The aim was to solve the problem of silver money circulation in the former empire of Napoleon I, which bequeathed homogeneous standards for silver and gold coins. In France, Belgium and Switzerland they were denominated in francs, and in Italy in liras. These countries had the same bimetallic money, which moved freely across the borders and was informally exchanged at the rate of 1:1. The standardisation was based on the French gold franc from 1803, which was minted in denominations of 5, 10, 20, 40, 50 and 100 francs, with 20-franc money weighing 6.45161 grams of fine gold and being 21 millimetres in diameter. The gold franc could be exchanged for silver at the rate of 1:15.5, which was an approximate ratio of the value of the two metals in 1803 (Bordeaux, Jonung 1999: 14–16; Gnjatović 2015: 14; Einaudi 2018: 17).

In a sense, the initiators of the LMU considered the unification of money minting to be the first step towards future common money and Europe as a single monetary space based on the gold standard. Therefore, other

⁷ *Srbske novine*, No 14, 1 February 1868; No 41, 6 April 1868; No 20, 15 February 1869.

⁸ The State Council changed its powers several times in the 19th century, including the period when it was the highest authority in the country. At this time, it still had an important legislative and administrative function, especially in the administrative-judicial and financial areas.

⁹ D. Gnjatović derived the conclusion on the adoption of the French standards based on the sources of the State Archives of Serbia (2015: 14).

countries were expected to join the union. Less developed countries could expect economic benefits from accession, as the decimal system and the restriction of small circulating silver money had a positive effect on exchange rate stability and money circulation within the country, while leading to an anticipated improvement in trade and financial ties with foreign countries. At the same time, the accession to the LMU did not affect monetary sovereignty too much, because in addition to offering the possibility of preserving the name and features of the national currency, the convention did not restrict the issuance of small copper coins or banknotes by the issuing bank. Hence, several neighbouring countries and those closest to Serbia adopted the LMU standards, including Greece, Bulgaria, Romania and Austria-Hungary (Gnjatović 2015: 18–21; Mangin, Nenovsky 2021: 5–9).

Apart from following the lead of Greece and Romania, Serbia's decision to accept the standards was also influenced by the decision of its most important trade partner, Austria-Hungary, to partially adopt the rules of the LMU without joining it.¹⁰ In Serbia, it was believed that the domestic issue of money and the implementation of standards would not cause social or economic turmoil, because it had not previously had its own money, and that the value of the accounting tax grosh was almost equal to the value of one French franc (Gnjatović 2015). Another factor to be taken into account is that of modernisation and getting closer to Europe, a commitment insisted upon by the educated ruler of Serbia. However, Prince Mihailo was assassinated on 10 June 1868 and did not live to see the first modern Serbian money minted in denominations of 1, 5, and 10 paras that started circulating in February 1869.¹¹ Serbia's position on full acceptance of the LMU standard was explicitly set out in the Act on Minting of Serbian Silver Coins of 1873, which set the dinar as the unit of currency, divided into 100 paras, and its fineness, mass and size corresponded fully to those of the franc.¹² Despite several attempts that followed Serbia did not become a full member of the LMU. However, reliance on LMU standards and practices applied by member states remained an important issue in Serbian monetary policy.

After gaining independence at the Berlin Congress in 1878, in order to suppress foreign currencies from circulation, Serbia introduced the minting of gold

¹⁰ Austria-Hungary did not join the LMU because it did not accept bimetallism, but on 24 December 1867, it signed a special monetary agreement with France, mutually accepting gold money at a certain rate. After that, Austria-Hungary minted some of its gold coins according to the LMU standard (Willis 1901: 83).

¹¹ *Srbske novine*, No 20, 15 February 1869. Previously, the law prohibited future entry of old Austro-Hungarian copper coins. *Srbske novine*, No 19, 13 February 1869.

¹² *Srpske novine*, No 267, 7 December 1873.

coins by the Act on the Serbian National Currency.¹³ This act determined the weight and fineness of gold, silver and copper coins. Although the law repeatedly referred to LMU standards, it introduced a kind of incomplete bimetallism, as it did not provide for freedom of minting, nor did it give silver money unlimited capacity of legal tender, whereas it only indirectly determined the relation between gold and silver money (Ugričić 1967, 65). This was a consequence of broader European developments regarding the currency backing. Since the production of silver had been growing since 1873, the higher volume of silver coins in circulation led increased storing and safe-keeping of gold coins. Hence, the LMU members stopped minting 5-franc silver coins (suspension period) in late 1878, introducing the so-called floating or limping bimetallic standard (Willis 1901: 181–192; Nenovsky, Vaslin 2020: 75; Bae, Bailey 2011: 133–134).

Privileged National Bank of the Kingdom of Serbia

The idea of founding a Serbian issuing and central bank gradually took shape during the second half of the 19th century. The lack of capital in Serbia affected traders but, given the agrarian character of the country, also the peasantry who borrowed from the loan sharks, at huge interest rates (Ilić, Jerković, Bulajić 2015: 39–40). However, it was not entirely clear to the state and economic elite what kind of banking system Serbia needed, nor exactly what role the central bank should play. Its credit function was highlighted, while the issuing function was not discussed that much. The question of the origin of capital was raised, with King Milan Obrenović (1868–1889) and representatives of the Liberal and Progressive Parties being closer to the idea of establishing the national bank with foreign capital. However, corruption scandals that accompanied the construction of railways and other concessions in Serbia and the collapse of the largest foreign concessionaire, the French General Union (1882), strengthened the position of Belgrade businessmen, as agents of trade with the neighbouring Austria-Hungary, that the central bank must be established with domestic capital. Since this attitude prevailed, it would be established as a joint stock company of domestic businessmen and other shareholders, Serbian subjects, under the appropriate control of the state (Jerković 2018: 9–30).

In January 1883 the Act on the National Bank was adopted and confirmed. The basic task was lending to corporates. The National Bank also was given the privilege of issuing banknotes. The Act provided for the printing of paper money in denominations of 50, 100, 500 and 1000 dinars, with a gold

¹³ *Srpske novine*, No 279, 19 December 1878.

backing. This was an attempt to gradually introduce the gold standard and monometallism, because no other (silver) backing was envisaged for paper money.¹⁴

The establishment of the National Bank was a step forward in the Europeanization of Serbia. However, the very beginning was associated with many problems that posed a challenge to the administration and the Ministry of the National Economy. In mid-July 1884, after the first issue of money was prepared and printed in Belgium, the operational work of the National Bank began (Hadži-Pešić 1995: 96). The 100-dinar banknote was put into circulation. However, two problems quickly emerged. First, 100 dinars represented a great value,¹⁵ which limited the use of that banknote in everyday trade. Secondly, the part of the population that engaged in traditional trade had more confidence in coins, especially the Austrian ducats. The memory of the past times also contributed to their attitude of distrust. As noted by Charles Boschmans, an expert from Belgium who came to help in the organisation of the National Bank, distrust is “quite understandable in a nation that has seen many wars and revolutions in fifty years and where it has become commonplace to hide money”.¹⁶ Foreign diplomats, however, ascribed the slow acceptance of paper money to an insufficiently civilized population (Lampe 1971: 123).

The time before and after the beginning of the work of the central bank in Serbia is marked by complex economic and political circumstances. Internal disputes between the increasingly authoritarian king and the opposition, led by a growing radical movement, extravagance of the Court, disrespect for the constitution and the law, arbitrary dissolutions of the Assembly and government crises, riots and repressive measures that followed, were intertwined with external failures, such as the attack on Bulgaria and an increasing economic and political dependence on Austria-Hungary. Only a few years earlier, the struggles for national liberation, successful but unfinished, left serious financial consequences. Under such circumstances, the authorities proved unable to properly manage public finances, so expenditures increased due to obligations imposed by the independence, while the growing deficit

¹⁴ *Srpske novine*, No 13, 19 January 1883.

¹⁵ In the early 1880s, 100 dinars was a significant amount of money for which you could buy around 625 kilograms of wheat, 400 kilograms of flour or bread, 400 liters of milk, 360 liters of plum brandy or 130 kilograms of pork. Calculation according to: *Državopis Srbije [Serbian State Records]*, XXII, Belgrade: Ministry of the National Economy, 1883; *Srpske novine*, 1883.

¹⁶ At the request of Serbia, Charles Boschmans, chief accountant at the National Bank of Belgium, was sent from Belgium in February 1884 to provide professional assistance. Archives of the National Bank (ANB), Zbirka reprodukovanih materijala [Collection of reproduced materials] (25), National Bank of Belgium 1883–1886 (2), Dossier “Mission de Mr Boschmans à Belgrade”.

was offset by the introduction of new taxes. As this was not enough, the state increasingly resorted to foreign and internal borrowing and began to fall into the vicious circle of taking new loans to repay due debts (Jovanović 1990b: 204–206; Gnjatović 1991: 15–65).

10-Dinar Banknote

The National Bank promptly addressed the issue of poor money circulation. Already in October 1884, this matter was discussed in Managing Board meetings. Vice-governor Georg Weifert¹⁷ and the Belgian expert Boschmans reported orally to Prime Minister Milutin Garašanin that it is the lack of smaller-denomination banknotes that poses a problem and that they therefore need to be printed. Though the National Bank's management agreed it was necessary to issue the 10-dinar banknote, open issues remained with regard to amending the Act (which did not envisage this denomination) and the backing.¹⁸ As the 100-dinar banknote did not stay long in circulation in the coming months either, the National Bank's management discussed the same matter in December 1884. Long debates ensued, but the conclusion was nothing new – coins had even previously been dominant in circulation and the 100-dinar banknote is too large. The compromise was to issue a 50-dinar banknote (envisaged by the Act) in early March 1885, but its value was too high for everyday circulation as well and did not achieve the anticipated effect (Hadži-Pešić 1995: 122).

The National Bank and businesspeople agreed that it was necessary to amend the Act on the National Bank and introduce the 10-dinar banknote, but they had different views on its backing. Originally, already in December 1884, the National Bank's Managing Board took the position that 10-dinar banknotes should be denominated in gold. This position was to be endorsed by the Shareholders' Assembly convened for March 1885.¹⁹ In the meantime, this issue caused much discussion, even on the pages of the Serbian official gazette.²⁰

Though aware of the gold's popularity among the population because it was easy to transport and store, some advocated silver because neighbouring

¹⁷ Georg Weifert (Serb. Đorđe Vajfert, 1850–1937), Serbian industrialist of German descent. He headed the National Bank for almost three decades, serving several terms in office (Ilić, Jerković, Bulajić 2010).

¹⁸ ANB, Privileged National Bank of the Kingdom of Serbia, Management (1/I, UPR), Minutes from the Managing Board meeting, 9 October 1884, v. 1.

¹⁹ ANB1/I, UPR, Minutes from the Main Board meeting, 30 December 1884, v. 16; *Srpske novine* No 51 and 52, 6 and 7 March 1885.

²⁰ State Archives of Serbia (AS), Ministry of National Economy, Trade (MNP-T), PF III, Rno 93/1897; *Srpske novine* No 51–58, 6–14 March 1885.

countries, Austria-Hungary in particular, had silver money in circulation and it would have been difficult to keep gold-backed banknotes in circulation, while their outflow would threaten lending to corporates as the National Bank would have to raise its interest rate. Opponents pointed to the risk of a rising agio and held that the silver banknote would not suppress foreign coins. As opinions in the National Bank were divided as well, the Managing Board report submitted to the Shareholders' Assembly did not even mention the silver backing, whereas the Supervisory Board report spoke of it as necessary (Privileged, 1885: 25–27).

Because the number of shareholders who confirmed their attendance was insufficient, the meeting was postponed for April. After a two-day discussion attended by the representatives of the corporate sector and the government, it was decided, by a majority of votes, that the 10-dinar banknote should be issued with a gold backing. The government representatives did not express their opinion on this matter, but only promised to submit the proposed amendments to the law at the first National Assembly (Privileged 1886: 42–44; National Bank 1909: 44). That, however, did not happen and the National Bank was forced to reduce the number of its staff, because its income barely sufficed to cover its expenses. When, in May 1885, the Government did have its say after resolving a long-standing cabinet crisis (Jovanović 1990b: 218–219), it surprised the National Bank by voting for a silver backing. Governor Filip Hristić's efforts to bring the government to change its mind were to no avail.²¹

It was only several years later that the reasons for such government's position became clear. Namely, the government intended to issue its banknote backed by the Lottery Loan of 1881, whereby currency circumstances would be aggravated further.²² The government placed pressure on the National Bank repeatedly and revived the idea of banknote issuance by the government several times in the coming years, without clearly defining the backing or whether this would be genuine currency in circulation, or it will only serve to settle government liabilities (National Bank 1909: 149).

In order to preserve its position of an independent institution as much as possible, the National Bank's management convened an extraordinary Shareholders' Assembly. Though aware that they had been blackmailed, the Governor, the management and the Assembly chose a lesser evil. The use of

²¹ ANB1/I, UPR, Minutes from the Main Board meeting, 27 June 1885, v. 16.

²² A large part of these 100-dinar bonds in gold remained uninvested, and the government planned to use them as backing for issuing 10-dinar securities in gold in 1887 (*Stenografske beleške [Stenographic Notes]* 1888, 912–915).

the 100-dinar denomination alone would have seriously jeopardised further functioning of the National Bank. For this reason, in early October 1885, the Assembly issued an acclamation endorsing the proposal about the 10-dinar silver banknote, and only several days later the National Assembly adopted draft amendments to the Act on the National Bank. After the adoption of the Act and the unsuccessful war with Bulgaria which not only ended in a defeat but also shed light on the King's rashness, the lack of money intensified further and the Government invested efforts to make sure that this banknote entered every home in the country and be accepted as legal tender. Until the end of World War I, this banknote accounted for 95% of money supply.²³

In this way, albeit under pressure, bimetallism was confirmed in Serbia as a principle which was increasingly abandoned by the LMU after 1878 in its effort to extend the gold standard (Gnjatović 2015: 18). In the future, gold- and silver-backed banknotes would co-exist side by side in Serbia, changing some of the trading practices. The currency clause began to be applied in international agreements, safeguarding the backing from a possible decline in the value of domestic currency relative to the gold used for settling international obligations.

Agio and the National Bank

In domestic trade, the relation between gold and silver and banknotes payable in gold and silver was determined by calculating the agio or the disagio.²⁴ This relation became particularly important when the banknote payable in silver was introduced along with the gold-backed one, especially since the circulation of the 10-dinar banknote was on a continuous rise.²⁵ It soon came to be thought that such powerful growth in circulation pushes up the agio on gold, which sowed disquiet among not only traders, but common individuals as well. In its discussions with the government, the National Bank pointed out that the agio was rising because of a lack of gold which was only available

²³ ANB1/I, UPR, Minutes from the Managing Board meeting, 31 October 1885, v. 1; *Privileged* 1886: 49; *Srpske novine* No 213, 27 September 1885 and No 45, 26 February 1886. The National Bank designated the 10-dinar banknote as *temporary*, both because of the government's pressure and because of its leaning towards a gold backing. The banknote, however, was more successful than anticipated. The population accepted it so well that it came to be known as the "bank", a term used colloquially to denote all future 10-dinar banknotes. AS, MNP-T, F VII, r 38/1891.

²⁴ An agio is the amount by which a currency exceeds its nominal value, or the surcharge that needed to be paid when using poorer-quality money (paper-gold). Conversely, a disagio is the amount deducted from the nominal value, or the deduction when making payments in better-quality money. The agio and the disagio were expressed in percentage terms (e.g. a gold agio of 35% means that 100 dinars in gold is 135 dinars in paper money, and a 25% disagio means that 100 dinars in paper is 75 dinars in gold) (Kohn 1937: 13).

²⁵ According to the National Bank, it was only the silver banknote that was in circulation, while the circulation of the gold banknote was so negligible that it cannot even be spoken of as a means of circulation (*National Bank 1909*: 48).

during the export season, as well as poor economic circumstances, low export capacities and an unfavourable structure of exports (raw materials) and imports (finished products), disordered public finances and the government's borrowing against a commitment to settle its debts in gold-backed money. Since 1890, the National Bank tried to prevent large seasonal fluctuations by intervening in the market, though it was clear that this measure was not enough to suppress the agio.²⁶

The silver banknote, issued increasingly by the National Bank, almost put gold banknotes out of circulation. This hindered some economic activities and resulted in a several years' dispute with the government.²⁷ Repeated attempts to come to an agreement regarding the excessive volume of silver money were futile. The government thought that, by issuing gold-backed silver banknotes, the National Bank was acting in breach of the law and failing to achieve the primary goal for which it was established (cheap lending to the corporate sector), even harming the interests of the people and the government.²⁸ The public also accused the National Bank of using a part of silver banknotes for buying and selling gold, storing it and distributing it through dividend payments, instead of lending to the corporate sector (Jelić 1904; Blagojević 1980, 356–357). Finally, notes of dissonance emerged in the National Bank itself. In shareholders' meetings in 1891 and 1892, opinions contrary to the management's position were voiced, claiming that the large issue of the silver banknote not only breached the law but also harmed trade. If truth be told, this was the position of shareholders belonging to the opposition Liberal Party or the export lobby in the Belgrade Chamber of Trade. The National Bank responded to these objections by saying that it was doing this in order to contain fluctuations in the agio and rein in speculation, though it did own up that this transaction produced "certain benefits" (National Bank 1909: 159–160; National Bank 1934: 34).

In the 1890–1893 period, the National Bank tried to rein in the agio through market interventions, but with limited success. Political circumstances were not conducive to bringing order into finances, which was a precondition to

²⁶ The agio had been a strain on Serbian finances even before the National Bank was established, and it was typical for all economically undeveloped countries with foreign loans. It gained momentum in Serbia once the silver banknote was introduced. The amount of the agio varied and depended on many factors: yield, volume of export and import, budget deficit, etc. The National Bank first tried to influence the agio exchange rate by buying or selling gold, but this measure proved to be inadequate and conducive to speculation. The problem of the agio was greatly diminished once the budget became more balanced (*National Bank 1909*: 155–161).

²⁷ Article 11 of the Act set out that there may be two and a half times more banknotes in circulation relative to the metal backing. No more than one quarter of gold could be substituted by silver. *Srpske novine*, No 213, 27 September 1885.

²⁸ AS, MNP-T, f V, 72/96, Reports of commission members and other materials.

consolidation. The Radical Party's government was not successful in narrowing the fiscal deficit, and even the renewed agreement with Austria-Hungary from 1892 failed to improve the unfavourable terms of trade (Rajić, Leovac 2018, 246–251). In such circumstances, the government tried to resolve the problem of agio and silver money issuance without the consent of the National Bank. In November 1893, King Aleksandar Obrenović (1889–1903) highlighted in the National Assembly that it was of paramount importance to regulate financial circumstances, and amendments to the Act on the National Bank were soon adopted.²⁹ In the discussion, the National Bank was designated as the key culprit for the rise in the agio. It was criticised for introducing the silver banknote, which was seen as the fruit of the previous, Progressive Party regime, during which record high foreign borrowing had also taken place (Jovanović 1990a, 205; Pešić, Mladenović 2017). The amendment to the Act meant that the envisaged gold backing would only be used for gold-denominated banknotes, while the silver backing was reserved for banknotes denominated in silver.³⁰

Governor Weifert notified the Ministry of the National Economy that he disagreed with the amendments because they were adopted unilaterally and spawned legal uncertainty.³¹ Notwithstanding its disagreement, the National Bank sought instruction as to how to implement the amendments, as the quantity of silver banknotes in circulation well exceeded the amount of silver in the treasury. There were two options: to sell gold in order to procure silver for backing the circulation or to downsize circulation to match the balance in the treasury. As the government of moderate radicals supported a kind of deflationary policy, it was decided to reduce gradually, over a period of five years, the number of silver banknotes in circulation.³² This intention was, however, not realised due to political differences embodied in the crisis of parliamentarism, suspension of the democratic constitution (of 1889) and restoration of the old constitution (from 1869).

When financial and economic difficulties lost their primary importance, the National Bank used the well-tested tool of pressurising the government and adopted the position that circulation can only be reduced by downsizing credits. In October 1894, when the economic situation was further aggravated by lower-than-expected agricultural yields (Privileged 1895: X), it notified all

²⁹ *Srpske novine* No 283, 18 December 1893.

³⁰ In an effort to further reinforce the gold standard, these amendments also came to include the provision that the National Bank may, in the future, issue 20-dinar banknotes in gold as well.

³¹ AS, MNP-T, f V, 72/96, Letter No 14711, 21 December 1893.

³² AS, MNP-T, f V, 72/96, The Government's plan was that circulation should measure 10 million at the end of the fifth year, which corresponds to a backing of 4 million (40%).

money institutes that the volume of credits would be reduced by 20 percent. These institutes soon swamped the Ministries of Finance and the National Economy with requests that such decision of the National Bank should not be implemented. At the same time, since the National Bank did not intervene by buying and selling gold in order to soothe the market, the agio climbed to as much as 19% (National Bank 1934: 34). For this reason, already in November 1894, the Minister of the National Economy requested that the National Bank should recall its decision to downsize credits, highlighting poor economic circumstances in the country. Next year, this request was reiterated, and it was decided to temporarily abandon the withdrawal of silver banknotes (Privileged 1896: XII).

The contention surrounding this issue and the irregular state of things lasted until the Act was amended in 1896, restoring the practice according to which backing for silver banknotes could be in either of the two precious metals, but limiting its volume to 25 million dinars.³³ By making these amendments, the government made it easier for the National Bank to operationally implement the provisions of the Karlsbad arrangement, agreement on the conversion of state loans with abroad large creditors of the Serbian government (Mijatović 2012; Gnjatović 1991).

The Act on the National Bank was amended three times without the National Bank's consent in the 1898 through 1900 period, because it turned out that any attempt to restrict the circulation of silver banknotes meant a reduction in lending to corporates. The agio at the same time posted record-high growth. The key to this problem lay in borrowing by the government which, because of King Aleksandar Obrenović's personal regime and frequent political crises, resorted to emergency loans with the National Bank.³⁴ Poor public finances continued and the government used new borrowing to try and postpone bankruptcy (Rajić 2011). The conclusion of the Monopoly Loan in 1902 was a step towards bringing order into Serbian finances by resolving a part of domestic debt (Gnjatović 1991: 87), while a more noticeable improvement took place from 1904 onwards. The Ministry of Finance took the position that the National Bank should not be a "source for reinforcing government revenue" (National Bank 1934: 38), and the loan concluded in France was also used for repaying government debt to the National Bank. However, the question of restricting the circulation of silver banknotes remained the bone of contention for the central bank and the new Radical Party majority which

³³ *Srpske novine* No 36, 16 February 1896.

³⁴ In late 1898, government debt measured around 15.9 million and was two times higher than the entire earlier borrowing (National Bank 1934: 36, 38). ANB 1/I, UPR, Minutes from Managing Board meetings, March/April 1898, v. 13.

saw in it the bulwark of the exporting lobby, connected with the recently overthrown Obrenović dynasty and the ideology of the rival Progressive Party (Lampe 1971: 173–210).

Negotiations surrounding the extension of the National Bank's privilege, which was to expire in 1908, provided an opportunity to place pressure on the Bank and show the government's dissatisfaction because of its failure to subscribe the full amount of initial capital and open branch offices, as well as because of the quantity of silver banknotes (Pavlović 1908). After long negotiations, a joint committee,³⁵ set up in 1906, managed to come to a compromise solution, just before the privilege expired. At the government's insistence, the silver banknote contingent was limited to maximum fivefold value of the subscribed initial capital.³⁶ The Act on Extending the Privilege did not resolve the currency issue, however. Its resolution awaited more propitious circumstances when the National Bank would "be required to convert all silver-denominated banknotes into gold-denominated banknotes" (National Bank 1909: 199). Though the National Bank was designated as the culprit for the agio, the government was aware that this matter could only be discussed when a higher surplus was recorded, the foreign trade balance turned positive and "there are no longer fears that the bank's gold backing could be exhausted due to a shortage of gold in the country". When such perspectives materialised to a great extent in 1912, Serbia entered a seven-year period of wars which would defer the final resolution of the currency issue for a longer time (National Bank 1934, 68).³⁷

Conclusion

In renewing its monetary system, the Principality of Serbia originally intended to adopt all principles of the Latin Monetary Union. This is confirmed by the Project on Resolving the Monetary Issue from 1868. The provision referring to the fixed, precisely determined relation between silver and gold was, however, not applied since 1878, resulting in a sort of incomplete bimetallism in the country. Though, subject to the 1883 Act on the National Bank, Serbia intended to issue gold-backed banknotes only, the attempt to make the domestic 100-dinar gold banknote generally accepted in trade ended in a failure. It is not only the high denomination which posed an obstacle, but also the belief that gold, as the more precious metal, needed to be stored. Already in

³⁵ ANB1/I, UPR, Minutes from Managing Board meetings, 1905–1906, v. 8.

³⁶ *Srpske novine* No 69, 25 March 1908.

³⁷ During the World War One, the National Bank was even threatened with the loss of all movable assets, i.e. the entire treasury. This did not happen only because of the resourcefulness of some members of the board of directors and a few officials (Ilić 2014).

1885, the Act on the National Bank was amended, putting the 10-dinar silver-backed banknote into circulation. This banknote was infrequently exchanged for metal and as such was fit for circulation (it will make up 95% of money supply until World War I). It had, on the one hand, a positive effect on the National Bank's core function – lending to corporates and the government.

In addition to many advantages, such as increased circulation and corporate lending, the introduction of silver banknotes in Serbia also had its downside. Namely, as the economically more developed part of the Western European bimetallic bloc (France, Belgium, Switzerland and Italy) tried to standardise the value of silver money and limit its supply, Serbia and its National Bank put into circulation before World War I not only the 10-dinar banknote but also the 100-dinar banknote payable in silver. The Government was forced to settle its annual liabilities under international loans in gold, incapable of maintaining the dinar's convertibility.

However, though the issuing institution was criticised as being the only one responsible for the growing agio, which was on a constant rise between 1893 and 1903, it turned out that the regulation of political circumstances after the change of dynasty and the settling of government debt with the National Bank and abroad also influenced currency circumstances. In the vicious circle of mutual accusations regarding who was guilty for the rise in the agio, the answer was that both sides were responsible: through an excessive issue of silver banknotes, the National Bank suppressed the gold currency and manipulated with data on the quantity of money in circulation, while the government, because of a balance of payments deficit, foreign borrowing and political turmoil, frequently resorted to loans with the National Bank, serviced precisely by banknotes without an adequate backing.

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Session 2: Monetary Unions Between Continuity and Confrontation

The Anglo-Irish Monetary Union 1922-1979: Lessons for Ireland, the Eurozone and Scotland

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Abstract

The Anglo-Irish Treaty of December 1921 brought to an end the Irish War of Independence and formalised the partition of Ireland within the British Empire. It also conferred full monetary and fiscal autonomy on the Irish Free State (now the Republic) of Ireland. However, notwithstanding a long history of conflict, Ireland retained a *de facto* monetary union with Britain until Dublin joined the European Monetary System in 1979. This focus on monetary continuity – which guaranteed currency and banking stability – survived the Irish Civil War of 1922-23, the Anglo-Irish trade war of the 1930s, Ireland's refusal to join the British war effort in 1939 and even the resumption of conflict in Northern Ireland in the late 1960s. This paper identifies that Ireland's incremental approach to banking and currency dependency was neither as conservative or insular as the current research suggests. This paper also identifies key lessons from the Irish experience for other small Eurozone members, and for potential future members including, but not limited to, Scotland. A key finding is that, for small states, membership of the Eurozone (or potential membership) brings with it a level of economic dependency at both an internal (fiscal policy) and external level (larger trading partners) which should be acknowledged. This paper also illustrates that banking and trade links can survive (and even prosper) in the midst of concurrent political disagreements.

Key words: Ireland, Eurozone, Currency Union, Monetary Policy, Scotland.
JEL Codes N14, N43, O23.

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This paper is structured in the following way. Section 1 provides a broad overview of the banking and currency arrangements governing Ireland from the granting of its monetary independence in 1922 until its joining of the European Monetary System (EMS) in 1979. Section 2 sets out the advantages of Ireland's approach to monetary policy – the advantages of a continuity dependency.

Section 3 provides a case study of how international factors influenced Irish policy making in the 1922-43 period. Section 4 provides parallels from the Irish experience for the Great Recession of 2007-12. Similarly, Section 5 addresses the Eurozone and Scotland in the context of the development of Irish banking and currency policy. Sections 6 and 7 provide conclusions, both in the context of challenging the dominant narratives in the existing research and in drawing longer term perspectives on the Irish experience.

1. The Realities of Monetary Independence 1922-79

The newly created Irish Free State (Ireland) gained monetary and fiscal independence from Great Britain with the signing of the Anglo-Irish Treaty (The Treaty) in December 1921. The Treaty also formalised the partition of the island of Ireland.

Despite fiscal autonomy and theoretical monetary independence Ireland also pursued a policy of “*continuity rather than change*” in relation to banking and finance matters (Fanning 1983). The absence of financial expertise in the political administration resulted in policy formulation staying firmly within the control of the British influenced Irish Department of Finance (Fanning 1978). In this context, Joseph Brennan emerged as a key figure in establishing Irish adherence to the underlying principles of balanced budgets and limited expenditures.² The successful floating of the first independent Irish National Loan in 1923 was not allowed to detract the Department of Finance from their adherence to the “*correct principles of public finance*”.³

On an operational level Irish monetary and banking policy during the 1922-79 period evidenced a clear continuity with pre-1922 arrangements. Even after the creation of the Irish Currency Commission in 1928 (superseded by the Central Bank of Ireland in 1943) the Irish pound remained at parity with sterling, interest rates continued to be based on the Bank of England rate and the Irish commercial banks retained their embedded position in the London markets.

² Joseph Brennan memorandum entitled ‘Financial Policy for the Future’, 5 Oct. 1923, Fin 1/3455, NAI. Brennan was Secretary General of the Department of Finance (1922-28); Chair of the Irish Currency Commission (1928-43) and Governor of the Central Bank of Ireland (1943-53).

³ Joseph Brennan memorandum entitled ‘The Financial Position after the Loan’, p. 1, 12 Dec. 1923, Joseph Brennan Papers, Ms 26, 223(1), NLI.

In this context, the decades to the 1970s can be viewed as a slow-moving transition from total dependency on British macroeconomic structures to more autonomous monetary and banking policies. This was a transition which was still on-going in the mid-1950s and was not completed until Ireland joined the EMS without Britain in 1979.

Within Ireland, the legacy of British administration was reflected in a banking system dominated by joint stock banks rather than the investment banking model of much of continental Europe (Lee 1989). The City of London, at least through emerging Irish eyes, remained the empire upon which to model the nascent monetary structures of the Irish Free State. At the core of this system lay the dominant presence of the Bank of England.

The Irish government took a number of incremental steps to ensure that monetary arrangements in the Irish Free State were consistent with greater monetary autonomy. The Coinage Act 1926 and the 1926 Banking Commission (1926 Commission) reasserted Ireland's close association to the sterling area, albeit in the form of Irish Free State currency notes and a Currency Commission. The Currency Act 1927 "*constituted an important step in adapting the Irish banking system to the political changes which had come about*" (Pratschke 1969).

Irish conduct in the 1922-28 period was marked by a degree of pragmatism regarding the actual potential for change in existing banking and currency arrangements. While "*anglocentricity*" certainly dominated among Irish policy makers, this did not constitute dependence without the potential for independent thought (Pratschke 1985). In part this reflected the "exceptionally confused" currency arrangements which existed in Ireland at this time.

"British coin, British Treasury notes, Bank of England notes and Irish Bank notes circulated freely. However, neither the Bank of England or Irish bank notes were recognised as legal tender, while Treasury notes issued before 1921, although legal tender, bore no date of issue and could not be recognised." (Meenan 1970).

Ireland's economic options were further circumscribed by the reality of overwhelming trade dependence on the United Kingdom. In 1924 over 98 per cent of Irish exports were destined for the British (83.6 per cent) or Northern Irish (14.5 per cent) markets. The financial constraints of economic independence were reflected in a 9.2 per cent budget deficit in 1924 (Fitzgerald and Kenny 2020). The costs of the Irish Civil War (1922-23) resulted in Irish army expenditure accounting for over 62 per cent of estimated state expenditure in 1923 (Fanning 1978). In addition, British

financial claims on Ireland totalled between 80 and 100 per cent of Irish Gross National Product (GNP). These claims were eventually set aside as part of the wider settlement agreed in 1926 which also resulted in the border of Northern Ireland remaining unchanged despite much political agitation (Fitzgerald and Kenny 2020).

The Irish Currency Commission functioned professionally until the establishment of the Central Bank of Ireland in 1943. Despite significant challenges to the Anglo-Irish relationship during this period – the gold standard crisis of 1931, the Anglo-Irish trade war of the 1930s and Ireland's decision to remain neutral in 1939 – neither the sterling peg nor the Irish commercial banks reserves held in London – were ever seriously threatened (Neary and O'Gráda 1991).

The coming into power of the first coalition government in February 1948 crystallised the first divergence between Ireland's continuity driven approach to currency policy and official government policy (Moynihan 1975). The appointment of Seán MacBride (officially as Minister for External Affairs 1948-51) had a significant impact on facilitating a more expansionist expenditure programme. The first capital budget was introduced in 1950 (Girvin 1989). Underpinned by nearly £40 million in borrowings from the European Recovery Programme (Marshall Aid) the inter-party government significantly increased capital expenditure (Lee 1989). 88% of local government capital expenditure was allocated to housing in 1948-49 (Ferriter 2004).

These disagreements, which culminated in the resignation of Joseph Brennan as Governor of the Central Bank in 1953 – resulted in a brief monetary policy experiment. In 1955, Ireland failed to follow Britain in increasing interest rates. What followed was a dramatic reallocation of assets to Britain from Ireland to take advantage of the higher returns (Bielenberg, Ryan 2013). The result was a dramatic economic crisis with emigration rising to its highest point in the twentieth century. This event has been noted as "*the defining event of post-war Irish economic history*" and resulted in a return to the continuity based banking and currency policy. It also led to the reorientation of Irish economic policy towards export orientated foreign direct investment (Honohan, O'Grada 1998).

From the mid-1950s to the 1970s the Central Bank of Ireland remained a conservative monetary authority. The level of banking and currency policy continuity reflected the enduring economic, social, cultural and political

links with Britain. The tendency for continuity was also reinforced by the negative economic impacts of the Balance of Payments crisis of 1955-57 highlighted above.

Ireland's currency issue remained fully backed (only by gold and sterling). Only from the mid-1960s did a modest level of lending to commercial banks occur, in addition to the allowance of a limited amount of U.S. dollar reserves. Further incremental steps occurred regarding the imposition of reserve requirements on banks and the enforcement of credit policy. Overall, this level of continuity illustrated that:

“It is hard to dispute that the Central Bank was essentially operating a currency board system before the 1970s. And it retained many of the essential characteristics right up to the end of the sterling link in 1979.” (Honohan 1994).

2. The Advantages of a Continuity Dependency

This paper challenges the view that the perceived intellectual rigidity in Ireland during the 1922-79 period was mirrored by a similarly restricted approach to banking and monetary affairs. Rather, the continuity in Irish monetary policy post-1922 (evident up to at least the late 1960s) was not based on any dogmatic adherence to Bank of England policy, but rather on the reality of overwhelming trade and banking dependence upon Britain. This dependent status was strongly reflected in Ireland's banking and monetary architecture. A reality magnified by established administrative and ideological links with British governing structures.

R.N. Kershaw (Advisor to the Governor, Bank of England) acknowledged the desirability of maintaining good relations with the emerging Central Bank of Ireland in 1942 due to Ireland's *“massive reserves invested in sterling”*.⁴ Ireland's net sterling assets were estimated at £150m in 1939 (Whitaker 1949). The potential destabilising effects of any significant reduction in Ireland's sterling balances was explicitly recognised by Threadneedle Street whose overriding priority was to *“prevent the massive conversion of Irish sterling into gold or foreign exchange”*.⁵ The embedded nature of the Irish commercial banks in the London markets was reflected in the fact that they still held over £326 million in assets outside of Ireland in 1966 with the vast majority of these based in the City of London (O'Mahony 1967).

All the Irish commercial banks enjoyed significant income from investments in British securities. These sterling investments – dramatically expanded

⁴ Note by R.N. Kershaw (Advisor to the Governor, Bank of England), 2 Dec. 1942, OV 81/2, BOE.

⁵ Note by H.A. Siepmann (Advisor to the Governor, Bank of England), 18 Apr. 1939, C43/466, BOE.

by British demand for Irish produce during the 1914-18 war - played a key role in helping the Irish banks offset the declining economic environment of both the early 1930s and the 1950s. For example, the reserves of Ulster Bank were so strong that it was the declining yield available on British securities, rather than falling operational profits, which impacted more on their overall profitability in the decade to 1939 (Drea 2014). This was a common characteristic across all the Irish commercial banks and reflected their quasi savings bank characteristics.

It is accurate to suggest that the Irish commercial banks were not “hungry fighters” driving development in southern Ireland in the 1922-79 period (Lee 1989). However, this interpretation overlooks the dearth of large-scale investment opportunities available in Ireland during this period. The lack of liquid capital markets in Ireland underpinned the investments of the Irish banks in London given the preference among Irish bank customers for deposit/savings accounts requiring easily realisable and secure banking assets (Smiddy 1936).

Considered in the context of *Fianna Fáil's* (the dominant political party in Ireland from 1932) pre-1932 rhetoric the level of banking and trade dependence upon Britain reflected, not a forthright rejection of currency and banking reform by Irish policymakers, but an acceptance, however reluctantly, that economic dependency remained a key characteristic of the Irish economy. A situation left unchanged by the attainment of Irish independence in 1922, the coming to power of *Fianna Fáil* in 1932 and the outbreak of war in 1939.

The specific example of Ulster Bank in the decade to 1932 also illustrates a high level of operational dependency within the Irish commercial banking sector (Drea 2014). Although not addressed in the existing research, this research identifies that Ulster Bank was subject to real operational constraints imposed by their English based owners (the London County & Westminster Bank) from the mid-1920s on. This, on occasion, resulted in direct confrontation and compromised Ulster Bank's ability to operate independently in southern Ireland.

It is within this framework – the continuity of dependence – that this paper offers a reassessment of the banking and monetary policies pursued by Joseph Brennan (up to the mid-1950s) and his successor J.J. McElligott (up to the mid-1960s). Brennan's fiscal dogmatism was matched by a clear and consistent flexibility on monetary issues (Drea 2021). He correctly identified the dangers of the parity sterling link as early as 1924 and sought – through

the Commission of Inquiry into Banking, Currency and Credit (Banking Commission) in the 1930s – to equip the emerging Central Bank of Ireland with the mechanisms capable of managing changed currency arrangements in the future.

Notwithstanding his perceived closeness to the Irish commercial banks, Brennan – particularly after the gold standard crisis of 1931 – was a firm advocate of monetary flexibility. Although, for Brennan, this was a level of flexibility set firmly within the overarching guidance of the Bank of England and Ireland's secure position within the emerging British Commonwealth.

Cormac O'Gráda has taken the view that the inaction of Cumann na nGaedhael and Fianna Fáil “*to meddle with monetary practice*” in the 1922-43 period resulted in the Irish commercial banks having no effective lender of last resort and the Irish Free State being left with little discretion in monetary policy (O'Gráda 1994). However, this view underplays two key points. First, the strength of the commercial banks external reserves – underpinned by their conservative lending policies - negated their need for a potential lender of last resort in the period under consideration (Honohan 1997).

Second, the political inaction on monetary reform resulted directly from Ireland's continued economic dependence upon Britain, not from any wider political objectives. 92.6% of Irish exports still entered the British or Northern Ireland markets in 1938 compared to 98% in 1924 (Irish Government 1931). Just under 90% of the Irish commercial banks investments were still held outside southern Ireland in 1939 compared to 96.7% in 1926 (Irish Government 1939). In this context, the key question is not why Ireland sought to maintain existing banking and currency arrangements post-1922, but rather what were the real benefits derived from such a policy?

The achievements of Ireland's banking and monetary policies up to 1979 have been overshadowed by a continuing focus on the “*bleak perscription*” of Irish fiscal policy during this period (Fanning 1978). However, this paper highlights that the continuity in banking and monetary policy reflected a functioning and well capitalised commercial banking system, consistent monetary policy (notwithstanding Fianna Fáil's agitation for reform before coming to power) and a currency arrangement based on the reality of trade dependence on Britain. Two additional advantages of this policy of continuity are also identified.

First, by eliminating the potential for a variable exchange rate with sterling the Currency Commission facilitated a stable environment for Irish exports. Combined with Brennan and J.J. McElligott's more dogmatic fiscal policies,

Ireland was thus able to avoid the significant accumulation of external debt and the monetary instability associated with many smaller, emerging nation states such as Austria, Poland and Hungary. Given the weakness of the global economy in the 1920s and 1930s this rigid control of the state's finances was, in itself, a remarkable achievement of the Department of Finance (Corcoran 2009).

Second, the stable banking and monetary policies pursued during the 1930s facilitated Fianna Fáil's use of fiscal policy tools (i.e. a recurring budget deficit funded primarily through increased taxation) to increase employment, promote industrialisation and increase expenditure on social services. A stable banking and currency framework enabled the government to pursue these policies while simultaneously commencing the Anglo-Irish trade dispute and adopting more protectionist policies. Ironically, the reality of Ireland's economic dependence upon Britain (and the appropriateness of Ireland's monetary and banking policy) is best reflected in Fianna Fáil's refusal to seriously challenge existing monetary arrangements in the 1930s.

3. Internationalising Irish Banking and Currency Policy: A 1922-43 Case Study

This paper also identifies the influence of wider international factors on monetary institution building in Ireland. This is a context which has not been addressed within the existing research. This section sets out a case study of how international influences impacted upon Irish banking and currency policy in the 1922-43 period.

The Irish Currency Act 1927 (Currency Act) and the Currency Commission model were based on Professor Henry Parker-Willis's (Chair of the 1926 Banking Commission) direct experience of helping establish and operate the U.S. Federal Reserve system in the decade from 1913 (Drea 2015).

However, the assessment of the role of Parker-Willis in Irish monetary affairs should not be confused with the belief that the Currency Act represented a success for the Irish commercial banks in preventing the establishment of a central bank. The Currency Act established a wholly independent monetary authority, linked consolidated note issue to business transactions and allowed the commercial bankers considerable operational autonomy. These were characteristics directly informed by Parker-Willis's view of the weaknesses in the Federal Reserve system in the mid-1920s (Parker-Willis 1927). The design of the Currency Commission model, while supporting the continuity of dependency in Irish economic affairs, was firmly rooted in U.S. monetary experience.

Overall, the example of Parker-Willis highlights that wider internationalist

influences on monetary institution building did not necessarily result in any major reform of banking and monetary structures in Ireland. In this context, the issues of continuity and change cannot be addressed without acknowledging the significant role played by Montagu Norman (Governor of the Bank of England 1920-44) in Irish monetary affairs in the two decades to 1943.

The attainment of Irish independence in 1922 coincided with Norman's great drive to bring central banking structures to the dominions of the British Empire. Far from acting as a barrier to further development, Threadneedle Street (and the British Treasury) encouraged the Irish banks to come to terms with Irish monetary autonomy and supported the introduction of the Currency Commission in 1927 (Drea 2013). For Threadneedle Street, Anglo-Irish monetary relations were conducted on an apolitical basis devoid of compulsion or aggression. This approach enabled Irish policymakers to choose their own pace of monetary development and to preserve the traditional access granted to Irish commercial bankers, particularly Bank of Ireland, to Threadneedle Street and the City of London (O'Gráda 1994 and 1995).

Post-1931, the Bank of England utilised Ireland's desire to join the Bank of International Settlements (BIS) to ensure Irish monetary development remained orthodox. Threadneedle Street played a vital role in providing advice and expertise to Brennan in the Currency Commission and provided consistent support to his stewardship of Irish monetary affairs in the 1930s and early 1940s. The Bank of England's call for an autonomous Central Bank of Ireland in 1939, although prompted by the outbreak of war, was the logical conclusion of Norman's adherence to his internationalist central banking principles of co-operation, independence and autonomy (O'Gráda 1994).

On a more personal level, the examples of Parker-Willis and Norman illustrate the importance of key relationships in facilitating the development of Irish banking and monetary policy. Parker-Willis enjoyed a close working relationship with Brennan, McElligott and the Irish commercial banks during his work in Ireland (1926-27). However, this did not preclude his refusal to accede to requests from both McElligott (about concurring in his Minority Report) and the banks (to limit access to their financial records). It was Parker-Willis who prompted Brennan and Ernest Blythe (Minister for Finance 1923-32) to seek more detailed financial information from the commercial banks even prior to his arrival in Dublin in early 1926 (Drea 2015).

Similarly, the official caution displayed by the Bank of England in Irish affairs up to 1943 mirrored Norman's belief in the non-political nature of

monetary affairs. The working relationship of the Bank of England and Irish policymakers was based directly on the close contacts enjoyed by the Department of Finance with both Threadneedle Street and the Treasury from 1922 on. The continuity evident in Anglo-Irish monetary affairs during the 1922-43 period – notwithstanding wider political issues – was facilitated by Norman’s growing professional regard for Brennan. This was the “prized relationship” which underpinned official Anglo-Irish monetary relations in the period to 1943.⁶

4. Parallels for the Great Recession 2008-2012: Ireland

This paper contains a number of parallels for the “Great Recession” crises which peaked in Ireland and the Eurozone between 2008 and 2012. These crises culminated in the financial bailout of the Irish economy undertaken by the International Monetary Fund (IMF), European Union (EU) and European Central Bank (ECB) in late 2010.

First, the parity sterling link may have been severed by Ireland’s decision to join the EMS without Britain in 1979, but as the events of 2008-12 illustrated the level of banking co-dependence between Ireland and Britain remains significant. This is a level of continuity which has persisted notwithstanding Ireland’s adoption of the euro in 1999 and 50 years EU membership.

In October 2010 Britain granted Ireland a £7 billion bilateral loan in order to ensure the stability of the Irish economy.⁷ In defending the loan to the House of Commons, the then Chancellor of the Exchequer George Osborne was explicit in acknowledging that, given Ireland’s importance as a trading partner, “it is clearly in Britain’s interest that we have a growing Irish economy and a stable Irish banking system”.⁸ Royal Bank of Scotland’s (RBS) ownership of Ulster Bank has resulted in a significant and direct cost to the British taxpayer arising from the current crisis. Up to June 2013 the British government (via its 81% shareholding in RBS) provided direct capital support totaling over £15 billion to Ulster Bank (White 2013).

Ireland has been successful in using membership of the EU to diversify away from trade dependence on Britain. However, in a banking context the historical co-dependence of the Irish and British commercial banking systems remains intact. Bank of Ireland, Allied Irish Bank and Ulster Bank (until 2022) continue to operate as all-Ireland financial institutions. Bank of

⁶ Letter from Joseph Brennan to Montagu Norman, 2 Feb. 1943, OV 81/5, BOE.

⁷ The only other country to provide Ireland with a bilateral loan was Sweden.

⁸ United Kingdom Government, ‘Statement by the Chancellor of the Exchequer, Rt. Hon. George Osborne MP on financial assistance for Ireland’, 22 Nov. 2010, (www.gov.uk/government/speeches/statement-by-the-chancellor-of-the-exchequer-rt-hon-george-osborne-mp-statement-on-financial-assistance-for-ireland), (28 June 2013).

Ireland and Allied Irish Bank continue to issue sterling notes in Northern Ireland. Supported by lending from the Irish commercial banks, Britain was, by far, the most popular non-Irish location for property investment associated with the “*Celtic Tiger*” economy (NAMA 2013).⁹

Second, the City of London, despite the financial crisis of 2008, remains a global financial centre in a medium sized British economy (British Parliament 2013). London is the second most important financial centre in the world (after New York) notwithstanding a longer term pattern of British industrial and manufacturing decline (European Economics 2011). The proximity of the Irish Financial Services Centre (IFSC) to one of the world’s largest financial centres has aided Ireland’s development as an international location for financial services (Reddan 2008). Nearly half (46%) of all funds under administration in the IFSC originate from Britain (Europe Economics 2011). Third, Ireland’s loss of monetary independence arising from membership of the euro mirrors the lack of real monetary autonomy evident in the 1922-79 period. Both the European Monetary Union (EMU) and the parity sterling policy pursued by the Currency Commission can be characterised as voluntary fixed exchange rate regimes. However, while EMU required a legal transfer of monetary powers to the ECB, the Irish authorities did technically possess the power to pursue a more independent interest rate policy under the Currency Commission mechanism. However, as highlighted throughout this paper, the potential to implement a more independent policy in the period up to 1979 was circumscribed by the reality of overwhelming trade and banking dependence upon Britain.

Fourth, the absence of operational monetary autonomy in the 1922-79 period was complemented by fiscal independence which enabled Fianna Fáil to finance (primarily through increased taxation) their economic reform agenda post-1932. This parallels the experience of Ireland in the 1999–2010 period where the loss of monetary independence arising from euro membership did not initially impact upon Irish budgetary independence.

However, a reckless programme of fiscal expansion rendered Ireland susceptible to the combined property, banking, fiscal and financial crises which emerged from 2008 (Donovan and Murphy 2013). These crises ultimately resulted in Ireland’s fiscal autonomy being ceded to the IMF, EU and ECB in November 2010.

⁹ At December 2012, 33% of NAMA’s property portfolio was located in either London (21%) or the rest of Great Britain excluding Northern Ireland (12%).

5. Irish Lessons for the Eurozone and Scotland

For the Eurozone and Scotland significant lessons can be taken from Ireland's banking and currency policy evolution in the century since economic independence was achieved in 1922. This process – moving from political confrontation to conciliation with Britain – underscores a number of key characteristics relevant for existing smaller Eurozone members and for potential Eurozone members in the future.

First and foremost, Ireland's experience shows that banking and trade links can survive (and even prosper) in the midst of concurrent political disagreements. As identified in this paper, Ireland remains heavily interconnected with the British economy notwithstanding Dublin's decades long policy of seeking to reduce dependencies on Britain. The Irish pounds peg to sterling (and the high level of cooperation between Irish and British financial authorities) survived the Anglo-Irish economic war of the 1930s, Ireland's refusal to join the British war effort in 1939 and the outbreak of violence in Northern Ireland in the late 1960s. This was an economic relationship which continued irrespective of wider (and often violent) political disagreements.

Ultimately Ireland's joining of the EMS in 1979 and the Eurozone in 2002 – both without Britain - did not fundamentally alter the closeness of the wider Anglo-Irish economic relationship. Nor did it ever seriously challenge Ireland's free travel area with Britain. Indeed, despite much media speculation, it is not yet clear whether even Britain leaving the EU in 2021 will reduce the importance of the Anglo-Irish economic relationship in the long term. Banking, investment and trade relationships can often have a deep historical basis that outlast political disruptions. For example, Ireland's commercial banking system remains dominated by financial institutions which predate Ireland's independence from Britain.

Ireland's experience also shows that for small states membership of the Eurozone (or potential membership) brings with it a level of dependency at both an internal and external level. Internally, the absence of operational monetary autonomy – for Ireland with a fixed sterling peg (up to 1979) and now under the Eurozone – makes fiscal policy even more important to maintaining economic balance. In the absence of the ability to control interest rates, national fiscal policy becomes an essential tool to ensure long term financial sustainability.

The example of Ireland in the 1930s highlights the positive synergies between a stable interest rate environment and the use of fiscal policy to generate economic growth (even in the midst of a trade war with Britain).

Unfortunately, the more recent example of Ireland during the “Celtic Tiger” period from the late 1990s to 2007 illustrates the dangers of fiscal indiscipline when matched with the loss of monetary autonomy. The resultant crisis – culminating in an international bailout of the Irish state in 2010 – should serve as a stark warning to all smaller Eurozone member states.

Externally, for smaller states in a de facto monetary union, the performance of the larger trading/currency partner is critical. Such membership also implies clear economic dependencies. John Maynard Keynes (writing in 1930) noted that:

“For countries which are small compared with their neighbours, or do not contain independent financial centres of international importance, an Exchange Standard may be ideal. But it does undoubtedly involve some measure of dependence on the country whose money is chosen as the basis of the Exchange Standard, which may be hurtful to the national pride”.

Keynes assessment accurately reflects the real economic dependencies which an independent Ireland continued to exhibit on Britain for much of the twentieth century. It is also a relevant issue for many smaller Eurozone members today – where increased foreign investment has resulted in a concentration of employment that is often dependent on neighbouring, larger Eurozone economies.

For example, the dependence on the German automotive industry now evident in Czechia, Hungary and Slovakia has broad similarities with the Irish experience post-1922. Indeed for future Eurozone members – Croatia and Bulgaria – the danger of developing an over-dependence on one large economy in an unfinished monetary union – should be acknowledged and understood. Indeed, Ireland’s comparative economic under-performance (particularly from the 1950s to the 1990s) has been attributed to an over-dependence on a poor performing British economy (O’Rourke 2017; O’Grada and O’Rourke 2021; Bielenberg and Ryan 2013).

For Scotland, the development of banking and currency arrangements in Ireland between 1922 and 1979 are both a useful and relevant comparative context. The perceived uncertainty over the future currency of an independent Scotland is one of the key arguments of those advocating against possible independence. However, recent research (Kenny and McLaughlin 2022) highlights that:

“While an independent Scotland may wish to set up an independent central bank, the experience of Ireland suggests that adopting a de facto central bank with a flexible currency board style arrangement may be a suitable approach... such an approach shields policy-makers from certain political

pressures, while offering the credibility and policy space to alter the regime”

However, the Irish experience also highlights that the development of an incremental Scottish approach to banking and currency independence is dependent on developing an accommodative relationship with the Bank of England and the commercial banking sector generally. It would also require a high level of political support from both sides of the border subsequent to independence becoming a reality. In the fraught political landscape of Great Britain in 2022, this is by no means guaranteed.

For Scottish nationalists, following the Irish model would also require a high level of policy continuity (i.e. the Bank of England would continue to set interest rates for Scotland). Politically, this may be deemed too regressive by those wishing to promote a more energetic, less traditional independent economic policy.

6. Challenging the Existing Literature on Irish Banking and Currency Policy

The current analysis of Irish banking and currency policy remains dominated by a small number of major works which emphasise, above all else, the continuity in monetary policy fostered by “*anglocentric*” policymakers up to the 1960s (e.g Fanning 1978, 1984; O’Gráda 1994, 1997 and Moynihan 1975). These works have had a disproportionate influence on research in this area and continue to dominate more recent scholarly output. Brennan and McElligott are still viewed as “*the fiscal midwives of the new state, limiting the well-intentioned but largely misguided paternal excitement of the post-revolutionary politicians*” (Considine and Reidy 2012).

Within this widely accepted context, the “*miserabilism*” of Irish fiscal policy in the 1922-79 period was complemented by a static monetary policy which sought only to preserve existing banking and currency arrangements (Whitaker 2009). Following this narrative places Brennan at the centre of a Department of Finance “*elite*” who controlled the conservative bias of the Irish Free State up to the late 1930s (Regan 1999).

This level of control (orchestrated primarily by Brennan and McElligott with the support of the commercial banks) also ensured the absence of “*developmental innovation*” in the financial structures of the new state (Bielenberg and Ryan 2013). These findings mirror Fanning’s conclusion that the “*absence of change*” was the outstanding characteristic of the Department of Finance (and by association, Irish monetary policy) up to at least the late 1950s (Fanning 1978). These findings are also consistent with Brian Girvin’s acknowledgement of the emphasis within the existing research on

the negative elements of the Cumann na nGaedhael government up to 1932 (Girvin 2002).

However, this interpretation does not distinguish between the entrenched fiscal dogmatism of key Irish policymakers – such as Brennan – and their less rigidly held and more flexible views on monetary and banking affairs. This approach also fails to acknowledge how broader international trends in monetary institution building had a direct impact on the evolution of Irish monetary structures. These impacts derived from both an institutional (Bank of England) and more individualist (Parker-Wilis,) context and highlight that Irish monetary and banking policy during the decades up to 1979 was subject to wider macroeconomic considerations.

The established research is also dismissive of the significance of proposals for monetary reform in the two decades to 1943. In this context, the coming into operation of the Central Bank of Ireland is still deemed irrelevant given its operation as a “mere” Currency Board until the 1970s (Honohan 2013). This narrative reflects the conservative basis of Maurice Moynihan’s history of central banking, and is centred on O’Gráda’s view that Irish monetary policy (right up to the 1970s) was viewed simply as “*not meddling with the banking system*” (O’Gráda 1997).

However, this narrow focus on the forces of “*continuity*” (i.e. commercial banks, public servants) has resulted in an unbalanced analysis of the proposals for monetary and banking reform evident during the 1922-43 period. In addition, although personal relationships central to the development of Irish monetary structures are identified in the existing research the context considered is often singular in nature. For example, a variety of close relationships are identified: Brennan and McElligott, the Department of Finance and the British Treasury. Yet, no research places these relationships in the context of the wider divisions evident in Irish economic life during the 1930s and 1940s.

The dominance of Brennan, and his allies in the 1930s Banking Commission did not preclude the existence of a significant movement advocating monetary change. A movement largely based on the application of Catholic social principles to economic issues. This was an approach supported inconsistently – and often incoherently – by Fianna Fáil and their newspaper – *The Irish Press* – from the late 1920s on.

7. Conclusion: Continuity and Change?

On an operational level, the work of Fanning, O’Gráda, Moynihan and Patrick Honohan confirms that monetary and banking policy during the

1922-79 period evidenced a clear continuity with pre-1922 arrangements. Even after the creation of the Central Bank of Ireland in 1943 the Irish pound remained at parity with sterling, interest rates continued to be determined by Threadneedle Street policy and the Irish commercial banks retained their embedded position in the London markets.

However, this research highlights that key Irish policymakers, such as Brennan, evidenced a more flexible and realistic approach to banking and monetary affairs than is currently recognised. This was a continuity in monetary policy borne out of the reality of overwhelming trade and banking dependence upon Britain. This continuity – the continuity of dependency – reflected neither a lingering attachment to British monetary practice nor a complementary conservatism to the fiscal dogmatism prevalent in the decades after economic independence was achieved.

This paper also develops three further issues which have been overlooked in the existing research. First, a germ of monetary reform existed in Ireland from as early as the mid-1920s and was consistent in promoting alternative policies in the period to 1943 and beyond. Although overwhelmed by the conservative policies pursued by the Department of Finance, Currency Commission and the Irish commercial banks in the 1920s and 1930s, the forces of change did provide a clear alternative to official policy during this period.

Second, this research challenges the view that the creation of the Currency Commission in 1927 and the establishment of the Central Bank of Ireland in 1943 were insignificant events given the continued stagnation in Irish monetary policy in the decades after 1943 (Honohan 1994). Rather, this thesis argues that the incremental policy of monetary and banking reform commenced in the 1920s represented the beginning of an important, but drawn out reform process which ultimately resulted in Ireland joining the EMS without Britain in 1979. This was a “*small step*” process in which the findings of the 1926 Commission paved the way for the greater changes proposed by the 1930s Banking Commission and implemented by the Central Bank Act 1942 (Pratschke 1969).

However, this was also a process based directly on Brennan’s piecemeal approach to monetary reform, a process which placed monetary autonomy within the overarching objectives of fiscal and banking stability. The confines of which were clearly exposed by the balance of payment crisis of the mid-1950s which underlined Ireland’s continued dependence on the British economy.

In the 1960s Irish monetary and banking policy remained closely embedded to the City of London and British financial structures. However, the steps undertaken in the 1922-43 period – the issuing of distinctive Irish currency, the establishment of an independent state monetary body, the tentative move towards state supervision of banking affairs and an increased awareness of the ability of the state to influence credit conditions – did provide a framework for the implementation of a more independent monetary policy as trade and banking dependence upon Britain declined from the 1970s on.

Third, this thesis identifies that wider international trends did influence Irish monetary and banking affairs as early as the 1922-43 period. At both an institutional and more individual level the process of monetary institution building in Ireland was directly impacted by wider international experiences. For example, Parker-Willis utilised his direct experience of the flaws evident in the U.S. Federal Reserve system to design an Irish Currency Commission system wholly independent of political control.

Institutionally, the Bank of England consistently sought to aid the development of an autonomous and independent state monetary body in Ireland. In this context at least, the continuity evident in Irish monetary and banking policy in the 1922-79 period was matched by a significant, but largely overlooked, process of change which facilitated the development of greater Irish monetary autonomy in the latter half of the twentieth century.

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Session 2: Monetary Unions Between Continuity and Confrontation

Finding Common Ground? The Attempts at Rebuilding the Scan- dinavian Monetary Union in the Interwar Years

(Preliminary working paper)¹
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Introduction

Established in 1873, and functioning smoothly throughout the first era of globalisation and even through the 1905 political divorce of two of its member countries, the Scandinavian Monetary Union (SMU)² of Denmark, Sweden and Norway has been labelled “the most successful of the pre-World War I monetary unions”.³ During the First World War, however, after suspending gold convertibility, differing national policies to cope with supply difficulties and exchange rate fluctuations soon tested the cordial relationship of the monetary union.⁴ The war time experience is effectively and by all practical purposes considered to have ended the union, although some scholars

¹ This is a preliminary working paper, where the author stated that he has not yet been able to start on the two last research questions, and where some of the other parts need to be made much more effective, and some points are also discussed more than one place.

² In this paper the author uses “Scandinavian Monetary Union”, and not “Scandinavian Currency Union” when referring to the union, while “Scandinavian Coin Convention” is used to refer to the very agreement. In addition to this, “Coin Union” and other labels are used when these are taken directly from the sources.

³ Bartel, R. J. (1974). International Monetary Unions: The XIXth century experience. *The Journal of European Economic History*, 3, p.703.

⁴ Rongved, F. G. (2017). The gold war: The dissolution of the Scandinavian Currency Union during the First World War. *Scandinavian Economic History Review*, 65(3).

suggest that the decisive end of the union can be found in 1924.⁵ None of the standard accounts of the Scandinavian monetary union has, however, considered the continuous attempts at rebuilding the union in the interwar years. This is most likely due to a combination of two factors: On the one hand, the 1920s has generally been characterised by national efforts to re-establish the gold standard and coping with national economic turbulence. On the other hand, the efforts to rebuild the union never fully materialised before the gold standard collapsed in 1931.

It is well-known that the interwar years on many accounts are considered a period of increased isolationism in international relations, and a definitive end to the first era of globalisation, with the world's states adopting competing national policies aimed at ending economic and social problems within own boundaries. As such states turned their backs on international cooperation and free trade, whereas the different national policies based on protectionist measures ended up with the combined effect of increasing economic difficulties for everyone.

Perhaps somewhat counterintuitively the interwar years is also generally considered a period of increased central bank cooperation.⁶ The Scandinavian central banks were an integrated part of this movement. This implied both “externally” with e.g. the first direct bilateral contact with the Bank of England, and participation at monetary meetings under the auspices of the League of Nations, but also internally in Scandinavia – and in a wider Nordic context – with increased cooperation and meetings to discuss and perhaps even trying to coordinate a range of aspects of monetary policy.

At the core of this was the resurrection of the Scandinavian Monetary Union. The central banks of the Scandinavian countries convened several times during the 1920s up until 1931, and continuously interacted, trying hard to bring back this “most successful” monetary union. This paper is the first comprehensive account of the efforts to re-establish the Scandinavian monetary union in the interwar years. Based on archival material from the Danish and Norwegian central banks, this paper answers the question how the central bankers of the Scandinavian countries considered the prospects of bringing the union back to life in light of both national and international

⁵ E. g. Bergman, M., Gerlach, S., & Jonung, L. (1993). The rise and fall of the Scandinavian Currency Union 1873–1920. *European Economic Review*, 37(2-3); Bordo, M., & Jonung, L. (1997). The history of monetary regimes – Some lessons for Sweden and the EMU. *Swedish Economic Policy Review*, 4, 285–358; Talia, K. (2004). *The Scandinavian Currency Union, 1873–1924* [Doctoral dissertation]. Stockholm School of Economics.

⁶ Borio, C., & Toniolo, G. (2008). One hundred and thirty years of central bank cooperation: A BIS perspective. In C. Borio, P. Clement, & G. Toniolo (Eds.), *Past and future of central bank cooperation*. Cambridge University Press.

economic turmoil throughout the 1920s and up until 1931.

The article will first give a brief background on the golden age of the Scandinavian Monetary Union, before turning to a discussion on the literature on the Scandinavian central banks in the interwar years in order to describe the shortcomings regarding both the union and central bank cooperation. Thereafter the analysis starts with a short “quantitative” overview of Scandinavian central bank meetings, which also serve as an illustration of the literature’s shortcomings. I then turn to a discussion of some central problems of re-establishing the union in the period immediately following the First World War as seen by the central bankers. One such problem – the small non-gold coin issue – is discussed in detail, both because it was perhaps the major difficult issue of the period and because its solution – exempting the small non-gold coins – has been given such prominence as important parts of the literature sees it as the decisive end of the union. I take a new perspective on this and conclude that this understanding is flawed. Thereafter I turn to the parts covering the question outlined above: What were the prospects of restoring the Scandinavian Monetary Union seen from the perspective of the central banks both prior to and after all of the three Scandinavian central banks had returned to the gold standard?

Background: The golden age of the Scandinavian Monetary Union (1873–1914)

The Scandinavian Monetary Union came into effect in 1873.⁷ The union was based on the Scandinavian Coin Convention, and the Scandinavian countries adopted the new *kroner*⁸ currency, joined the gold standard, and pegged their currencies at par value. Internally all central banks were obliged to buy and sell gold for central bank notes at a fixed price: 2480 kroner per kilo gold, but the union was from the onset a coin union. The main Scandinavian coins were the fairly large 10 and 20 kroner in gold, and one kroner equalled 100 *øre*. There were also small coins in silver (1- and 2-kroner, and 50-, 40-, 25- and 10-*øre*), and in bronze (5-, 2-, and 1-*øre*).⁹ The convention stipulated free circulation and legal tender status within the union not only of the main gold coins, but also of non-gold coins produced in any of the three countries.¹⁰ Within certain limits the non-gold coins could be freely exchanged for gold

⁷ The following depiction is largely collected from part 1 in G. F. Rongved (2017), “*The Gold War: the dissolution of the Scandinavian Currency Union during the First World War*”, in *Scandinavian Economic History Review* no. 3

⁸ It was called *kroner* in Norway and Denmark, and *krona* in Sweden. For the sake of convenience, they will henceforth all be referred to as *kroner*.

⁹ Convention/law.

¹⁰ Originally the Convention.

at par value.

The union was a result of a range of movements in the second half of the 19th century: e.g., universalistic efforts of establishing a world coin and universal counting systems, the urge to follow the lead of other gold standard countries, Swedish economists' desires to enter the French-led Latin Monetary Union, and the lure of linking the currencies to the international economic hegemon Great Britain. All of this was combined with a spectre of political ideas and efforts which can be described as *scandinavianism*. After the French defeat in the Franco-Prussian War, subsequent German monetary reforms, and British insistence on keeping its distinctive number systems, it had become evident that the prospects of a universal coin had passed. The result was a separate Scandinavian system which combined the previous three national Scandinavian currencies with the most optimal solution based on characteristics from different international monetary systems. This meant landing on the gold standard, decimal system and a gold content in the main coins which fairly easily could be combined with the new German system.¹¹

Due to parliamentary opposition related to the growing resistance to the Swedish king of the personal union, Norway did not join until 1875, but thereafter monetary integration and cooperation expanded considerably. In 1885 the Riksbank and Nationalbanken opened bank accounts to each other which were not required to have a positive balance to be drawn upon, the central banks could draw at par value, and banks and tradesmen using this could do this free from fees. Norges Bank was a part of this agreement from 1888. At the turn of the century, the central banks agreed to accept each other central bank notes at par value – Riksbanken and Norges Bank in 1894, Nationalbanken followed in 1901. Thus, coins and paper money were deemed equal, and for a very short time the Scandinavian Monetary Union has been described as a “complete system” of payments.¹²

It can be argued that this complete system lasted only until 1905, as the Riksbank terminated the 1885 agreement one week after Norway broke out of the personal union with Sweden to become fully independent. However, bilateral agreements were swiftly concluded in 1905 to replace the 1885-agreement. Notwithstanding that these specified that there should be limits on the debts on the bank accounts, and a fee had to be paid if the debt was not paid by gold shipments – by all practical circumstances the central bank

¹¹ G. F. Rongved (2016), «Politisk mynt», Chapter 5 in E. Lie et al Norges Bank 1816-2016. Bergen: Fagbokforlaget.

¹² Henriksen, I., & Kærgård, N. (1995). The Scandinavian Currency Union. In J. Reis (Ed.), International monetary systems. Macmillan Press.

arrangements continued as before until the Great War. As such, describing the Scandinavian Monetary Union up until 1914 as a success history, like the standard accounts of Bartel and De Cecco, seems appropriate.¹³ For my own matter, I have seen it as a success history in the longer run, but with some minor difficult episodes along the way – usually resulting from financial or economic turmoil.¹⁴ What should be noted here is that it was a success resting on having developed to something far more than mutual gold coins – with accepting central bank notes at par value and mutual bank accounts with practically unlimited drafts also at par.

Despite these four decades of success, it seems – interestingly enough – like representatives of the three central banks did not meet. It was a detached central bank cooperation based on written communication and formal agreements. This changed with the First World War. During the war, a more integrated Scandinavian central bank cooperation was established, with not only the quantity of communication increasing, but also the quality. The first Scandinavian central bank meetings became a new feature, and this institutionalised meeting ground including the personal ties that were developed during the war years, were an obvious basis for the strengthened central bank cooperation of the interwar years, which is the theme of this article. However, in other regards, the economic consequences of the war also were a major blow to the cooperation. With suspension of gold convertibility in August 1914, the three currencies started fluctuating, and without the mutual anchor of the gold standard, difficulties ensued – and endured. In addition, national economic considerations – securing supplies and upholding economic activity – became paramount to the governments during the war years, with effects also for the central banks. Generally, the independent central banks were made part of such efforts and would use whatever means available to support the expanding state machinery. For the Scandinavian central banks this also included taking advantage of stipulations of the Scandinavian Coin Convention in own national interest. As difficulties increased, cooperation soured. I have described the war years as the nadir of Scandinavian monetary cooperation, with 1917 as an *annus horribilis* in these matters.¹⁵ Hence, regarding the First World War as the end of the Scandinavian Monetary Union is the conventional perspective in monetary history – something to which I also have contributed. But is this necessarily a correct understanding?

¹³ Bartel (1974); De Cecco, M. (1992). European monetary and financial cooperation before the First World War. *Rivista di storia economica*, 9, 1–2.

¹⁴ Rongved (2017).

¹⁵ *Ibid.*

Scandinavian central bank cooperation and the monetary union in the interwar years – in literature

In the international central bank literature, central bank cooperation is often seen as something that started to sprout during the First World War and expanding in the interwar years.¹⁶ However, in the standard literature on the Scandinavian Monetary Union and official central bank literature of the Scandinavian countries, the central bank cooperation and diplomacy of the interwar years is downplayed – if not altogether overlooked. This discrepancy between the interpretation of the international and the Scandinavian situation, is probably partly a result of the tendency of the standard Scandinavian literature to see the war as the end of the union. We will return to this below, but most accounts of the SMU focus on the golden years up until 1914, whereas the war years becomes an appendix, although some accounts extend the union's slow death until 1924.¹⁷ Given this understanding, and a tendency in the Scandinavian central bank literature and economic history to regard the interwar years mostly in national terms, there has been little room for analyses covering Scandinavian central bank cooperation and efforts at restoring the union in the 1920s and -30s.

If we first take a look at the Norwegian literature, the first coherent exposition of Norges Bank's interwar years was written by Nicolai Rygg – which also was the period in which he served as Governor.¹⁸ Rygg hardly mentions any such cooperation or the monetary union – the focus is almost exclusively on national policy, and primarily the struggle to balance between fixing the Norwegian banking system and the efforts to return to the gold standard. This perspective seems to have made an impact on all later takes. His successor as Governor, Gunnar Jahn, wrote most of the book on Norges Bank's first 150 years, which completely disregards Scandinavian interwar cooperation.¹⁹ In the more recent bicentenary central bank history of Norway, *Norges Bank 1816-2016*, which unlike the previous two was written by professional historians and not central bankers, this is continued – the Scandinavian Monetary Union is described as something that ended during the Great War, and the interwar years is treated under the with methodological nationalism.²⁰

¹⁶ Toniolo, G. (2005). Central bank cooperation at the Bank for International Settlements, 1930–1973. Cambridge University Press; Borio & Toniolo (2008).

¹⁷ Bergman et. al (1993); Bordo & Jonung (1997); Talia (2004).

¹⁸ N. Rygg (1950), *Norges Bank i mellomkrigstiden*. Oslo: Gyldendal forsk forlag. Rygg was Governor until 1946.

¹⁹ G. Jahn, A. Eriksen and P. Munthe (1966), *Norges Bank gjennom 150 år*. Oslo: Norges Bank.

²⁰ E. Lie, J. T. Kobberrød, E. Thomassen and G. F. Rongved (2016), *Norges Bank 1816-2016*. Bergen: Fagbokforlaget.

A couple of master theses was however written on the interwar period during the research project leading up to this last book, and in Tine Petersen's thesis on Norges Bank's leaving of the gold standard in 1931, Scandinavian central bank cooperation is definitely treated as a factor. Nevertheless, this is limited to decisions dealing with the currency situation in terms of adhering to the gold standard, and the monetary union is not made part of these discussions.²¹ In other takes, like Francis Sejersted's classic study of Rygg's reign as Governor, the methodological nationalism – and perhaps Rygg's own shaping of how posterity would understand the Norwegian central bank history of the interwar years – has left a solid footprint, and the cooperative efforts and diplomacy of the Scandinavian central banks is disregarded.²² Not even the writings of Keilhau – Rygg's contemporary “antagonist” – remedies this perspective.²³

Disregarding Scandinavian central bank cooperation and efforts to restore the union is characteristic also in the Swedish literature. The first official history of the Swedish central bank was originally intended to end in 1918, but as the last volume was published in 1929, its time scope was expanded to cover the years up until 1924.²⁴ The last part of this volume, written by K. G. Simonsson and covering the “central bank” years of Sveriges Riksbank from 1904-1924, does indeed end with a couple of pages of the Scandinavian Monetary Union. However, this is framed as a decay history, which ended with an important part of the union – small denomination non-gold coins – being temporarily exempted from the convention of the three countries with an additional article. Hence the very last sentence of the book – and henceforth the last words of the monumental four volume series of the history of the Riksbank – was: “Through law of 11 April 1924, effective of 6 October the same year, Norwegian and Danish small coins minted in concurrence with the convention of the union, has stopped being legal tender in Sweden.”²⁵ Amen. It should be noted here that this decision at this time is important also because Sweden as the first Scandinavian country – and indeed the first European country – resumed gold convertibility in the beginning of April 1924. This decay framing seems to have influenced Krim Talia's 2004 doctoral

²¹ T. Petersen (2011), *Da Norge forlot gullet. Norges Bank og kurspolitikken 1931-1933*. Master thesis, University of Oslo; E. Thomassen (2012), *Knuten på perlekjedet: Securitas-aksjonen og Norges Bank 1925-1928*. Master thesis, University of Oslo.

²² F. Sejersted (2001), «Ideal, teori og virkelighet. Nicolai Rygg og pengepolitikken i 1920-årene», in *Demokrati og rettsstat*. Oslo: Pax forlag.

²³ W. Keilhau (1952), *Den norske pengehistorie*. Oslo: H. Aschehoug & Co.

²⁴ Simonsson, K. G. (1929). Riksbanken som centralbank 1904–1924. In S. Brisman, D. Davidson, & K.G. Simonsson (Eds.), *Sveriges Riksbank 1668–1918–1924* (Vol. IV, pp. 1–63). P. A. Nordstedt & Söner.

²⁵ *Ibid*, p. 63.

thesis on the Scandinavian Monetary Union. It ends in 1924, and describes the inter-Scandinavian smuggling of small coins and the means to counter this (i.e. the 1924 exemption of small non-gold coins from the Scandinavian Coin Convention) as the “Third and Final Nail” in the union’s coffin – and with this, somewhat melodramatically: “The SCU was no more.”²⁶ Hence even a thesis dealing with the rise and fall of the monetary union shuns dealing with most of the interwar year efforts to rebuild the union. Talia’s thesis seems in turn to have influenced the Swedish Monetary Statistics, where it also is concluded that the Scandinavian Monetary Union “was finally abolished in 1924.”²⁷ This is to some extent paralleled in Gunnar Wetterberg’s official account of the Riksbank, describing World War I as the end of the union, although it “took long before formally ending.”²⁸ Accordingly, Wetterberg does indeed mention incidents also after 1924 – including the interesting period from 1928 until 1931 – albeit this is done very superficially and without trying to explain and see this in a contemporary perspective. In addition, much of the standard academic literature on the Scandinavian Monetary Union is done from a Swedish perspective as it is presented in articles written by Lars Jonung with a range of additional authors, including Michael Bordo.²⁹ As mentioned, these standard takes seldom move beyond the First World War.

Denmark has, similarly to Norway, a central bank literature on the interwar years which is characterized by works from the central bank’s own directors. In 1926 member of Board of Directors Carl T. Ussing gave out a thorough book on his period as director, 1914-1924.³⁰ This detailed exposition does mention some of the meetings of the monetary union, but due to its time span it ends prematurely and it is focussed on Danish national affairs. The official six volume edition of Nationalbanken’s history, where the volume covering the interwar years was published in 1968, was written by economists Erling Olsen and Erik Hoffmeyer, whereof the latter served as governor for 30 years from the middle of the 1960s.³¹ Of all Scandinavian central bank literatures,

²⁶ Talia (2004), p. 177-179.

²⁷ R. Edvinsson (2010), “Swedish monetary standards in a historical perspective”, in Riksbanken *Historical Monetary and Financial Statistics for Sweden*, Volume 1: Exchange rates, Prices and Wages, 1277-2008. Stockholm: Ekerlids förlag, s. 41. There is no direct reference to this “end date”, however the paragraph in which it is mentioned, has references to chapter 6 in the same book, i.e. H. Lobell (2010), “Foreign exchange rates 1804–1914”, which has Talia’s thesis in the bibliography.

²⁸ G. Wetterberg (2009), *Pengarna och makten. Riksbankens historia*. Stockholm: Sveriges Riksbank/Atlantis. Sjekk sitatet

²⁹ Bordo & Jonung (1997); Bordo, M., & Jonung, L. (2003). The future of the EMU: What does the history of monetary unions tell us? In F. H. Capie & G. E. Wood (Eds.), *Monetary unions. Theory, history, public choice*. Routledge.

³⁰ C. Th. Ussing (1926), *Nationalbanken 1914-1924*. Copenhagen: G. E. C. Gads forlag.

³¹ E. Olsen and E. Hoffmeyer (1968), *Dansk pengehistorie 1914-1960*. Copenhagen: Danmarks Nationalbank.

Olsen and Hoffmeyer is the only work where the efforts to re-establish the monetary union – and all the way until 1931 – is somewhat discussed.³² Here there are references both to reflections within Nationalbanken and the Riksbank, to perspectives at the Scandinavian economic meetings, and to where resistance against restoring the monetary union was perceived to have come from at different points in time. As such it is a valuable exposition of vital parts of this subject. However, the take is somewhat Danish, both when it comes to sources and perspective, short, has no broader reflections, and thus has its limitations. The contrast to the latest work on the Danish central bank from 2018 is however large – the latter is meant for a “broad public” and brings nothing valuable to this discussion.³³ In contrast, Per H. Hansen uses archival material from the three Scandinavian central banks to give a most interesting analysis on aspects of their interwar policy, and parts of the Scandinavian central bank cooperation, however this is restricted to the establishment of the Bank for International Settlements (BIS) in 1930 and in the response to the Austrian crisis the year after.³⁴ Still, there are some interesting perspectives in Hansen’s analysis also for our purpose, in particular the small state vs. great power dynamics.

What should be clear from each specific account of the Scandinavian Monetary Union in the interwar years, is that they downplay – or forthright disregard – a major part of the union’s history. This was furthermore at a time when the level of cooperation and coordination was at its peak. This is interesting also because much of the history and understanding of the matter has been written by the actors themselves (in particular in the Norwegian case). True, national monetary policy, economic turmoil and political chaos characterized each of these countries in the 1920s and 1930s. However, this was a period of extensive cooperation, which also aligns with and is an integral part of the international picture and is indicated by the before mentioned analysis of Petersen on leaving the gold standard and Hansen on establishing the BIS. The solutions to many of the national problems were international, and the Scandinavian central banks placed much effort into this cooperation.

A major point here is that many would say that returning to the gold standard was perhaps the most important objective of the “economic policy” of the 1920s, and from the archival material of the central banks it was likewise a most important matter also in the 1930s. Returning to the gold standard

³² Ibid, s. 113-116.

³³ K. Abildgren (2018), *Danmarks Nationalbank 1818-2018*. Copenhagen: Danmarks Nationalbank.

³⁴ Per H. Hansen (2012), “Cooperate or Free Ride? the Scandinavian central banks, Bank for International Settlements and the Austrian financial crisis of 1931”, in *Scandinavian Journal of History*, vol. 37, no. 1.

was also a precondition for restoring the Scandinavian Monetary Union. However, this does not necessarily imply that the union was nothing more than a byproduct of the gold standard. To some extent, it can be seen as part of the same, were the gold standard and the monetary union were integral elements in restoring the pre-war system. A standard interpretation of the 1920s sees it as an ambiguous decade, pulled between forces wanting to return to pre-war normalcy and the long liberal 19th century on the one hand, and on the other hand, forces creating something new, pointing away from the 19th century and towards new thoughts and different policies belonging to the 20th century. In general, central banks seem to have been entities and intellectual environments which more than most were deeply rooted in the first group. Returning to the gold standard has been seen as the most poignant symbol of such traditional, backward-looking affinities. But the Scandinavian Monetary Union was also a part of what the central bankers regarded as the old, well-functioning world which they wanted to restore. Hence, from the contemporary perspective of the 1920s and 1930s, rebuilding the monetary union was simply the right thing to do. In this perspective it seems somewhat of a sin of omission not to write of these efforts or try to understand them on their own terms.

A “quantitative” overview of the Scandinavian central bank meetings

Moving on from the lacking literature on Scandinavian central bank cooperation and efforts to bring back the Scandinavian Monetary Union in the interwar years, to my findings on the subject. Firstly, it might be interesting to see this in more quantitative terms. The Table 1 below,³⁵ indicates a rather intense cooperation, with the central banks meeting very often. As can be seen, the central banks convened almost every single year, and sometimes several times a year – to discuss and coordinate a range of issues, not least trying to get the union working again. From 1916 and until 1939 I have so far registered approximately 30 meetings. As might be remembered, such meetings did not (as far as I am aware of at this time) happen during the golden years of the SMU up until 1914. The SMU conferences started with the First World War, with meetings conducted to mend war time inflicted difficulties. If we disregard the meetings of the war years, there are about 25 such conferences.

³⁵ The table is preliminary.

Table 1**Central bank meetings of the Scandinavian Monetary Union**

Year	Type	Location	Date
1916	SMU meeting	Stockholm	23.-24. Feb
1916	SMU meeting	Gothenburg	7. Oct
1917	SMU, Off. conf.	Stockholm	17.-19. Apr
1918	SMU meeting	Copenhagen	8.-9. May
1918	SMU meeting	Oslo*	25.-26 Oct
1918	SMU, Off. conf.	Stockholm	12.-13. Nov
1920	SMU meeting	Copenhagen	9.-11. Feb
1920	SMU meeting	Oslo*	23.-25. Feb
1921	SMU meeting	Stockholm	12.-13. Nov
1921	SMU meeting	Oslo*	13.-15. Dec
1923	SMU, Off. conf.	Oslo*	29.-31. Oct
1923	SMU meeting	Stockholm	14.-15. Dec
1924	SMU meeting	Copenhagen	12.-13. Oct
1925	SMU meeting	Oslo	23.-24. Oct
1928	SMU meeting	Stockholm	7.-9. Dec
1929	SMU* meeting	Gothenburg	22.-23. Nov
1931	SMU meeting	Copenhagen	21.-22. Feb.
1931	Nordic meeting	Stockholm	27. Sep
1932	SMU meeting	Oslo	22.-23. Oct
1933	Nordic meeting	Stockholm	24.-25. May
1935	Nordic meeting	Copenhagen	25. Feb
1936	Nordic meeting	Oslo	25.-26. Oct
1937	Nordic meeting	Helsinki	27.-28. Sept
1938	Nordic meeting	Basel	10. May
1938	Nordic meeting	Stockholm	17.-18. Dec.
1939	Nordic meeting	Basel	9. May
1939	Nordic meeting	Copenhagen	14.-15. Oct

Source: Based on material from the archives of the Riksbank, Nationalbanken and Norges Bank. Oslo* refers to Norwegian capital Kristiania before it changed its name in 1925.

In the 1930s, most of the meetings included the Finnish central bank, and the Icelandic central bank participated on at least one of them. In the table below I have labelled these “Nordic meetings”. It might seem tempting to omit these from the Scandinavian central bank meetings, and rather define them to be something else. However, it would be a premature verdict to conclude that this made them differ qualitatively from the meetings in the 1920s, or necessarily made them “less Scandinavian”. The Nordic meetings were obviously built on the already institutionalised conferences and cooperation of the Scandinavian Monetary Union and functioned as a development from the SMU meetings. Furthermore, that these gatherings were Nordic in scope, did not mean that the Scandinavian Monetary Union was not being discussed. On the contrary, both contemporary and future issues of the SMU were being debated at these Nordic meetings. In addition, Iceland, which was in a personal union with Denmark, had also gained a formal affiliation to the monetary union in 1924.³⁶

In addition to the Nordic meetings, there were what I have labelled as “official conferences”. On these conferences, the participants did not merely represent the central banks – which in the Norwegian and Danish case were private entities – they were official designates from their respective country’s government. In some cases, this also meant that members of government would be official participants at the meetings. This was because such conferences were summoned with the intention of legally altering – or ending – the SMU convention and was thus a matter which had to be handled as part of each country’s foreign policy as well as national legislation. As can be seen, there were not many such official conferences. Judging by the archival material, the closest the union came to being abandoned was at the official conference in Stockholm in April 1917, when there was impetus for Sweden to leave the union because of the limitations which the convention imposed upon national monetary (and economic) policy.

Based solely on the quantitative material here, it seems reasonable to conclude that the efforts to enhance Scandinavian central bank cooperation increased in the interwar years. We will return to the more qualitative aspects of this, but this included e.g. the Swedish Riksbank offering to lend Norges Bank gold in order to strengthen the Norwegian krone. Such actions would be in concordance with Barry Eichengreen’s theory of central bank cooperation under the classic gold standard, as presented e.g. in *Golden Fetters*, and can be seen as a regional expression of the same in the immediate aftermaths of the

³⁶ It must however be said that Iceland’s affiliation to the union and to the entire central bank cooperation was so detached from the other countries, that in the late 1930s it actually caught both the Riksbank and Nationalbanken by surprise that Iceland had been formally affiliated to the union since the mid-1920s.

war.³⁷ The cooperation also included discussing and coordinating the discount rates, sharing experiences with discounting treasury bills and relations with the government, informing each other on the national economy and steps taken to assist trade, industry, and the financial sector, and analysing the international economic situation as well as agreeing on mutual action vis a vis other central banks, the Bank for International Settlements, and in international negotiations. With regards to the SMU, there was much talk of and efforts to restoring the union – which will be analysed below – but also cooperation in order to mend other difficulties as they appeared. The cooperative spectre was wide and hence obviously included both “low-key” as well as “high-profile” cooperation, as defined by Borio and Toniolo.³⁸

How did the central banks consider the prospects of re-establishing the Scandinavian Monetary Union?

Preconditions for and obstacles against resuming the SMU

Scandinavian monetary cooperation reached its nadir during the First World War with the “Gold War” between Sweden and Norway, in the aftermaths of the official conference in April 1917.³⁹ At this time the prospects of coming in a position to cooperate intensely again must have seemed rather unlikely. As we however know from the sheer number of meetings – and the intensified cooperative efforts – this changed swiftly. There are several reasons for this, one of them seems to have been on a personal level. During the war it had been Governor Karl Bomhoff of Norges Bank and Governor Victor Moll of Riksbanken who could not come to terms and led the per-letter-quarrelling. In the autumn of 1920, however, the 78-year-old Bomhoff retired, and Nicolai Rygg was appointed Governor to clean up the mess after the war time. Judging by the archival material, he seems quickly to have developed a cordial relationship with Governor Moll. Letters from Moll to Rygg often began with the cordial “Käre Broder!” (i.e., “Dear Brother!”), and this continued with his successor Ivar Rooth after Governor Moll suddenly passed in 1928. With regards to Nationalbanken, the bilateral relationship with Norges Bank and Riksbanken respectively, does not seem to have been as negatively affected during the war as between Norges Bank and Riksbanken. On the personnel side, there was continuity from the war years and some years into the 1920s, including *de facto* Governor Rubin and Deputy Governor Ussing. In 1923-24, however, four out of five members of the Board of Directors in

³⁷ B. Eichengreen (1995), *Golden Fetters*. New York: Oxford University Press, p. 8.

³⁸ Borio & Toniolo (2008), p.17.

³⁹ Rongved (2017).

Nationalbanken were replaced, and the only bearer of continuity was Westy Stephensen, the board's currency expert.

What were the prospects of revitalising the monetary union? In the early 1920s gold convertibility was still suspended, the currencies fluctuated massively, and all Scandinavian countries were preparing for pursuing deflationary policies aiming at resuming gold convertibility. In 1922, at the Genoa conference, the participating states agreed to resume the gold standard via the Gold Exchange Standard, as gold was scarce, and large gold-based currencies like dollar and pound sterling could function as gold substitute. At the time, however, Great Britain was not yet in a position to resume gold convertibility and only the US was on gold. Also the Scandinavian countries' point of departure differed significantly after the war time disturbances, with Norway in the worst position, as the value of the Norwegian krone was only half the pre-war parity. As such Norway had to struggle to reach parity through most of the 1920s, and did not resume gold convertibility until May 1928. Sweden's much better point of departure made her resume gold convertibility as the first European country in 1924. Denmark stood somewhere in between and was able to make the same efforts early in 1926. However, it is worth noticing that Denmark eventually resumed convertibility on a gold bar standard, following the lead of Bank of England. Sweden, on the other hand, having resumed convertibility even before the "conductor of the international orchestra", which Keynes framed the Bank of England, returned to the old gold coin standard, while keeping a gold export prohibition.⁴⁰ Both the Swedish and Danish decisions were related to and influenced by the SMU, and was also to have influence on the SMU's further life – as might be remembered the union originally had been a gold coin convention. Hence, a range of circumstances affected the return of the SMU: returning to gold convertibility, what kind of gold convertibility was returned to, and the degree of limitations on gold flows. And just like during the war, the formal paragraphs of the Scandinavian Coin Convention of 1872/73 were to create hindrances for each country's individual monetary policy in the interwar period, both in larger and smaller issues. One astonishingly large stumbling block was related to small coins.

Small coins – large problems

During the war years and early 1920s a reoccurring problem within the union was non-gold coins of minor denominations.⁴¹ Although this might seem like a trivial matter, it caused major disturbances from the war years on, in the same matter as – and intertwined with – the gold policy, and this was to influence

⁴⁰ Keynes ref.

⁴¹ The term "token coins" has also been used to describe these, e.g. by Talia.

politics also in the interwar years. As indicated, the solution to the problem has also been seen as ending the Scandinavian Monetary Union, and as such it seems pertinent to carve out this matter.

As mentioned, the Scandinavian Coin Convention of 1872/73 stipulated free circulation and legal tender status within the union not only of the main gold coins, but also of non-gold coins produced in any of the three countries.⁴² Within certain limits the non-gold coins could be freely exchanged for gold at par value. But these conditions were created for and at a time when the three currencies were traded at par and anchored to the gold standard. With the suspension of gold convertibility in 1914 the Scandinavian currencies had started fluctuating both within the union and in relation to other foreign currencies, as well as to the price of precious metal.

One side of this was that the price of metal used in the non-gold coins – silver and copper – meant that the public through the Convention and the right to sell at par value would remelt them to earn a profit, resulting in a shortage of coins. Another element was that the coins legal tender status meant that they could be exchanged for gold in the central banks, and the public could export these within Scandinavia and thus take advantage of exchange rate differences. Generally the Scandinavian Coin Convention functioned as a gateway to a spectre of arbitrage possibilities, and the central banks could also end up profiting on each other. Hence, at the May 1918 meeting Nationalbanken wondered if “Swedish’s discontent” and urges to alter the convention was because Riksbanken had lost an opportunity to profit from minting small non-gold coins.⁴³ Although Governor Moll explained that the discontent was rather because the convention stipulated no limitation on each country’s right to mint gold coin, which together with the coins’ legal tender status restricted each countries’ gold policy, the Riksbank saw the potential drawbacks with non-gold coins as well.⁴⁴ The central banks came to terms: Laws forbidding the remelting of Scandinavian non-gold coins were implemented during the summer of 1918.

The small coin issue was however not over with. It was debated also at the next meeting in 1918, in Oslo in October. In Norway the lack of circulating non-gold coins was becoming precarious, despite the war time decision to expand the spectre of small denomination money (1, 2 and 5 øre in iron and 1- and 2- krone in paper). It was suggested minting an iron 1- krone coin as well,

⁴² Originally the Convention.

⁴³ “Minutes of the negotiations of the Scandinavian central bank conference in Copenhagen, 8.-9. May”, undated minutes, NRA-NBDII/D0643.

⁴⁴ *Ibid.*

replacing the silver coins, although Deputy Governor Mosen of Norges Bank found it to be “tasteless”.⁴⁵ However, the suggestion never materialised, and the small coin issue remained unsettled. It was the main theme at the meeting in Copenhagen early in 1920. Non-gold small coins had disappeared from circulation in both Denmark and Norway, while Sweden suffering from the flip side of the situation, had experienced massive inflows of small coins, and suffered from the Convention’s obligation to exchange them for gold. The central banks seem to have come to terms again, and in the aftermaths of the meeting, Norges Bank asked the Ministry of Finance to start preparing a change in the Coin Convention’s article XI abandoning each person’s right to exchange one’s small coins with gold.⁴⁶ A few days later, Norges Bank however asked the Ministry to postpone such changes. The situation seems to have blown over, and over a year later, in the middle of June 1921, Governor Moll wrote that the issue was not important enough to necessitate an additional [paragraph to the] convention. He believed that such an initiative would lead to a general revision of the entire Scandinavian Coin Convention. Although Moll found that such a revision had become necessary, now was not the time.⁴⁷

But the time came quickly enough. Already at meetings in November and December 1921 the matter was again discussed. The amount of small Scandinavian coins had continued to pour into Sweden – the value of such coins held by the Riksbank increased from less than 3 million kroner at the end of 1920 to more than 19 million kroner two years later, while in Norges Bank the value of such coins plummeted from approximately 1 million to close to nothing in the same period.⁴⁸ With these continued difficulties, there seemed to be no way around changing the very Convention. Thus, the matter had to be elevated from the central banks to the government level, and an official meeting was finally held in Oslo⁴⁹ in October 1923. Here the governments agreed to a supplementary paragraph to the Scandinavian Coin Convention which allowed each country to mint separate non-gold coins, which thus were legal tender only in the country they were minted, and this came to effect in 1924.

⁴⁵ «The Scandinavian bank meeting, 25-26. October 1918», undated minutes, NRA-NBDII/D0643. It is not certain why he should have reacted this way: the paper krone had already been introduced the year in advance, it had been heavily criticised in the public, and the very material should probably have made the paper krone far more “tasteless” in the eyes of a central banker than an iron krone.

⁴⁶ «Re the Mint convention etc. Short resume of Board of Director’s statements during the war”, undated note, NRA-NBSA/D0155.

⁴⁷ Letter from Governor Moll to Governor Rygg, 20 June 1921, NRA-NBDII/D0642.

⁴⁸ Talia (2004), p. 177-179.

⁴⁹ I use the term “Oslo” here, although the name of the Norwegian capital was “Kristiania” until *primo* 1925.

Did the small coin issue end the Scandinavian Monetary Union?

This decision has prompted several authors to see the decisive end of the Scandinavian Monetary Union in 1924. This accounts for Bordo and Jonung, Talia, and Edvinsson.⁵⁰ Bergman, Gerlach and Jonung places the end of the union in 1920/21, but also their arguing seems to be linked to the decision to allow separate small coins, and the end year seems merely to have been misplaced.⁵¹ The most melodramatic exposition is perhaps Talia's, which considers the smuggling of "token coins", and thereafter the decision to repeal these coins of their intra-Scandinavian legal tender status, to be "[T]he final nail in the coffin" – and thus: "The SCU was no more"⁵²

Although there are good arguments in favour of such an understanding, or like other studies of the Scandinavian Monetary Union which ends the union with the First World War, like Bartel, De Cecco, Øksendal, as well as Henriksen, Kærgård and Sørensen,⁵³ I am not entirely convinced. I agree that the end of the Monetary Union was no mort *subite*; it was indeed something that took its time. And yes, it seems apt to see this slow death as starting with World War I – I have also argued along such lines. However, there are arguments against this understanding.

Firstly, a closer look at the small coins issue might shed a different light on the matter. Among the main Scandinavian intellectual-political actors of the 1860's and -70's which prepared the gold standard and constructed the Scandinavian Monetary Union, there were strong proponents preferring the Monetary Union to be without small coins. In this perspective such small non-gold coins were not a necessary art of the union. Now this might seem irrelevant to what the SMU actually had become by the interwar years and its entire development from 1873 and until the outbreak of war, however it is important to note that in the 1920s this perspective also resonated with the central bankers. It was explicitly stated by some of the central actors that re-establishing the union after 1924, without small denomination non-gold coin, was like the union the 'Union Fathers' had wanted.⁵⁴ This shows how the contemporary actors did not regard the decision of 1924 as a defeat of or an end to the union.

⁵⁰ Bordo & Jonung (1997), p. 343-344; Bordo & Jonung (2003); Talia (2004); Edvinsson (2010).

⁵¹ Bergman et. al (1993), pp. 513 and 516.

⁵² Talia (2004), p. 177-179.

⁵³ De Cecco (1992); Bartel (1974); L. F. Øksendal (2007), *Essays in Norwegian monetary history 1869-1914*. Doctoral dissertation, Norwegian School of Economics and Business Administration, Bergen; I. Henriksen, N. Kærgård and C. Sørensen (1994), "Den Skandinaviske Møntunion", in *Den Jyske Historiker*, vol. 69-70; Henriksen & Kærgård (1995).

⁵⁴ Rygg, N. (1928). Spørsmålet om skandinavisk myntunion. *Nordisk tidskrift för konst, vetenskap och industri*, 4(7), pp. 488–489, 495. Norges Bank referred explicitly to the influential "professor-politician" of the 1860s and 1870s, Norway's main actor in these matters, Ole Jacob Broch.

Secondly, the international literature on the gold standard sees World War I as what might be described as a *time out*, but it does not see the war as an end of the gold standard. Admittedly, the period from 1870 until 1914 is often labelled as the “classical gold standard”, and the return to the gold standard is portrayed in its own terms, sometimes given its own name (the “gold exchange standard”), being more diverse than its classical form (although this was diverse too!), and often being analysed in terms of being to blame for enlarging the consequences of the Great depression. However, it is nevertheless seen as part of the gold standard. The politics of the interwar years was a return to the gold standard, including the struggle to achieve this goal. The gold standard is not seen as ending during World War I. Although there admittedly are differences, it does not necessarily seem correct to judge the SMU completely different. The SMU was – just like the gold standard – seen as normalcy, and the return to it the right thing to do in order to re-establish normal conditions. Although there had been some strategic threats from the Swedish Riksbank of leaving the union during the world war, and discussions of altering the union’s convention thereafter, the SMU was – as we shall see – not seen as abandoned by the actors. This holds even if it differed from what it had been prior to the war, e.g. after the 1924 decision to except small gold coins. The union was seen as alive, albeit sleeping, and restoring it was an important issue. As will be shown, the central banks continuously debated how to reinstate it, and also as late as in 1931 – the very year the gold standard collapsed – there were agreements among two of the Scandinavian central banks to commence some small steps with the intention of starting the union again.

Efforts at re-establishing the Scandinavian Monetary Union before returning to the Gold standard

In the aftermaths of World War I, there was general uncertainty whether or not gold would end up as the ultimate international measure of value and thus if the gold standard would return. Furthermore, although it was considered likely – also by the Scandinavian central banks – that the gold coin foot would be reintroduced, the inflation during the war years made it uncertain if this would be at par value in all countries.⁵⁵ Either way, the smaller countries needed USA and Great Britain to take the lead. With only USA on the gold standard, the Scandinavian countries waited for England to stabilise pound to the dollar. Until then the Scandinavian central banks agreed that it would be best if “every small state should refrain from all experiments to stabilise their currencies” – hence to devalue – but work vigorously to strengthen their

⁵⁵ Joint statement from the Scandinavian central banks after the Stockholm meeting in November 1921, appendix no. 6 to letter from the Riksbank to Norges Bank, 17. November 1921, NRA-NBDII/D0641.

economic position internally and internationally, aiming at reinstating the old gold par exchange.⁵⁶

The Scandinavian Monetary Union complicated the situation, as the convention restricted each country's gold policy. As we have seen, the obligations of the Scandinavian Coin Convention, including the gold flows and small coin problems, was causing problems. If one state unilaterally re-established the gold standard without restrictions on gold flows, the central banks considered this to imply that the Scandinavian Coin Convention automatically was operative again. But this posed a serious problem now that the three currencies were no longer pegged, and the exchange rates floated. After the war, Sweden was in a better position than her two partners, with exchange rates closer to the old par value, and a more stabilised economy. Reinstalling the gold standard in Sweden only, was under such circumstances believed to make the benefits fall on Norway and Denmark – through the golden fetters of the convention – while the drawbacks would hit Sweden alone. Hence, returning to the gold coin foot and thus to the monetary union, which was seen as interconnected issues, had to be done first after agreement among the three countries.⁵⁷ Solving the non-gold small coin issue was a vital element in this.

Moreover, it was imperative that a return to the Scandinavian Monetary Union implied having the same gold value in all three currencies. As the market value of the three currencies differed significantly at the start of the decade, it was a long way to go, but Moll was definitely positive: "If resuming the coin convention is a common Scandinavian interest, and for my own part I am convinced that that is the case, the three countries in cooperation and uniform should work towards this goal".⁵⁸

In January 1922 Moll thus wrote Bank of England Governor Norman and recommended him to return to the gold coin base. Sweden, stated Moll, could in turn immediately follow suit – had it not been for the Scandinavian Monetary Union. However, if England took the lead, the situation would perhaps change also for Norway and Denmark, and all three could end up following.⁵⁹ Governor Norman's response was discouraging: it was too early, at least until USA's position regarding the interallied debt – another reoccurring

⁵⁶ Ibid.

⁵⁷ PM from Victor Moll, appendix no. 2 to letter from the Riksbank to Norges Bank, 17. November 1921, NRA-NBDII/D0641. The PM can also be found in DRA-NBD/33, box labelled «1818-1936 Sager, Skandinaviske møntunion, genoptagelse», here with the title "What are the preconditions for the reinstatement of the Scandinavian Coin Convention?".

⁵⁸ Ibid.

⁵⁹ Letter from Governor Moll to Governor Norman, 27. January 1922, from undated and untitled resume of communications to and from Moll in the year 1922 regarding Bank of England, resuming gold convertibility, international conferences *etc.*, NRA-NBDII/D0643.

theme – was sorted out.⁶⁰ Also Governor Winther in Nationalbanken agreed; it was too early. Even if England took the lead, Denmark was in no position to follow up. However, asserted Winther, the Scandinavian Monetary Union could not be of hindrance for Sweden to return to gold without Norway and Denmark.⁶¹ By all practical purposes this was also the outcome. In 1922 Sweden de facto returned to the gold standard, and on 1 April 1924 also de jure, as the first European country.⁶²

The two other countries were however in 1924 still far from such a position. In Denmark there were loud political voices – the Social Democratic party and the Landbo-party⁶³ – in favour of stabilizing at a lower than par rate. Nationalbanken was worried, for a range of reasons, but not least because “a cut [...] would imply a termination of the Coin Union and it would in any case depend on the two other Nordic countries if the stabilisation could be introduced before a year has passed after the termination”.⁶⁴ This was discussed at the meeting in Copenhagen in October 1924, and Moll warned the other two – and in particular Denmark – of stabilising at a rate lower than par value: “The gentlemen are aware of the Coin Convention’s obstacles against stabilising. Yes, it is evident that it must be terminated”.⁶⁵

Riksbanken was back on gold – and at that at odds with the previous precondition of waiting for Bank of England. But the issue of re-establishing the Scandinavian Monetary Union lay dormant. The other precondition had to be fulfilled, and Nationalbanken and Norges Bank were not in a position to restore the gold standard. Internally there were major economic issues to be handled. The finance sector was in massive troubles after the First World War, and the mid-1920s was characterized by bank failures and the central banks’ *ad hoc* efforts to handle the banking crisis. Expansionary politics was contrary to the deflationary policy needed to restore the gold standard, and the so-called parity policy had to be postponed.

Finally, however, at the beginning of 1926, Denmark could also return to the

⁶⁰ Letter from Governor Norman to Governor Moll, February 1922, from undated and untitled resume of communications to and from Moll in the year 1922 regarding Bank of England, resuming gold convertibility, international conferences *etc.*, NRA-NBDII/D0643.

⁶¹ Letter from Governor Winther to Governor Moll, 8 March 1922, from undated and untitled resume of communications to and from Moll in the year 1922 regarding Bank of England, resuming gold convertibility, international conferences *etc.*, NRA-NBDII/D0643.

⁶² Edvinsson (2010), s. 41.

⁶³ It is not certain if this was the old Liberal party (Venstre), or the new Landmandspartiet. The latter only received below 1 % of the votes and were not represented in the Danish Parliament. If it was Venstre however, they had received over 28 % of the votes, and together with the Social Democrats had received nearly 65 % of the votes which combined gave them 99 out of 148 mandates in the parliament.

⁶⁴ Letter from Nationalbanken to Nicolai Rygg/Norges Bank, 2 October 1924, NRA-NBDII/D0643.

⁶⁵ Undated minutes from the October 1924 meeting in Copenhagen, NRA-NBDII/D0643.

gold standard. But this was not a return to the traditional gold coin standard. Denmark returned to a gold bullion standard. This was a major issue to be discussed within the SMU in the years to come. The Danes followed the lead of Bank of England, explicitly calling England a “pioneering country” in the gold question, which had returned to gold, but at a bullion standard some months earlier in 1925.⁶⁶ The coin vs. bullion question was not completely settled in Denmark until being codified at the end of 1926, but Nationalbanken landed on bullion due to “international considerations”, after a meeting with Governor Norman of the Bank of England. Norman had stated that the Danish central bank needed to follow a procedure which excluded the possibility of gold entering circulation and disappearing. And when the Bank of England said “jump”, the Nationalbanken knew what to do.

However, the Danish decision was also made with consideration to the Scandinavian Monetary Union. Nationalbanken chose the gold bullion standard because resuming the gold coin standard “would imply that the Scandinavian Coin Union with regards to the main coins would take effect immediately”.⁶⁷ And, it was continued, as there was “strongly differing perspectives considering restoring the Scandinavian Coin Convention”, this question needed to be kept open until further notice.

With both Sweden and Denmark back on gold, the issue of restoring the union resurfaced in the second half of the 1920s. But, in contrast to the start of the 1920s, it had evidently become a contested issue. What were these “strongly differing perspectives”? This is not straightforward to pinpoint; Nationalbanken might have been referring to political differences, i.e. between the governments, as well as differences between the central banks. It might also have referred to differences of opinion in the academic economic communities. It is known that after Denmark went back on gold, the matter was discussed in the Nordic economic meeting in September 1926.⁶⁸ Here the leading Danish economist Axel Nielsen was strongly in favour of re-establishing the Scandinavian Monetary Union. He was however more interested in restoring the agreements from 1885/1888, where the central banks could draw at par value without paying a fee, as well as the agreements from 1894/1901 where the central banks accepted each other notes at par value. Hence it seems that it was the previously mentioned “complete system” from the turn of the century he had in mind, although he found both the main coins and mutual

⁶⁶ PM, Nationalbanken, dated 30. October, probably 1929, DRA-NBD/33, box labelled «1818-1936 Sager, Skandinaviske møntunion, genoptagelse».

⁶⁷ Ibid.

⁶⁸ The following is from Olsen and Hoffmeyer (1968), p. 114-116.

small coins to be less interesting. As such he was perhaps visualising a more modernised version of this “complete system” of payments. But he met little understanding from one of the leading Swedish economists. Eli Heckscher acknowledged the Scandinavianist sentiments, but found the monetary union of little economic value, and perhaps also to be harmful. The world was in disarray, and who knew what the future would bring. If the world ended up with a more flexible monetary system than the gold standard, the fetters of the SMU would be troublesome. The Norwegian economists Gunnar Jahn and Oscar Jæger were positive to re-establishing the SMU, and like Nielsen the latter praised the arrangements with feeless drafts, but fellow Norwegian Wilhelm Keilhau launched a “powerful attack” on the Scandinavian Monetary Union, as he wanted neither Danish nor Swedish influence on Norwegian monetary affairs.⁶⁹

Interestingly it seems as if Keilhau’s attack made quite an impression on the Danish and Swedish central bank. Albeit he was not a bearer of the official Norwegian position, and neither at the time nor in retrospect has been considered to have had particularly weighty perspectives, both Copenhagen and Stockholm believed that he had quite a few like-minded people in Norway. Hence, in communications between Nationalbanken and Riksbanken there was now fear of arranging a new Scandinavian central bank meeting – presumably official – which Axel Nielsen and Eli Heckscher had recommended. In Nilsen and Hoffmeyer’s words: “There was quite simply fear that the Norwegians would use the opportunity to destroy the Scandinavian Coin Union completely”.⁷⁰ And a means of avoiding the Norwegians from taking such steps was accordingly the Danish decision to land on the gold bullion rather than the gold coin standard.⁷¹ Interestingly if this perspective is correct, it would upend the positions so far. Only a few years earlier, it had been Norway wanting to uphold the union, whereas Sweden might be interpreted to have been more lukewarm.⁷² Also if we see the successive development, this perspective seems skewed. That being said, although the Riksbank at some instances might have seemed lukewarm, the statements of Governor Moll at the central bank meetings had nevertheless clearly been in favour of restoring the union, and only two years earlier he had warned the others against stabilising (resuming gold convertibility at a lower than par rate), using as an argument the negative effect this would have on the union – its termination.

⁶⁹ Ibid, p. 115.

⁷⁰ Ibid.

⁷¹ Ibid, p. 115-116.

⁷² Note from the Norwegian minister in Stockholm to the Norwegian Minister of Foreign Affairs, 27. November 1923, NRA-NBDII/D0641.

Nonetheless, the Danish decision seems to have postponed the union partners from having to take a clear stand to the issue of re-establishing the union. As seen from table 1, there was no new meeting in 1927, and the discussion and decision did not resurface until after Norges Bank had returned to gold. But on 1 May 1928 the last of the Scandinavian countries finally returned to the gold standard. What is interesting is that the strongest proponent of re-establishing the Scandinavian Monetary Union in the years thereafter seems to have been Governor Nicolai Rygg. In light of the Norwegian literature this is interesting, because Rygg does not mention this in his most influential work on the interwar central bank affairs. And in light of the broader Scandinavian debate this is also interesting, because it suggests the Danish and Swedish fears of the Norwegians terminating the union, were false, misinterpreted or unbalanced.

Efforts at re-establishing the Scandinavian Monetary Union after returning to the Gold standard

With Norway back on gold, rebuilding the SMU became a major theme once again. From now on the discussion seems to have been twofold – on one side was the discussion of reinstating the Monetary Union according to the 1873 Coin Convention, i.e. primarily as a gold coin union, and thus being preoccupied with the three countries ending up on the same kind of gold standard. On the other side was a discussion highlighting the developments between 1873 and 1914, focussing on the mutual feeless drafts and exchanging each other's central bank notes at par value, which can be interpreted as a more modern version of the union and more in line with the general monetary development. As shown above, this was the perspective of the academic economist environments which were positive to restoring the Scandinavian Monetary Union.

On the Nordic Trade Meeting in September 1928, the union was debated heavily. Here a major contributor was Governor Rygg of Norges Bank, who had published a piece on the matter in the journal *Nordisk tidsskrift*. His written thoughts are interesting in their own rights, but they were also the foundations for his lecture entitled “The Question of Scandinavian Coin Union”. Rygg was clear: “The major question that needs to be answered is if a cooperation is wanted or not. If not, the case is clear. However, I believe that within the crowd gathered here, the value of this cooperation is understood, and efforts will be made to reinstate this work”.⁷³ Rygg referred to the official statement from the Scandinavian Trade Meeting in 1917, which had been very positive to the monetary union, and wanted to return to Scandinavian ideas of fellowship as soon as normal times made it possible. Rygg thus concluded his written

⁷³ Rygg (1928), NT, s. 496.

comments:

*Here the trade community has pointed the way and the finish line needs to be crossed. The trade community sees in the arrangement a valuable asset which our forefathers struggled to create. This asset should be maintained. Conditions which we were not master of, have more or less suspended it, so it needs to be assessed and put back in order. The time has come to go to work.*⁷⁴

The motivational speech may have made an effect, as the Nordic trade meeting of 1928 seems to have been more positive than the Nordic economic meeting had been in 1926. A more likely reason is because the former perhaps saw their interests better looked after with the monetary union – its arrangements had been designed to facilitate trade – whereas the economists had less interests invested and regarded this in a more theoretical perspective, although these differed. Hence, the Nordic trade meeting unanimously agreed on a resolution stating the “desirability of the governments in the concerned countries preparing a revision done by experts with the task of preparing a proposal for coin convention adapted to the existing conditions”.⁷⁵

A little more than a month later the Scandinavian central banks met for the first time after all countries had returned to gold. Seemingly the conditions were finally all in place. All Scandinavian central banks were on gold, Great Britain and US as well, the international economy was flourishing, within Scandinavia the national economic situations had stabilised after many turbulent years, and in the business and financial communities there was widespread hope for a revival of the union. The main theme on the December 1928 central bank meeting was thus reinstating the monetary union, and generally there was agreement that this was a good idea. Riksbank Governor Moll stated that it would be fortunate “if the Coin Convention and the central bank agreements of 1905 again could be put into effect. On this issue, there is practically no disagreement within Sweden”.⁷⁶ This is not to say that Moll was not sceptical of a bank note union, as he stated that this would in case imply “a broad community with regards to financial affairs, which hardly is thinkable until the day arrives, that the three countries is made into something which could be called the United States of Scandinavia”.⁷⁷ Nonetheless, from the central bank meeting’s official statement, the intention was clear: “The representatives of the three central banks find it desirable that the coin convention, as far as gold coin

⁷⁴ Rygg (1928), s. 498.

⁷⁵ Rygg (1928), p. 485.

⁷⁶ Moll’s remarks during the 1928 central bank meeting in Stockholm, 7 December 1928, attached to the protocol, NRA/NB/DII/D0641.

⁷⁷ Moll’s remarks during the 1928 central bank meeting in Stockholm, 7 December 1928, attached to the protocol, NRA/NB/DII/D0641.

is concerned, as soon as possible is made fully effective again.⁷⁸ The unsettled question of whether it would be gold coins or gold bullion which would be the union's basis, necessitated that the decision – and a needed revision of the Scandinavian Coin Convention – had to be postponed. The interesting part is nonetheless that there was a clear and vocal intention of re-establishing the union. Moreover, the draft question was not seen to be dependent on the gold base question being settled, and to many it seems to have been a more important question, and the meeting hence established a working group with the three governors – Moll, Rygg and Schröder – aiming at a new agreement with drafts in order to facilitate trade between the countries. The urge to revise the 1905-agreements, also before the gold system was concluded, can be argued to point towards the central banks' desire to see the Monetary Union resurrected as a broader and more modern monetary union.

Albeit slowly, the Scandinavian Monetary Union was rising from the dead – unfortunately the opposite was true of Governor Moll. Shortly after the 1928 meeting and the working group was created, Moll passed away. As things finally was happening, unforeseen events got in the way once again. The working group had to postpone its activities, and things slowed down. But at the end of November 1929 the new Swedish central bank Governor Rooth could finally meet with Rygg and Schröder. At the meeting, Rygg argued that the 1885 draft agreement – with less limitations – would be a better basis than the 1905 agreement. There were also discussions of accepting each other's bank notes at par value, which likewise points towards ambitions of a broader monetary union.⁷⁹ The new Swedish central bank Governor does not seem to have had a negative impact on the efforts, as the meeting in Gothenburg bore fruits. Hence, shortly into the new year, on 4 January 1930, Rygg sent Rooth a *sketch* for an agreement, while Schröder in Nationalbanken received a copy.⁸⁰ This was basically a renewal of the 1885 agreements as it was a bank account without fees, but somewhat adjusted to meet the developments since the turn of the century.⁸¹ Moreover, this was in concordance with the urges of the Scandinavian business and trade communities, as well as the perspectives of some of the leading academic economists. Things were finally starting to materialize. Rooth responded positively, but asked to return to the matter at a later stage as he was extremely busy.⁸² Well, all the central bankers were about

⁷⁸ Protocol of the 1928 central bank meeting in Stockholm, NRA/NB/DII/D0641.

⁷⁹ Protocol of the 1929 central bank meeting in Gothenburg, NRA/NB/DII/D0641.

⁸⁰ Letter from Rygg to Schröder, 4 January 1930, DRA/DN/BDC/box 33.

⁸¹ Letter from Rygg to Schröder, 4 January 1930, DRA/DN/BDC/box 33.

⁸² 'PM om Den Skandinaviske Myntunion og Seddelbankoverenskomstene', 19 February 1931 (referring to a letter from Rooth dated 7 January 1930), NRA/NB/DII/D0642.

to become extremely busy.

An international economic crisis was in the making, as the effects of the Wall Street Crash in October 1929 was spreading around the world. This also threatened the Scandinavian countries. Generally, the consequences internationally were that the central banks increased interest rates and protection of own gold reserves to preserve the gold standard. Suddenly the tide had turned, and the prospect of restoring the union which had appeared so encouraging was seemingly drifting away. There was no meeting in 1930, which most likely was a combination of the central banks having more than enough to handle at home, and the need of engaging in the international negotiations and meetings in the creation of the Bank of International Settlements. The sketch agreement lay unresolved.

However, despite the crisis, a new meeting was summoned in Copenhagen early in 1931. Once again the prospect of re-establishing the union was a major theme, this time the initiative came from Nationalbanken. Prior to the meeting, Nationalbanken had stated that it “confidentially could negotiate over the potential prospects for the banks of issue towards paving the way for a resurrection of the Scandinavian Coin Union”.⁸³ During the meeting’s initial remarks on this subject, Nationalbanken’s director Rosenkrantz described the agreements of 1885 and 1905 as “the real bank note union”. He did not dare to suggest the banks to “bind themselves to resume the old practice, however if there should be a mood for it there might be made an attempt – e.g for one year – on mutual accepting the central bank notes at par value”.⁸⁴ With regards to the main gold coins, the union was formally effective, but “by all practical circumstances this has no significance, as the gold coin does not circulate. The public has become fully used to bank notes, and there is no need for circulating gold coins”.⁸⁵ It seems fair to interpret this to be an openness and willingness to resurrect a more modern version of the Scandinavian Monetary Union on the basis of how the union worked in the last couple of decades prior to the outbreak of the First World War. As the trade communities, parts of the economists, and now even the central bankers were arguing, the coin union was less important than the other agreements, which made it more of a monetary union. Despite the Danish initiative, and support at least from the Norges Bank, the theme was not concluded at this meeting either. Once again, the international economic

⁸³ Letter from Nationalbanken to Norges Bank, 13 February 1931, NRA/NB/DII/D0643.

⁸⁴ Protocol of the 1931 central bank meeting in Copenhagen, NRA/NB/DII/D0643. See also minutes/notes titled ‘The Nordic bank note meeting in Copenhagen 21 and 22 February 1931’, DNA/DN/BDAP/box 62, 17 December 1930–27 April 1931/no. 2668. Rosenkrantz’ remarks can be found in a PM titled ‘Should the Coin union be put into effect again?’, DNA/DN/BDAP/box 62/no. 2668.

⁸⁵ *Ibid.*

disturbances had made things difficult. Although the Swedes too seems to have been in favour of the union at this meeting – albeit more reluctantly than Nationalbanken and Norges Bank and more focussed on the gold foundation and gold coins than on drafts and bank notes – the Riksbank hesitated.⁸⁶

At this point in time, however, Nationalbanken and Norges Bank found that it was time to stop talking and start acting in order to re-establish the Scandinavian Monetary Union. This happened despite a mounting international economic crisis, despite Riksbanken's reluctance, and despite national economic turmoil and having currencies with differing gold basis. Therefore, in the aftermaths of the Copenhagen meeting, Norges Bank and Nationalbanken bilaterally continued negotiations on the subject in order to establish "closer economic relations between the Scandinavian countries".⁸⁷ The two central banks agreed on a trial arrangement where the central banks under certain conditions would accept each other's bank notes and coins at par value, and drafts at close to par value. This was meant to facilitate official payments, like the railways, postal services, telegraph and customs, and was in line with what Norway already had been doing since 1929.⁸⁸ However, the arrangement was expanded to encompass also legitimate payment from the public, and the small coins was also a new feature, in addition to the drafts. Nationalbanken also pushed to include payments from the private banks into the deal. Interestingly, although Riksbanken was not part of this trial arrangement, Norges Bank and Nationalbanken discussed including also Swedish notes and coins at par value in their bilateral trial arrangement.

Finally, the tireless efforts to restore the Scandinavian Monetary Union since the First World War had led to some practical results. Although not all three central banks were part of it, and it was a trial arrangement, it was a major part of the union being restored, it was the part which was considered to be most relevant to modern economic affairs, and it was obviously regarded as a steppingstone towards more cooperation and restoring more of the union. The discussions of including Swedish money into the arrangement also points in this direction. Hence, in the late spring of 1931 the Scandinavian Monetary Union was finally coming back to life, and the people who had tried to achieve this goal for many years must have been extremely optimistic.

Once again external events were working against the Scandinavian Monetary

⁸⁶ Ibid.

⁸⁷ Letter from Nationalbanken to Norges Bank, 26 March 1931, DRA/DN/BDC/box 33.

⁸⁸ Letter from Nationalbanken to Norges Bank, 26 March 1931, DRA/DN/BDC/box 33; undated letter from Nationalbanken to the Danish Royal Bank Commissioner, DRA/DN/BDC/box 33. See also DNA/DN/BDAP/box 62/no. 2669.

Union. The international economic situation continued to deteriorate, and over the summer the situation for Great Britain was looking grim. A vital part of the trial arrangement was keeping the same pound sterling exchange rate in Copenhagen and Oslo. But in September 1931 Bank of England took the shocking decision to abandon the gold standard, and the pound started to float. The shock waves hitting the international economy were severe. Within days the Scandinavian central banks convened in Gothenburg – for the first time with the Governor of the Finnish central bank, marking a new era of central bank meetings and cooperation – for a crisis meeting where it was decided to follow the British lead. As the currencies started to float, any prospects of reinstating the Scandinavian Monetary Union had to be postponed – once again. The 1931 trial agreement became the closest effort in the interwar efforts to recover the Scandinavian Monetary Union.

Conclusion

In this paper I have shown that the Scandinavian Monetary Union was far from dead during the interwar years. In contrast to conventional wisdom, it seems more appropriate to see the end of the union with the end of the gold standard in 1931 than with the start of the First World War. Likewise, linking the end of the union to the 1924 amendment to the Coin Convention which disregarded mutual small non-gold coins seems inaccurate. The ideas of resurrecting the union was alive and well in many communities, it intensified from 1928, and even led to an agreement between two of the union partners pointing optimistically into the future. Although the trial agreement was short-lived and became the closest effort in the interwar efforts to recover the Scandinavian Monetary Union, it nevertheless remains a fact that a new vitality, and new optimistic arrangements were conducted to resurrect the union as late as in 1931 – the year the gold standard collapsed.

Parts of the explanation for why this has been overlooked lays in the national methodologism of the interwar central bank and economic-historical literature, partly in combination with the vital parts of the central bank literature being written by the actors themselves or with some level of stakes in the events. Such writers seem to have had little incentive to expand on issues which hardly materialised, and which conventional wisdom later found to be pointless. But a major point in this article has been to argue that revoking the Scandinavian Monetary Union can be seen – in the perspective of the contemporary actors – as returning to a part of normalcy in the same manner as they tried to return to the gold standard throughout the interwar years. This was part of the general effort to return to pre-war normalcy and the institutions and arrangements of the liberal late 19th century. The idea of returning to the union was not

necessarily something merely subordinated to reinstating the gold standard – they can also be seen as two sides of the same coin.

The article explains in detail how the Scandinavian central banks continuously convened and cooperated throughout the interwar years, and how restoring the Scandinavian Monetary Union was a vital feature in these matters, despite the many obstacles in achieving the goals. Interestingly, the efforts to rebuild the union was also done with a clear progressive perspective, where vital aspects of the union one wanted to resuscitate were elements which originally had not been parts of the union. As such the union was not only seen as something old, but also something where important elements pointed forward and were seen as helpful in modern monetary matters. Such perspectives were shared by the Scandinavian trade and financial community, influential parts of the academic economic community, as well as – at least – most of the Scandinavian central bankers.

Despite many setbacks, the Scandinavian central bankers continuously tried to resurrect the Scandinavian Monetary Union until the gold standard's demise in 1931. Even after 1931, the Scandinavian Monetary Union was not dead in the perspective of the central bankers. Although the meetings thereafter formally were Nordic in scope, the subject of resurrecting the union continued to be discussed until the last interwar meeting in 1939. But that belongs to another paper.

Session 3: Markets, States and Monetary Unions

Monetary Mechanisms of the Comecon

An Exploration Essay

Adrien Faudot, Tsvetelina Marinova and Nikolay Nenovsky

Comecon is like the bumble-bee which according to the laws of aeronautical engineering, cannot fly because its wings are too small for its body; but, never having heard of aeronautical engineering, the bumble-bee flies anyway.
Arthur J. Smith (cited in Schiavone, 1981, v)

Abstract

Today's fragmentation of the world economy, the emergence in the near future of large economic blocs operating in different ideological and conceptual models of economy and society, and the fierce struggle for resources and influence, logically lead us turn to history, including the recent one. The issue of the functioning and collapse of the socialist monetary community has another, more specific but also topical meaning. It has to do with understanding the mechanisms of disintegration of the European Union and the euro area, its management and eventual overcoming. In this paper, we focus on the study of monetary mechanisms within the socialist system, and more specifically on its model of integration, the Comecon, which lasted from 1949 to 1991. In the first part we present the basic principles of socialist integration and the role of international socialist money. In the second part we present the main stages in the evolution of the monetary mechanisms of Comecon. The third part is devoted to some technical problems of multilateral payments and the peculiarities of the transfer ruble. Finally, we try to compare with European Payments Union. We present some competing hypotheses, answering the question why the monetary system of Comecon failed.

Key words: socialist integration, Comecon, transferable ruble, European Payment Union, Soviet Union, commodity-money relations, multilateral clearing

JEL: E42, F15, F45, N14, N24, P30

Introduction

In the report of Kristalina Georgieva, Managing Director of the IMF, 'Confronting Fragmentation: How to Modernize the International Payment System' to high-ranking financial circles in Zurich, Switzerland on 10 May 2022, it is said:

'As we look to a digital future, the system also needs to withstand the growing forces of fragmentation. These forces have become stronger as a consequence of Russia's invasion of Ukraine. It has caused not only tremendous human suffering, but also a global economic shock and a sharp increase in the risk of a 'new Cold War.' A world that could fragment into 'economic blocs', creating obstacles to the cross-border flow of capital, goods, services, ideas, and technologies.' (Georgieva, 2022)

Today's fragmentation of the world economy, the emergence in the near future of large economic blocs operating in different ideological and conceptual models of economy and society, and the fierce struggle for resources and influence, logically lead us turn to history, including the recent one. A few decades ago, the world was divided into two ideological and military blocs/camps, split into 'two world economies and markets' – capitalist and socialist. In those years, it was natural to live and think within the confrontation of the capitalist and socialist systems, which in turn were struggling for influence in the so-called third world, i.e., developing countries. The study of the economic and financial practices of communication between geopolitical and geo-economic blocs, between warring countries, characteristic of that era, becomes useful, and in a certain sense, vital. The lack of trust and predictability in the behaviour of the blocs and the individual countries is even stronger today.

Our interest in the Comecon (Council for Mutual Economic Assistance, also CMEA) came from the particular organization of the monetary system and its clearing mechanism. We are interested in the long term by two main themes, namely, first – the economic mechanisms in the relations and tensions between the blocks, and second – the relations and tensions within the blocks that were far from homogeneous. In this paper, we focus on the second theme, the study of monetary mechanisms within the socialist system, and more specifically on its model of integration, the Comecon, which lasted from 1949 to 1991.

Much has been written on the subject of monetary and exchange rate relations within the Comecon in those years – both in the socialist countries and by

Western economists. This literature is now forgotten or neglected as useless¹. However, today's events suggest that these bodies of literature are about to be rediscovered, and the diversity of experience and ideas – to be mobilized and adapted to new conditions of fragmentation.

The issue of the functioning and collapse of the socialist monetary community has another, more specific but also topical meaning. It has to do with understanding the mechanisms of disintegration of the EU and the euro area, its management and eventual overcoming.

The structure of the study is as follows. In the first part we present the basic principles of socialist integration and the role of international socialist money. They are set forth so that the modern reader unfamiliar with the political economy of socialism may understand the philosophy of socialist integration. In the second part we present the main stages in the evolution of the monetary mechanisms of Comecon. The third part is devoted to some technical problems of multilateral payments and the peculiarities of the transfer ruble. Finally, when concluding we try to compare the Comecon with the European Payment Union (EPU). We present some competing hypotheses, answering the question why the monetary system of Comecon failed.

I. Main principles of the socialist integration and the place of money

1. Basics of socialist integration

The issue of 'integration' between socialist economies came to the fore at a later stage after the Second World War, in the early 1960s, and with some difficulty. In spite of the principles proclaimed by the founders of Marxism-Leninism (about the international character of the new society, i.e., Lenin's '*world cooperative*' – a kind of communist globalization), the economic logic of the newly emerging socialist countries after WWII was profoundly autarchic. These countries, despite being small and open economies by nature, followed the experience of the Soviet Union and Lenin's and Stalin's principles of '*socialism in one country*'. The underlying model contained the practice of full nationalisation of the means of production, the state monopoly of foreign trade, foreign exchange monopoly, and above all directive planning. Planning was national; it manifested itself through the construction of the material, i.e., natural, balances of the national economy. Money/currency had a passive accounting and controlling role (we shall see this later). Market and monetary mechanisms of demand and supply were replaced by physical and planned adjustment mechanisms. It was claimed that in the new system, nationally and internationally, in force was the

¹ Literature on the subject is extensive. If we restrict to Comecon, we can recommend some basic textbooks, such as (i) in socialist countries – Aroyo (1974), Shiryaev (1977), Bogomolov (1980, 1986), (ii) in the West – Willes (1962), Wilczynski (1978), Lavigne (1985).

objective 'Law of planned and proportional development', replacing the 'Law of value', the basic law for the capitalist market economy ('Law of value' and 'Labour theory of value' were formulated by Marx)².

In practice, the import was a function of the national plan and export was a function of the planned import. Thus, foreign trade was residual and was included in the national plan. This was because of the drive towards homogeneous, 'harmonious' industrial national structures, the core of which was industrialization (according to 'Lenin's law' the rate of the production of the mean of production (Department I) should outpace that of the consumption goods (Department II). This created a constant hunger for investment, and hence for imports of raw materials and machinery³. The need for imports had to be paid with corresponding exports. Table 1 shows the share of population of Comecon member states and the share in total exports of each country.

Table 1

Share of the number of the population of Comecon member states and share in total exports

Country	Share of the number of the population (%) (1)	Share in the total volume of exports (%) (2)	(2)/(1)
Bulgaria	2.36	5.63	2.4
Hungary	2.8	7.07	2.5
GDR	4.6	12.82	2.8
Cuba	2.5	3.93	1.6
Mongolia	0.38	0.31	0.8
Poland	9.16	12.33	1.3
Romania	5.7	7.14	1.25

The endpoint of this logic is the construction of a foreign currency/foreign exchange plan, which is essentially planning of the balance of payments (see table 1).

² See, for example, Rumyantsev (1966), Tsagolov (1973/1974), Kronrod (1988), Aroyo (1974). 'The Law of planned and proportional development' was modified in the world of the world socialist system (WSS) as the 'Law of the coordination of economic development' and the national economic plans of the socialist countries (Aroyo, 1974, 177). The coordination of people's economic plans appeared as the basis of the regulation of the world socialist market (WSM). Its regulating role was manifested through bilateral and multilateral trade, credit and payment agreements, the organization of international settlements, the establishment of compulsory contingents, the principles of planned pricing, etc. (Mazanov, 1970, 10).

³ At the first stage mostly from the USSR, and partly from Czechoslovakia.

Table 2

Foreign Exchange Plan (for 1983, in Millions of Foreign Currency Leva)

	Revenue		Expenditures		Net balance	
	Socialist currency	Non-socialist currency	Socialist currency	Non-socialist currency	Socialist currency	Non-socialist currency
A. Current operations						
I Payments for exchange of goods						
1. For export and import of goods						
2. Other commodity operations						
II Payments for non-trade transac- tions and services						
1. Transport operations						
2. Tourism and travel						
3. Scientific and technical assistance						
4. Insurance						
5. Diplomatic and other representations						
6. Undergraduate and postgraduate students						
7. Banking operations						
8. Other non-commercial payments						
B. Credit operations						
1. Provision of loans and loans use						
2. Loan repayments						
3. Other credit operations						
All A + B						
C. Change in the foreign exchange reserve						

Source: Tsarevsky (1983, 27). In essence, the exchange rate plan reproduces (coincides with) the balance of payments.

It should be noted that the sought-after uniformity of the economic structures of the socialist countries, in the first years after the Second World War, was dictated not only by the experience of the Soviet Union (of building an 'isolated socialist economy') but also by the Marxist view of the necessity of equalizing the economic levels of the countries before they could participate 'equally' in foreign trade. They were not tolerated from the standpoint of the Marxist political economy. The argument was that with unequal development, any disequilibrium in the balance of payments (a deficit, for example) led to a transfer of surplus value, exploitation and income outwards. That is, there was 'non-equivalent exchange', i.e., for example, the transfer of surplus value from agrarian countries to industrial countries⁴, from debtors to creditors, etc.

As a consequence, bilateral disequilibria in the balance of payments (the core element of a multilateralism) were not seen with a good eye. It was therefore necessary to reach a relatively similar level of development before moving towards an active international socialist division of labour (ISDL), multilateralism and integration which in turn requires accelerated development of the industrial sector. According to one of the Soviet theorists of socialist integration, Yuri Shiryayev⁵:

ISDL differs fundamentally from capitalism both in its goals, driving forces, principles and functions, and in the ways of its implementation (i.e., in the economic mechanism), in its tendencies and in its socio-economic consequences [...] The immediate goal of the foreign economic activity of capitalist corporations/firms, manifested under capitalism as its main subjects, consists in the maximization of profit.

[...] Corporations/firms are not interested in the extent to which their foreign economic operations affect the state of the balance of payments and other economic indicators of their own countries [...] The basic motive of foreign economic activity under socialism is different. In order to maximize the national income, and therefore those funds to which it

⁴ This is why for many years the usefulness of 'the comparative advantages' was denied, even though it fits with Marxist views of foreign trade. It was only at a later stage when the foundations of socialism were claimed to have been built in all countries, that this theory was mobilized and began to be used within the framework of the international socialist division of labour (ISDL) and socialist integration (see for the economic effects of foreign trade, see Bogomolov (1980, 126-133), Bogomolov (1986) and also, Wilczynski (1978, chap. 9-11).

⁵ Yuri Shiryayev (1932-1987), a distinguished scholar in socialist integration, and a corresponding member of the USSR Academy of Sciences worked at the Research Institute of the USSR State Planning Committee, the Secretariat of the Soviet Union, and Deputy Director of the Economic Institute of the World Socialist System. Since 1977 he was Director of the International Institute for Economic Problems of the World Socialist System. He taught at the Economics Faculty of Moscow State University and at the USSR Academy of National Economy.

is allocated, it is necessary (apart from the importation of lacked goods) to replace with stable imports from other countries the absolutely or relatively inefficient productions of these or those goods and services. [...] *Import policy takes priority over export policy.* Export maximization has at its base the sense that it increases the volume of resources that a given national economic complex is in a position to spend on the practical realization of a long-term import strategy. Exports preserve their relative independence only as a means of forming foreign exchange reserves that ensure the uninterrupted implementation of the reproductive process [...] The drive for 'import expansion' explains the specificity of the deepening of the international division of labour, the development of the trend towards economic integration under socialism.' (Shiryayev (1977), 46-48)

As well as according to Jozef Wilczynski, a western economist of Polish origin⁶:

'In the Socialist centrally planned economies, the focus of attention is directed rather to the import side, while exports are essentially viewed as a sacrifice of domestic production to secure the required imports. Their developmental programmes are aimed at high rates of economic growth, leading to tight planning and overcommitment of resources. There is also tradition of autarkic ambitions, and continuous full employment is maintained by direct economic planning. The prevalent domestic sellers' markets reduce the need for, and inclination to, export and instead there is a constant pressure to import. The socialist countries are not interested in achieving a 'favourable' balance of trade, nor are anxious to accumulate large international reserves or to export capital' (Wilczynski, 1978, 144).

In socialist interpretation, both types of countries deserve condemnation on social and economic grounds. In the case of the surplus countries, the surplus is attributed to the exploitation of the less-developed and weaker nations by the rich and industrialized countries, whilst the deficit countries are attacked for insufficient development and social welfare programs (Wilczynski, 1978, 148).

Due to national planning the economic logic outlined above leads to structural foreign trade and payment bilateralism between countries in the

⁶ Jozef Wilczynski (1922-1984), Australian economist of Polish origin, author of the highly erudite book Wilczynski, J. (1978). Wilczynski was born in Augustow, Poland, in 1922. He served in the Polish Underground Army and in the Polish Army under British Command during World War II. He arrived in Australia in 1951. Wilczynski completed a PhD degree in Economics in London in 1968 and then in Science in Sydney in 1975. From 1962 until 1969 he was a lecturer at the Duntroon Military College in Canberra and from 1970 Associate Professor of Economics. He fluently spoke at least four languages apart from Polish and English. Wilczynski's last will was to establish a fund that would support Polish traditions and culture in the Australian Capital Territory. The Fund was created in 1985.

system⁷. National planning implied equilibrium, which was contrary to the principles of multilateralism, where equilibrium takes place within the whole group of trading partners. Both Russian and Western economists recognised that the logic of the system, led to volumes of foreign trade that were limited by imports, itself from the national plan), and were many times smaller than they would be under normal market relations⁸.

For the first ten years after the WWII, and after the creation of the Comecon/CMEA in 1949, it was difficult to speak about integration between the socialist countries⁹. Rather, it was a matter of unilateral material and financial assistance from the Soviet Union. This also fitted in with Stalin's general strategic approach of control, preferring each country to have relations only with the USSR, thus placing the USSR at the centre, and the other countries interacting with each other 'passing through' the USSR (Djilas, 1961)¹⁰. Notwithstanding this strategy, Stalin formulated in 1952 a conception of the two coexisting and competing world economies and markets – capitalist and socialist. This can be seen as having important theoretical and practical

⁷ On the relationship between planning and foreign trade in socialist economies, see Pryor (1963), Ausch (1972), Holzman (1974, 1976), Lavigne (1985). On planning in general and the experience of individual socialist countries, see Montias (1963), Bergson (1964), Ellman (1979), Proft, ed. (1983 [1980]).

⁸ Lavigne (1985, 17), Shiryaev (1977, 47-49).

⁹ The stages and phases, as well as the theoretical foundations of socialist cooperation, are presented in a number of publications (covering different periods), e.g. in the classic book by Bogomolov (1980, 1986), as well as Ágoston (1965), Mateev (1969), Kaser (1965, 1976), Ausch (1972), Aroyo (1974), Schaivone (1981), Graziani (1982), Lavigne (1985), Lipkin (2019, 2019a), Broad and Kansikas (Eds.) (2020).

¹⁰ This has been written about many times, see Korbonski (1990), Lipkin (2019, 2019a).

consequences¹¹.

After Stalin's death, Khrushchev made attempts in the direction of moving toward supra-national planning and the development of country specialisation. Khrushchev started insisting on the ISDL as the first step towards integration based on planning, as opposed to capitalist integration based on market mechanisms. However, these attempts met with determined resistance from the other Comecon members (Romania was particularly adamant¹²). Despite the resistance, coordination and prior agreement of national plans by quinquennium began (a process started in 1954 but gained importance after 1956)¹³. Bilateral trade based on bilateral agreements and treaties prevailed despite attempts at multilateralism and the creation in 1964 of the International Bank for Economic Cooperation (IBEC) and the transferable ruble (TR). The participation of the countries in the capital of International Bank for Economic Cooperation and International Investment Bank (IIB), established in 1971, is presented in table 3.

¹¹ Stalin: 'The most important economic result of the Second World War and its economic aftermath must be considered the collapse of the single all-encompassing world market. This fact determined the further deepening of the general crisis of the world capitalist system. [...] It is true that Germany and Japan were taken out of the picture as competitors of the three main capitalist countries: the USA, England, and France. But at the same time, China and other people's democratic countries in Europe fell away from the capitalist system, forming together with the Soviet Union a united and powerful socialist camp opposing the camp of capitalism. The economic result of the existence of two opposing camps was that the single all-encompassing world market collapsed, and as a result *we now have two parallel world markets also opposing each other*. It should be noted that the USA and England and France themselves had, of course, in spite of their will, contributed to the formation and strengthening of the new parallel world market. They subjected the USSR, China and the European people's democratic countries that were not part of the Marshall Plan system to an economic blockade, thinking thereby to strangle them. In fact, what happened was not strangulation, but the strengthening of the new world market. However, the main thing in this case, of course, was not in the economic blockade, but in the fact that in the period after the war these countries have economically closed and established economic cooperation and mutual assistance. The experience of this co-operation shows that no capitalist country could have given such genuine and technically qualified assistance to the people's democratic countries as the Soviet Union. It is not only that this assistance is as cheap and technically first-class as possible. First of all that this cooperation was based on a sincere desire to help each other and to achieve a common economic recovery. As a result, we have high rates of industrial development in these countries. It is safe to say that at this rate of industrial development it will soon be the case that these countries will not only not need to import goods from the capitalist countries, but will themselves feel the need to put aside the surplus goods of their own production', Stalin ([1952], 80-82, our emphasis). The socialist world market 'represents a totality of interstate and intrastate 'commodity market relations' (CMR), feasible in the form of a planned organized exchange of goods and services (international trade), credit and settlement relations within the world socialist system of economy' (Mazanov, 1970, 7).

¹² See Montias (1964). Interestingly, recent archival research provides evidence that it was Romania that initiated the creation of the Comecon (Dragomir, 2015).

¹³ For example, in 1954 plans were agreed upon for 1956-1960, in 1958 for 1961-1965, in 1963 for 1965-1970, and so on. Plans for multilateral integration measures were also launched, the first for the period 1975-1980, the second for 1981-1985 and even up to 1990 (five long-term targeted programmes and 340 measures were included (IBEC, 1984, 24-25)).

Table 3**Participation in the Share Capital of International Bank for Economic Cooperation (IBEC) and International Investment Bank (IIB)**

Country	IBEC		IIB	
	Share capital contribution (millions of transferable rubles)	Percentage in share capital	Share capital contribution (millions of transferable rubles)	Percentage in share capital
Bulgaria	17	5.5	85.1	7.9
Hungary	21	6.9	83.7	7.8
Vietnam	0.9	0.3	3.0	0.3
DDR	55	18.0	176.1	16.5
Cuba	4.4	1.4	15.7	1.5
Mongolia	3	1.0	4.5	0.4
Poland	27	8.8	121.4	11.3
Romania	16	5.2	52.6	4.9
USSR	116	38.1	399.3	37.3
Czechoslovakia	45	14.8	129.9	12.1
Total	305.3	100	1071.3	100

Source: Konstantinov (1982), 97, 100 and Tsarevsky (1983), 105.

Initially, the authorized capital of IIB was set at 1 billion TR, subsequently increased to 1.071 billion TR with the admission of new members. The shareholding depended on the relative share of a country's trade in mutual trade. Since 1966, 10% of the capital and contributions of countries are assumed to be made in gold and convertible currencies.

It was not until 1971, at the 25th Comecon session in Bucharest, with the adoption of the 'Comprehensive Programme for Socialist Integration' (Comprehensive Program) with a time horizon of 15-20 years that the ambitions for integration, based on specialisation and the ISDL were finally stated (CP, 1971)¹⁴. In the terms of the political economy of socialism (PES), it was about the formation of a 'common international socialist reproduction complex', 'common enlarged reproduction and the formation of common economic proportions' (Aroyo, 1974, 183, Bogomolov, 1980, 45, Filipenko,

¹⁴ The basic principles of the ISDL were adopted in 1962, but their placement at the centre of priorities took place in 1971. On problems of specialization, see Bogomolov (1980, ch. 6, 96-123), Aroyo (1974, 188), and Shiryayev (1977).

1985). The use of ‘the Law of comparative advantage’ began to be discussed¹⁵. Unlike capitalist integration, which is based on market mechanisms according to which goods and the factors of production freely move between countries and regions following the decisions taken at the micro-level (i.e. producers and consumers), socialism was about integration in the sphere of production, implemented through planning and at the macro level. While the countervailing effects of capitalist integration take place through the market and prices, in socialist integration it was through the coordination and adaptation of national plans¹⁶. The international socialist division of labour and planning generally follow ‘the Labour theory of value’, i.e. everything was directed towards cost analysis, and demand was almost fully ignored.

The Comprehensive Program was supposed to reinforce multilateral coordination of plans, i.e. the development of elements of multilateralism and supranationalism through the use of commodity-money relations (CMR) (transferable ruble and more active use of price mechanisms). It was assumed that common investments and investment projects would be accelerated and financed by the newly created common investment bank – the International Investment Bank (IIB).

Table 4

Balance sheet of the International Investment Bank

Assets	Liabilities
Cash - on current accounts - on hand	
Credits granted	Funds raised and deposits
Buildings and other property of the Bank	Construction fund for the bank's official building and depreciation charges
	Authorised capital (and paid-up portion) Reserve capital
Other assets	Other liabilities
	Profit

Source: IIB (1986, 146).

Despite some successes and liberal national reforms (the most radical being

¹⁵ There were still no ‘internationally socially necessary social labour costs’ as required by Marx, see Bogomolov (1980)

¹⁶ A synthetic exposition of the problems of coordination of planning is given in the book by the German Democratic Republic (GDR) economists (Proft, ed. , 1983 [1980]) and also in Bogomolov (1980, see diagram on p. 64)

the reforms in Hungary and Poland), the proclaimed tasks were practically unrealizable. The main obstacles were the presence of structural bilateralism, the preservation of national directive planning, and the absence of a market, nationally and internationally.

In the late 1970s and early 1980s, most countries experienced stagnation and several imbalances and crises (the debt crisis in Poland, for example). This led to an intensification of bilateralism (Köves, 1981; Kaliński and Dwilewicz, 2014). After 1985, and the beginning of Gorbachev's Perestroika, attempts were made to form a common market and convertibility of the TR, to establish direct links between enterprises, etc¹⁷. For example, in 1985, the technological and competitive backwardness forced the countries to adopt a program to accelerate by 2000 the technological dimensions of integration (Bogomolov, 1986, ch. 8). In 1988, in Prague, the 44th Comecon Session adopted the 'Collective Concept of the International Socialist Division of Labour' for the period 1991-2005, which implied an acceleration of science and technology and a number of market mechanisms. All these measures never became reality, the collapse of the system occurred in the late 1980s. The Comecon was formally dissolved in Budapest in June 1991, ending its 'institutional life cycle' (Vardomsky, 2020).

To sum up, and leaving aside the ideological clichés of 'fraternal cooperation, equality, etc.', the main features of socialist economic interaction were characterised by national directive planning, state monopoly of foreign trade and foreign exchange monopoly (i.e., full control over the balance of payments). This was supplemented by partial coordination of national plans and some attempts at supranational planning. This has been combined with elements of the market and monetary mechanisms, as well as an amplification of micro-level (enterprise and consumer) choices. However, market and monetary mechanisms conflicted with the underlying rigid principles of the system. While the Soviet economy was weakly open and largely self-sufficient, the other countries depended heavily on foreign trade¹⁸.

Two other important points must also be taken into account, namely that within Comecon existed a fundamental asymmetry between the Soviet Union and the other countries. The Soviet economy not only outweighed about twice the combined economies of the other members, but it was also a major supplier of raw materials, the main deficit commodity in the

¹⁷ See for more information Shiryaev and Bakovetsky (1988) and Stefanov (1989).

¹⁸ Shiryaev, the openness data, see also Bogomolov (1980, 1986).

Comecon countries¹⁹. To this, we must add the existence of a world capitalist system and market that constantly squeezed and at the same time attracts the socialist countries. In dealing with them they were forced to use market and monetary mechanisms, including large external loans. Centrifugal forces began to dominate centripetal ones²⁰.

2. Passive and active international money

The second important conceptual point is that of the role of money under socialism. Generally speaking, in socialist planned economies money was only a tool of calculation, accounting and control over the implementation of the plan.

‘Under socialism, monetary policy is rather of an accommodating, and as such of a secondary, nature, designed to facilitate a smooth implementation of the economic plan’ (Wilczynski, 1978, 52).

Following the definitions of the Polish economist Włodzimierz Brus, distinguishing between ‘active’ and ‘passive’ money²¹, the monetary system of the socialist economy could be considered as a dual one. In the leading sector, the production one – that of the nationalized enterprises – money was passive, while in the sector of consumer goods and services, the household sector, it was active²². In the first sector, money transactions were cashless because money was primarily a means of accounting and measurement. This was done through the Central Bank and its branches and via special accounts to control²³ the implementation of the plan by public enterprises. Here the money followed the real, actual flows reflected in the plan. In the second, consumer sector (second money circuits), which is no more than 5% of the total turnover – the money was in cash form. Notes and coins performed the functions of means of payment and savings (this was accounted at the so called ‘the household income and expenditure plan’ and ‘the cash plan’). The flows from the first (the cashless one) to the second circuit (cash one) were controlled by the Central Bank (Gosbank). This was because control over the wage bill was often lost and part of the non-cash turnover was cashed out, i.e., converted into cash. In a fixed-price consumer market, this influx of

¹⁹ Asymmetry and the problems of dependence and domination within the Comecon are presented in Giovanni Graziani (1982).

²⁰ Analysis of centrifugal and centripetal forces was given for the first time by Marer (1976).

²¹ Brus (1986, 1973).

²² See the classic book by Garvy (1977), as well as Lavigne (1970, 1983), Seurot (1983), Brus (1968 [1961]), Nuti (1986), Dembinski (1988), Nakamura (2017) as well as the Soviet authors Kronrod (1954), Atlas (1969) and Andres (1975). In fact, throughout the years, the Soviet literature on money has followed the principles of the founders of Marxism and Lenin’s ambivalent attitude towards money, i.e., the CMR. This is not the topic here, see Nenovsky (2010) and Magnin and Nenovsky (2021) for a review.

²³ There is talk of the function of ‘control through/by the ruble, the lev, etc.’ (Belchev, 1982).

cash led to the phenomenon of ‘suppressed inflation’, which manifested itself in the form of deficits, i.e., queues, forced substitution of consumption, etc. János Kornai (1980) described these phenomena in his theory of ‘shortage economy’. The authorities often resorted to periodic price and monetary reforms to ‘skim off’ the ‘overhanging liquidity’ that appeared.

This domestic duality of money was being transferred to the international sphere of the socialist countries, that of the Comecon. Here, too, two currency circuits were observed. Money was passive and a means of accounting and control in the *sphere of trade flows* planned by national authorities²⁴. These trade flows chronologically passed through various cashless forms of payment – bilateral, trilateral and multilateral barter, and clearings, and late, after 1964, they were served by the TR. The TR was a collective unit of account and a means of payments issued in limited amounts by a special bank, the IBEC (see next paragraph). In contrast, money was active in *non-trade payments* (tourism, diplomatic missions, transport, etc.), which were generally not significant in volume, although their importance was growing. Non-trade flows were serviced by national currency in cash form, and the end-of-year non-trade bilateral balances were included in the total clearing balance, whether bilateral or managed by IBEC.

Viewed in general, the external money circulation was detached from the internal one, external money was disconnected from internal money, and as a rule, its volume was not significant. In the external sphere, the main issue was the level of exchange rates. It was a question both of bilateral national exchange rates and the exchange rate of national currencies against the TR, and the TR exchange rate against convertible Western currencies. The TR was not convertible into either national currencies or Western currencies. More – TR was not convertible or partially convertible into goods and services, i.e., it had no ‘real convertibility’²⁵.

With a great deal of accuracy, we can conclude that in both sectors – of trade and non-trade payments, external currency (i.e., TR), as well as domestic

²⁴ These adjustments and the various calculations may give reason to think that money in this external non-trade sphere is active, i.e., it influences real flows. In reality, this is not correct. One can only speak of active money when it comes to its *micro* influence on the real economy through the mechanisms of the market, by giving producers and consumers’ freedom of choice. In reality, there is no ‘real’ international market, but it is a matter of interstate agreement and arbitrary discretionary changes in national plans. CMRs under socialism, are logically derived from various theoretical explanations (which are not the subject of this study), and in the international sphere, one of the most popular is the existence of ISDL and the preservation of economic autonomy and sovereignty of the countries as owners of manufactured output (Mazanov, 1970, 8).

²⁵ Western economists, as well as several Eastern economists (among them, though less frequently, Soviet scholars, Konstantinov, 1982, for example) introduced the category of ‘real convertibility’ (convertibility into goods and services) as a complement to familiar external and internal currency convertibility. Stoimenov (1984), for example, considers real convertibility to be a redundant category.

(national) currency, had passive functions. A kind of *macro activity* of money can be considered if the directive manipulations of exchange rates are taken into account. However, they have a non-market character, and they are the product of the main monopolists of the external sector – the macro players (the states or the authorized state companies), and of the power balances between these macro players (e.g., it is clear that the Soviet Union was in a dominant position, etc.²⁶)

II. The evolution of the international socialist monetary system, the struggle against bilateralism

The history of the international socialist monetary system can be seen as a history of various institutional decisions to combat bilateralism and attempts to impose some form of multilateral payments to enhance foreign trade between member countries. We know, bilateralism restricts trade flows to the trade possibilities of the most closed countries, due to the requirement of equilibrium trade flows at a bilateral level. Multilateralism, on the other hand, implies the existence of bilateral disequilibria (i.e., both deficit and positive balances of payments), subject to general equilibrium, and general compensation within the group of trade participants. The multilateralism leads to an increase in trade flows and hence in the incomes of all participants. It allows specialization and efficient use of resources and expands the choice of economic agents. Economic theory as well as historical experiences show that developed multilateralism implies mostly market and monetary mechanisms, including the existence of a transferable or convertible currency. The experience of the Comecon demonstrates in practice the limited possibilities of achieving multilateralism when using the mechanisms of coordination of national planning, and only superficially and partially – price and monetary mechanisms.

From 1945 until the Comecon collapse in 1991, monetary relations and payments between the socialist countries went through different phases, which could be grouped into two major stages: (i) a period of barter and bilateral clearings from 1945 to 1963, and thereafter, (ii) when the collective currency TR issued by the IBEC was created and attempts were made to introduce multilateralism of payments. Of interest is not only the history of the TR, but also the debates among economists of that era, and the various projects to make the TR a convertible and active currency.

²⁶ For example, on the pressure from the Soviet Union to change the exchange rate coefficients of the ruble for non-trade payments see Daskalov and Maslarov (1990).

1. Socialist clearings and their planned and ‘material’ specificity

In the early years after the war, the socialist countries continued the familiar practice of barter and clearing that began in the early 1930s²⁷. This form of payments was the only one that suited the tasks of rebuilding farms and paying debts, due to the lack of gold and convertible currencies (see Mazanov, 1970, Konstantinov, 1982, Tsarevsky, 1983, IBEC, 1984). Despite the technical universality of clearing, Eastern economists claimed that under socialism it acquired a new social content. For example:

‘However, by borrowing from the practice of the international economic relations of capitalist countries clearing as a form of payment (settlement), socialist states give it a new essence. They adapt the clearing method of payment to the requirements of mutually beneficial, equivalent trade. The given method was brought into line with the socialist production relations, with the state trade and currency monopoly, with the planned development of the national economy of each country and the international economic relations. Clearing thus became an instrument for the planned implementation of international payments, for the conscious maintenance of the equilibrium of the balances of payments’ (IBEC, 1984, 29).

According to the best Bulgarian expert on the system, Nesho Tsarevsky:

‘Retaining its form as a category of the capitalist world economy and its monetary system, clearing in relations between socialist countries *radically* changes its role. Whereas under capitalism clearing contradicts the nature of the relations of production and bases private capitalist foreign trade on them, in the conditions of the world socialist market the clearing method of payment is combined with the new relations of production, with the state monopoly of foreign trade and with the foreign exchange monopoly. Clearing is used by socialist countries as a means of regulating international payments in a planned manner and maintaining the balance of payments in equilibrium without the transfer of convertible currency. The clearing agreements concluded between the socialist countries are based on the principles of full equality and mutual benefit’ (Tsarevsky, 1976, 178).

²⁷ The history of socialist payments is presented in various publications, e.g. Tsarevsky (1966, 1976, 1983), Bogomolov (1980, 1986), Radkov and Neykova (1978), Konstantinov (1982), Stoimenov (1984), Lavigne (1985), Lelart (1986). We have mostly adhered to the official documents of the IBEC, e.g. its jubilee report on the occasion of the 20th anniversary of its foundation (IBEC, 1984), as well as to the monographs of G. Mazanov (1970) and Konstantinov (1982). Mazanov’s monograph is, in our opinion, the most professional and technically described history of the Comecon clearing system in the period from its inception to 1970. Konstantinov’s book (chapters II - VIII), technically completes the period up to 1981. Yuri Anatolievich Konstantinov (1932-2016) was a distinguished professor of finance. At the international level, he worked in the Secretariat of the Comecon and for more than 20 years headed the Monetary and Financial Department, the working body of the Comecon Standing Committee on Monetary and Financial Affairs.

In the unanimous opinion of the Eastern economists who follow the Marxian theory of money, in the system of clearing, money is not 'genuine' money, but a means of calculation and measurement and control, i.e., money is just 'ideal'. (This has been the main argument for the introduction of the TR, which according to the Eastern economists is a 'genuine' currency that will serve as a mean of payments and store of value). Clearing is a moneyless system, a physical and in-kind exchange of goods and services.

'Money under this system appears primarily as a means of measurement, of reckoning' (IBEC, 1984, 29).

'Multilateral or bilateral balancing of commodity deliveries ultimately means the settlement of all mutual demands, claims and obligations by means of book-entry settlements. In these conditions, the settlement currency functions as ideal settlement money' (Mazanov, 1970, 15).

Further:

'One of the main features of socialist clearing is its use in the conditions of the planned development of the national economy of all socialist countries and their mutual relations' (Mazanov, 1970, 20).

Specifically, clearings under socialism were 'planned' and material, had physical expression. Goods and services exchanged were included in pre-prepared lists agreed between the two parties and included in bilateral trade agreements. These agreements concerned both mutual supplies and payments. The clearing agreements defined the total volume of goods turnover, the contingents of the main goods, the obligations of the parties for their execution, the conclusion of contracts between foreign trade organizations, as well as joint inspection and control. Prices and methods of payment were agreed too. Within the framework of the agreement, it was assumed to observe value equality of the supplies of goods and services within the year²⁸. Commodity contingents were agreed upon annually and protocols were signed on the details of deliveries as well as interbank agreements on cashless payments (Mazanov, 1970, 19-20). Socialist clearing was conducted by bilateral (and therefore equal) parallel opening and maintenance of non-interest-bearing accounts by the two authorized banks, and this for the entire period of the clearing agreement.

In the first few years 1947-1949, national currencies were used as clearing currencies (the clearing currency was called the 'closed currency') and also foreign currencies, including the dollar, the British pound and the Soviet ruble. Institutional diversity continued until 1949, and even until 1952,

²⁸ In reality, with prices fixed in advance, equality in value is equality in kind, already in the bilateral planning phase.

when the Soviet ruble (given a gold basis in March 1950) was introduced as the main clearing currency. Thus, after 1952, a benchmark bilateral clearing was formed, where the ruble was the settlement currency and payments were made in the national currencies of the respective countries. Clearing covered all types of flows and transactions (trade and non-trade payments, transport, reparations, debts, etc.). The main actors were the central banks of the participating countries, or banking institutions authorised by them (mainly foreign trade banks), which maintained the clearing balances. In the event of a negative balance, the partner bank automatically provided technical credit²⁹, until the deficit was repaid with goods according to the contract. These were interest-free credits, but 2% annual interest was paid if limits were exceeded. The balances were only covered with goods and services. This gave grounds for calling socialist clearing 'pure and planned clearing', i.e., commodity clearing without money (Mazanov, 1970, 24).

The drawbacks and limits of the bilateral clearing were obvious. It shrank overall and bilateral trade to the export capabilities of the weaker partner. The limits of bilateralism are illustrated by Table 5.

Table 5

Trade volume in bilateral and multilateral settlements between countries

Balance of the country	A		B		C		D		Volume of bilateral settlements		Volume of multilateral settlements	
	+	-	+	-	+	-	+	-	+	-	+	-
With a country												
A			80	100	70	80	50	20	170	170	200	200
B	100	80			10	40	40	30	120	120	150	150
C	80	70	40	10			20	60	100	100	140	140
D	20	50	30	40	60	20			70	70	110	110
Total									460	460	600	600
Total turnover									920		1200	

Source: Mazanov, 1970, 61.

²⁹ It is called 'technical' to emphasize that it is the result of a technical framing of the credit operation (IBEC, 1984, 30).

On table 5 for example, with bilateral clearing, i.e., under bilateral settlements, the trade volumes of country A are $= 80 + 70 + 20 = 170$ for exports (and 170 for imports, because the equilibrium for the country needs to be maintained). In this case the smallest values are summed. Turning to multilateralism (multilateral accounts), the sum of all exports is taken $= 80 + 70 + 50 = 200$ and of all imports, i.e., $= 100 + 80 + 20$, or a total of 400. This brings the total for the four countries to 920 for bilateral trade and to 1200 for multilateral, almost a 25% increase.

In this sense, the Comecon member states have taken initiatives for various forms of multilateral payments, and multilateralism³⁰. Let's turn to the chronology.

The first logical step to overcome bilateralism was to attempt *trilateral clearing*, where balances were transferred within three countries³¹. A number of trilateral clearings involved a capitalist country, Finland and Denmark most notably. The idea of multilateral clearing dated back to the very creation of the Comecon, in January 1949 (put forward by Stalin)³². Eastern economists have pointed out several difficulties of the transition to a multilateral clearing in those years. First, is the unequal level of economic development of countries, and hence the dangers of non-equivalent exchange. The existence of structurally scarce commodities dictated by the goals of industrialization (mostly raw materials and machinery), and the existence of 'soft and hard commodities' (existence of 'soft-soft' and 'hard-hard' trade). Added to this are the changing terms of trade, as the contractual prices of the Comecon follow those of world markets.

Despite the obstacles mentioned, attempts at multilateral clearing began, and in June 1957 it was decided to balance balances of payments multilaterally. The most striking manifestation was the clearing between Albania, Bulgaria, Hungary, GDR, Poland, Romania, USSR and Czechoslovakia, which lasted from 1957 to 1963 (this scheme functioned in parallel with the bilateral payments). In this clearing, goods could be sold without observing the calendar-year equality of bilateral supplies. Equality was sought between the total exports to all countries and the total imports from those countries. Settlements were made by the Central Bank or the authorized banks of the participating countries. They opened special accounts for each other in the

³⁰ Virtually the entire subsequent history of the Comecon was stepping in this direction, which, however, proved doomed to failure because of a structural tendency towards bilateralism dictated by national planning and the lack of a market and convertible currency.

³¹ Or to offsetting by successive one-off credits of two countries' balances to the account of third countries (e.g. in 1950-1951 Bulgaria paid its passive balance and Romania through exports to Hungary, the GDR and Czechoslovakia, which paid it through their clearings with Romania).

³² See Mazanov (1970, 45) and Lipkin (2019).

settlement currency – called ‘clearing ruble’. The table below (table 6) shows the multilateral balancing in trade between CMEA countries.

Table 6**Multilateral balancing in trade between CMEA countries**

Country	1963	1964	1965	1966	1967	1968	1970
Bulgaria	1,33	2,42	4,63	4,33	3,60	3,56	3,03
Czechoslovakia	3,54	1,41	7,07	5,13	3,13	2,46	1,66
East Germany	9,49	5,95	7,14	6,33	4,45	3,62	5,65
Hungary	2,61	4,09	5,65	4,16	3,62	3,96	3,33
Poland	8,48	5,91	9,38	6,01	5,41	2,21	4,95
Rumania	9,89	2,88	5,73	6,50	8,45	7,41	6,59
Soviet Union	3,05	3,47	3,79	3,52	6,66	6,17	4,11
Unweighted average	5,48	3,73	6,20	5,14	5,05	4,20	4,19
Weighted average	5,05	3,81	5,77	4,76	5,27	4,46	4,13

Source: McMillan (1974), p. 17. The table presents the Michaely's index of trade multilateralism, calculated by MacMillan. The index ranges from 0 to 100, where 100 is total multilateralism, 0 is full bilateralism.

Next significant innovation in the model was the creation of the second level of clearing – the Clearing House, a multilateral clearing centre between the authorised banks of the Comecon countries. The Clearing House functioned initially within the Soviet Gosbank, and in 1963 was moved to *Vneshtorgbank*. The Clearing House and the authorised national banks opened special accounts for each other. On a daily basis, the national banks derived bilateral passive or active balances resulting from standardised payment methods (mainly immediate collection/incasso) and send them to the Clearing House. In turn, the Clearing House aggregated the balances by bank (i.e. by country) and settled them monthly by multilateral netting. According to Mazanov:

“The participating countries shall settle the balances of monthly receipts and payments not directly with each other but through the Clearing House. Therefore, each party appears in the multilateral clearing process as debtor or creditor of the other party and simultaneously as debtor or creditor of the multilateral clearing house. However, amidst the completion of these clearings by the Clearing House, each party imagines itself to be a debtor or creditor of the counterparty and becomes a debtor or creditor of the Clearing House. In this way, the settlement relationship between the banks is transformed into a settlement relationship between the bank and the clearing house, with the result that each party automatically has the

possibility of using the clearing house's credit to settle accounts with the parties, irrespective of which of them receives the goods. [...] The amount of the interest charged annually by the Clearing House on the balances of the debtor countries shall be distributed among the creditor countries in proportion to the amount and duration of the credits granted (positive balances in the accounts of the Clearing House). This means that the level of interest rates on active balances depends on the volume and duration of indebtedness of the debtor parties' (Mazanov, 1970, 48-49).

The Clearing House had no equity and resources that limited its lending activities. As a result, multilateral clearing was also not developed, by some estimates it covered no more than 1-1.5% of total trade. Bilateral trading and clearing continued to dominate. New institutional solutions were being sought. In fact, in this period many Eastern economists (primarily Hungarians and Poles³³) began to note the structural limits of multilateralism. However, the official position is that bilateral trade agreements can be overcome because multilateralism is *objectively* necessary³⁴ for the next phase – 'socialist integration':

'The contradiction that emerged towards the end of the 1950s between the system of account-credit relations and the objective needs of interstate economic cooperation of the socialist countries, which was becoming increasingly integrative, was not completely overcome. Incidentally, at this time the national economies of all the member countries of the Comecon considerably strengthened, the ISDL deepened, and interstate specialization and cooperation of production began to develop' (IBEC, 1984, 33).

The idea of a common unit of account to serve multilateralism in the Comecon, and to speed up integration, dates back to 1961-1962. But it was only in early 1963 that an expert working group was set up, whose task is described in the following words:

'They (the experts, members of the working group) were to work out the foundations of a settlement-credit mechanism, which the world practice had not known before [...] A settlement-credit mechanism was to be created, corresponding to the national and international interests of the socialist countries. It was a question of an accounting and credit mechanism of a system of countries that entered into an economic and political association of free, sovereign, going along the path of socialism

³³ E.g. the Hungarians Sándor Ausch (1972), Ivan Vincze (1977, 1978, 1979) etc.

³⁴ 'Objectively necessary' in the political economy of Marxism (Hegel) means independent of the will and desires of economic actors, i.e. something set from the outside, by the internal logic of social history.

and communism, united by common interests and goals, with the close ties of international solidarity (IBEC, 1984, 34-35).

Thus came into being the common currency, the collective monetary unit – the transferable ruble, and the institution that issued it and that manages multilateral payments – the International Bank for Economic Cooperation. Following the signing of the multilateral agreement on 22 October 1963, the system officially began to operate on 1 January 1964.

A significant impetus to the role of the TR and the development of multilateral exchange in the Comecon was given in July 1971, when the 25th Session of the Comecon in Bucharest adopted a ‘Comprehensive Programme for the Further Deepening and Improvement of Cooperation and Development of Socialist Economic Integration of the Comecon Member States’.

Multilateral payments and the transferable ruble – basic principles

Within the multilateral system of the Comecon four main elements can be analytically distinguished, namely (i) a common monetary unit TR issued by (ii) the newly established IBEC bank, (iii) a settlement mechanism, and (iv) a credit mechanism. In creating the TR, the official organs of the Comecon explicitly stressed that the new international currency was collective and contractual, fundamentally different from USD. The TR,

‘it is not national, it is not supranational, it is international, collective [...] The TR functions on the basis of an interstate agreement; it enters the monetary and financial circulation through the international credit institution, the IBEC, and exclusively serves interstate relations [...] The TR is not only an international currency. It is a *socialist currency*’ (IBEC, 1984, 40-41).

According to Konstantinov, in his popular monograph ‘*The International Monetary System of the Comecon Member States*’ (1982):

‘The TR is a *fundamentally new phenomenon* in global currency practice. It is a currency of the planned economy, the nature of which is difficult to understand if considered outside its relationship to other economic and political categories. One of these fundamentally important categories is planeness. [...] The TR is a currency of equal partners [...] The convertible ruble is the world's first truly collective currency (Konstantinov, 1982, 102, 120).

In fact, the aim was to create a common currency to serve the multilateral payments mechanism, a mechanism allowing the transfer of positive balances within Comecon trade. It was claimed that the various forms of socialist clearing were moneyless, but TR was a ‘real’ currency intermediary. The TR was credit money, the issue and volume of which had to accurately reflect the movement of commodity flows (planned and agreed contingents). This

comes from the quantity theory adopted by Marx, and according to which money should reflect the volume of goods and values (the Comecon used in practice the 'banking principle'). The transferable ruble and the mechanism of compensation must guarantee the equivalence of exchange.

To use the familiar representation, the TR mediated the commodity exchange by the rules of simple commodity production (C - TR - C), in contrast to the clearing system where we have the transformation of commodities (C - C). Soviet economists identified clearing ruble with a barter, the TR was only an ideal unit of measurement. While in the case of clearing, it can be argued with certainty that exports are a function of imports (imports pull and constrain exports), which was the point in the first part of this paper, in the case of the multilateral system of the TR, the possibility arises of the opposite causality – imports being a function of exports, i.e., the motive to export becoming the leading one. Konstantinov noted:

'The socialist integration partners are interested not in money per se, but in specific commodities as use values necessary for the satisfaction of productive and personal needs [...] The transferable ruble is 'tied' to the commodity. Its commodification is predominantly provided for at the stage of coordination of national economic plans, in the preparation and signing of five-year trade agreements and annual commodity turnover protocols. In this way, the correspondence of the mutual monetary turnover to the actual movement of commodities between the parties is ensured in advance. This excludes the possibility of spontaneous and unregulated flows of goods and money. The regularity of the movement of the TR protects it from devaluation, and protects it from the crisis phenomena of the currency system of capitalism. In spite of the organic connection of the TR with the planned movement of commodity flows, and their centralized management, it does not cease to be real money' (Konstantinov, 1982, 104-105).

Thus, it has been officially argued that the TR, though cashless in form³⁵, fulfilled all the basic monetary functions as they are known from Marxist political economy (namely, a measure of value, a scale for prices, a means of payment, and a store of value) (e.g., Konstantinov, 1982, ch. V, 134-165).

The TR was issued by the IBEC, in which member banks had three types of accounts – current account, credit account and deposit account (see the balance sheet in Table 6). The balance sheet of the IBEC was accessible only to the authorised banks, which accumulated the bilateral balances resulting from payments between foreign trade enterprises. Payments were made in national

³⁵ The IBEC issued travellers' cheques that could be exchanged in national currencies, these cheques that in some respects resembled banknotes.

currencies and mostly by 'collection/incasso with subsequent acceptance', i.e. collection with immediate payment. TRs were issued through the credit mechanism, which in turn maintained a continuous offsetting mechanism.

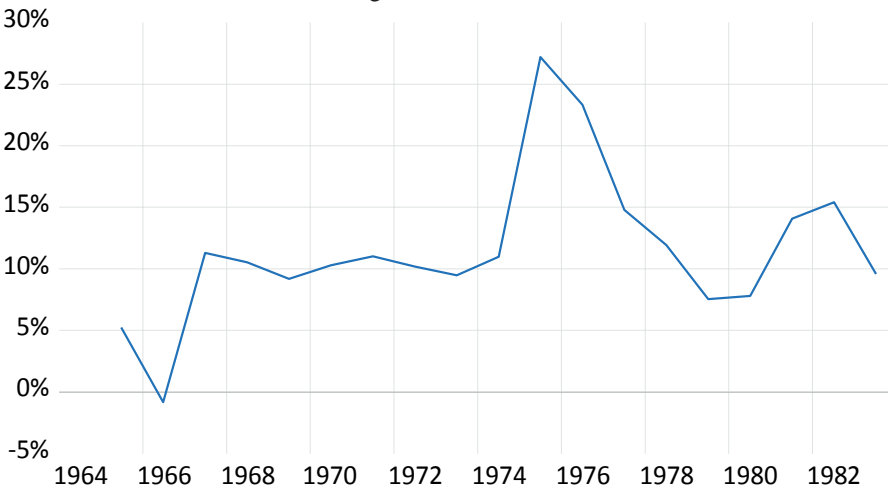
The sources for the creation of the TR were mainly two: (i) the settlement credits, and (ii) the term credits (also the credits under the joint investment projects which were extended by the new bank, the IIB)³⁶. Particularly important were the settlement credits, which the IBEC provided based on positive balances in the compensation mechanism system. While settlement credits were difficult to plan, planning was a practice in the case of term credits. Generally speaking, credits were managed in a planned manner, this was done through the mechanism of the IBEC annual credit plan. After 1971, credit and resource breakdowns were given according to the requests of the authorized banks and the national economic plans (IBEC, 1984, 75).

As already mentioned, apart from mutual trade, which accounted for about 95%, there were also bilateral non-trade transfers (tourism, transport, training, insurance, diplomatic missions, cultural events, etc.) whose balances, after certain manipulations (which will be discussed below) were also included in the total balances of the authorized banks of the IBEC's member countries.

Chart 1

Comecon transactions passed through IBEC

Comecon transactions volume growth



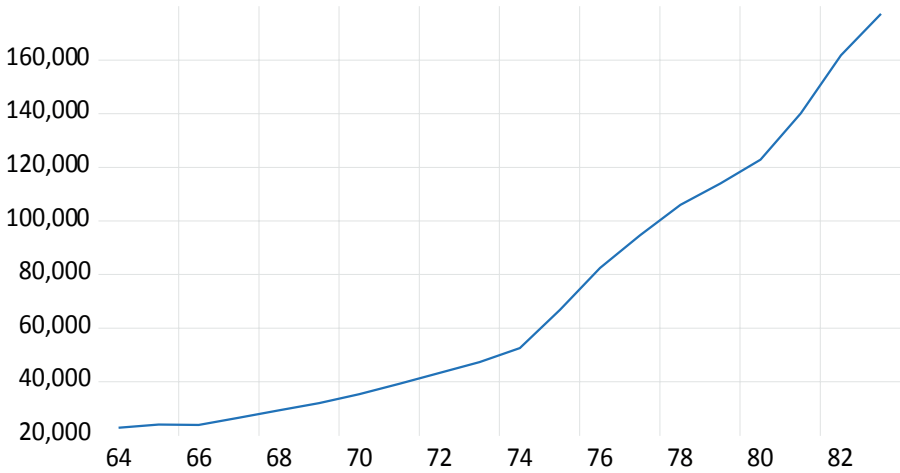
Source: IBEC, 1984

³⁶In fact, by 1970, six types of credit were differentiated: (i) for settlement, (ii) seasonal, (iii) for expansion of turnover, (iv) for the balance of payment adjustment, (v) off-plan credit (vi) credit for joint activities and facilities. Due to the increased transfers from one form to another, in 1970/1971, it was simplified into the two types of credit – for settlements and term credit.

Chart 2

Comecon Transactions Passed Through IBEC

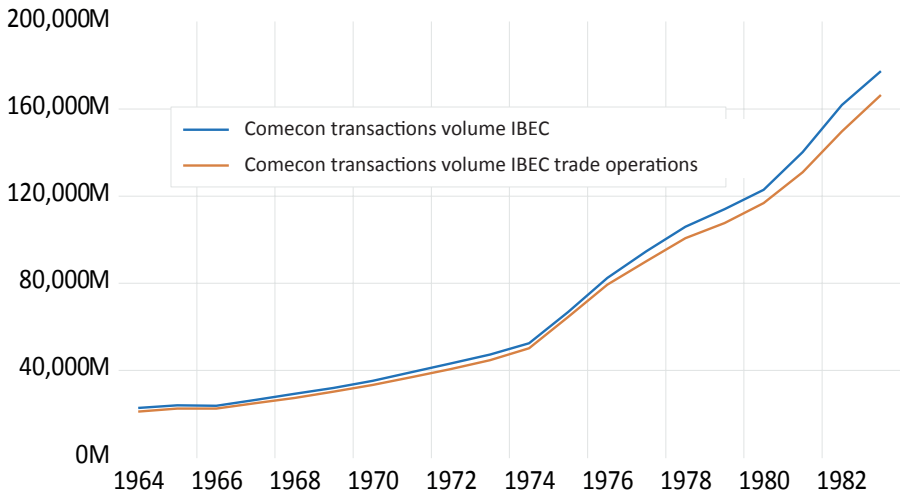
Comecon transactions volume in Mln TR



Source: IBEC, 1984

Chart 3

Comecon Transactions Volume IBEC – Total and Trade Operations



Source: IBEC, 1984

According to Mazanov, multilateralism has two dimensions, broad and narrow:

‘In a *broad sense*, multilateralism, as a higher degree of CMR of the socialist world systems, in terms of commodity relations implies multilateral coordination of the commodity structure of international trade and mutual exchange, and in terms of monetary relations implies multilateral equalization of balances of payments. This requires at the same time the existence of a planned currency convertibility with a developed and well-functioning system of international credit [...]

In a *narrow sense*, multilateralism in the mutual trade of socialist countries is a system of accounts whose multilateral character is expressed in currency convertibility with the use of a flexible system of inter-order credit. The basic premise of this system is very simple and consists in applying the usual, important banking principle of ‘equality of debit and credit’. The multilateral clearing system operates in this case with the participation of a bank, with the help of which payments are made and the temporarily free resources of one party are used by the other parties. The elasticity of balance is increased and reached in such a way that the countries with a passive balance of payments receive credit from the international centre of account, whose credit resources are formed from the own funds and temporarily free resources (active balances) of the separated countries; the latter use their active balances to expand imports and build up reserves. Currency transferability does not occur automatically, but always presupposes a certain agreement between a number of countries participating in this mechanism of payment relations [...] Such a system of multilateral settlements facilitates a significant increase in trade turnover because it makes it possible to conclude bilateral trade agreements that are not counterbalanced in value [...] Each country coordinates its balances with its partners so that the sum of these balances is equal to zero’ (Mazanov, 1970, 58-62), see also Table 2.

When loans were granted, the money supply of TRs grew; when loans were repaid, it shrank. This is an example of ‘planned managed emission, and no excess money is allowed to be issued (Konstantinov, 1982, 146). The demand for TRs equalled the supply of TRs. In the official IBEC publication we read:

‘The transferable ruble is a means of multilateral monetary settlements, and the latter are based on the principle of the transferability of currency. Each country has the right and the possibility to freely use the funds belonging to it for payments to any other country participating in the system of multilateral settlements. [...] The transferable ruble is a form of credit money. [...] Only the IBEC is granted the right to issue transferable rubles. The amount of TR in payment circulation on any date (month, quarter, year) is equal to the balances due to authorised banks on the loans obtained from the IBEC. In the bank’s statement, these balances are called ‘credit input/investment (*creditnie vlojenia*)’ (IBEC, 1984, 42-43).

Credit inputs/investment equal net loans on the bank's balance sheet, i.e., 'loans granted - loans received' (Table 7).

Table 7

IBEC Balance sheet

Assets	Liabilities
Cash - On current accounts - On deposit	Deposits - Current accounts - Term deposits
Credits granted	Credits received
Bank property	Capital - Authorised capital (paid-in) - Reserve capital
Other assets	Other liabilities
	Net profit

Source: IBEC (1984), 122.

Loan inputs equalled net loans on the bank's balance sheet, i.e., 'loans granted - loans received'. For example, at the end of 1982, they were 4.289 billion - 0.406 billion = 3.883 billion. For credit holdings by year see Konstantinov, 1983, 176.

Finally, table 8 provides an overview of the development of mutual settlements that are served by the TR overall and by country. It can be seen that the share of the USSR in the total volumes was always around 36-39%.

Table 8

Volume of mutual settlements through the IBEC (in billions of TR)

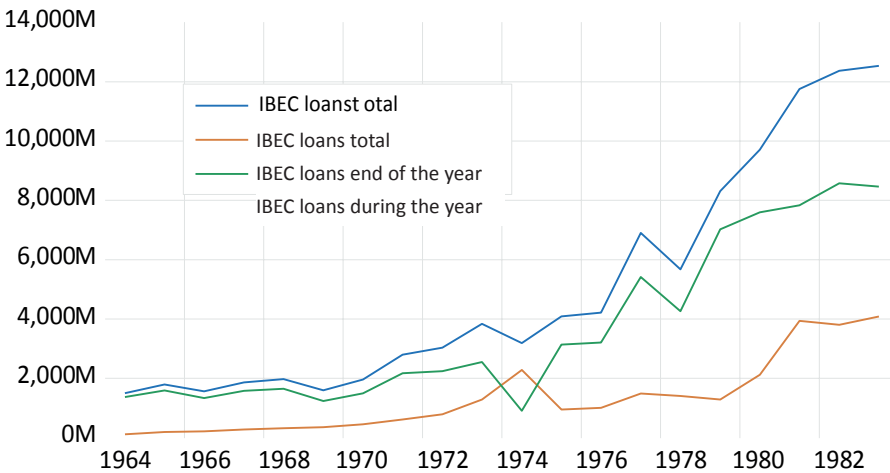
Country	1970	1975	1980	1982	Total for the period 1970 - 1982
Bulgaria	2.7	5.6	10.5	13.6	92.5
Hungary	2.8	5.8	9.9	12.5	89.1
Vietnam	-	-	-	1.3	2.6
GDR	6.2	11.0	17.4	21.6	165.3
Cuba	-	-	5.1	8.1	36.2
Mongolia	0.2	0.4	0.8	1.2	7.3
Poland	4.3	8.8	14.1	16.9	128.8
Romania	1.7	2.9	5.0	5.8	46.8
USSR	13.0	24.0	46.5	63.5	411.1
Czechoslovakia	4.5	8.4	13.6	17.3	127.3
Total	35.4	66.9	122.9	161.8	1 107.0
USSR/total in %	37	36	38	39	37

Source: IBEC, 1984, 45, and own calculations

Some of the main items of the bank's balance sheet and other variables presented in the tables below.

Chart 4

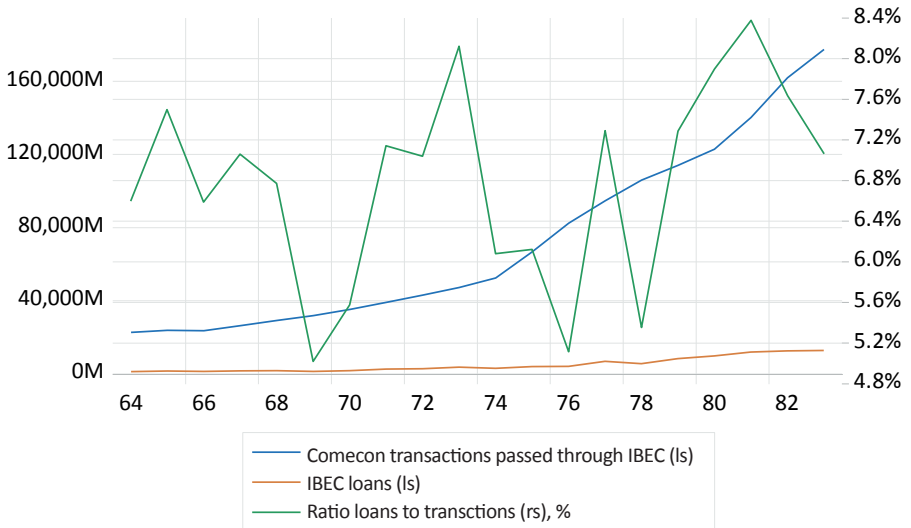
**IBEC Loans – Total, during the Year and End of the Year
(in Fact: Emission of TR)**



Source: IBEC, 1984

Chart 5

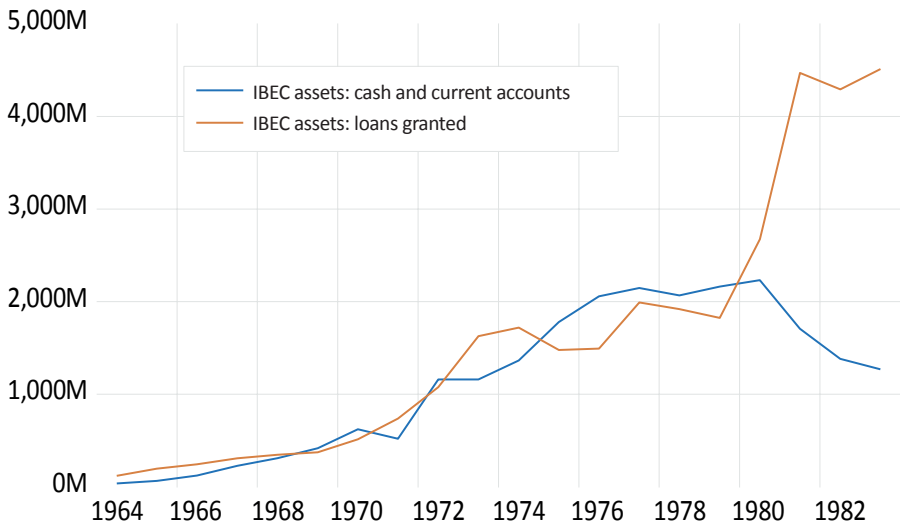
IBEC Loans to Comecon Transactions



Source: IBEC, 1984

Chart 6

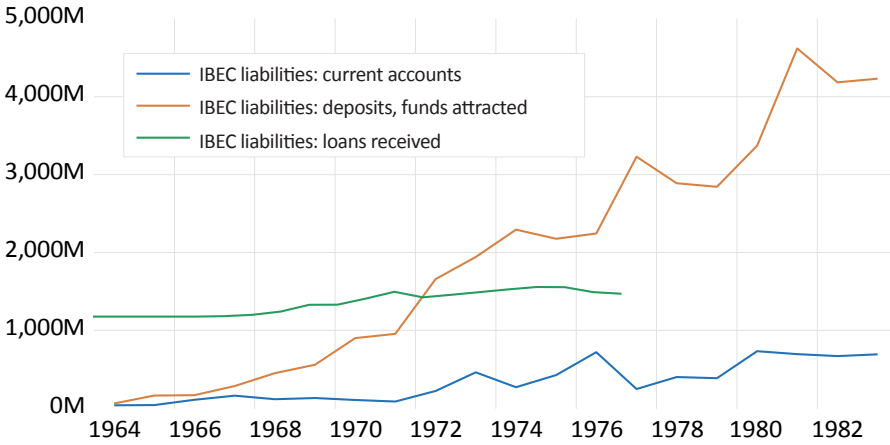
IBEC Main Assets Positions – Cash and Current Account and Loans Granted



Source: IBEC, 1984

Chart 7

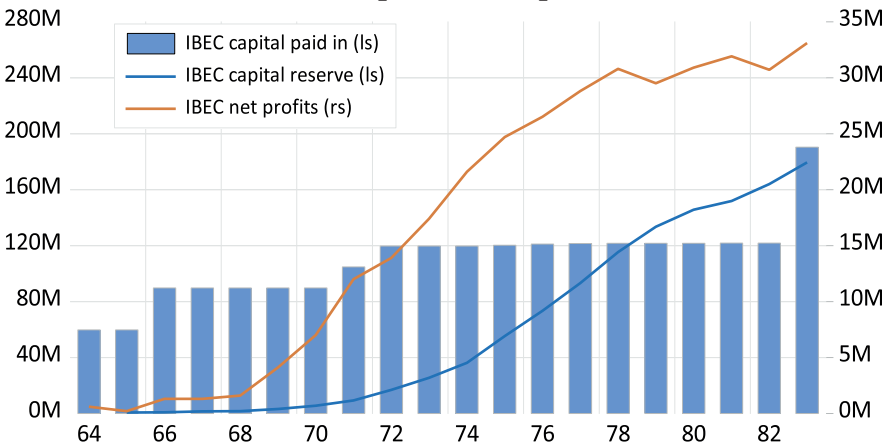
IBEC Main Liabilities Items – Current Account, Deposits (Funds Attracted) and Loans Received



Source: IBEC, 1984

Chart 8

IBEC capital and net profit



Source: IBEC, 1984

Let us now turn to the purchasing power of the transferable ruble, which inevitably leads us to the problem of different levels of pricing.

2. Technical aspects of the transferable ruble system

As already mentioned, similar to the two sectors in national terms (cash and cashless payments), two large segments are also distinguished in the Comecon economy (i) of trade payments, there were cashless, taking place in international currency – TR or convertible western currency and (ii) of non-trade payments which generally took place in national cash currency. In the first segment, wholesale prices, i.e., producer prices were the basis, and in the second segment, the basis were retail prices, i.e. consumer prices. Hence we had two rates of exchange of the TR to national currency – according to what this rate served for – respectively for trade and non-trade payments.

Let's look first at *trade payments*, which were the predominant share, over 90% of the whole transactions. Let's start with prices, which expressed the Comecon purchasing power of the TR.

Pricing and purchasing power of the transferable ruble in the trade sector

As a result of the claims that there was a socialist world economy, the problem of setting the level of prices in this world economy was raised. These were named '*contract prices*', expressed in TR and fixed in commercial contracts and agreements. Through contract prices, the purchasing power of the TR was expressed in the international socialist market. We remind once again that this market was distinct and separate from the national markets of the member countries, which had plan-controlled price levels and sovereign national currencies (some economists used to speak about '*closed currencies*'). The methodological dispute about the basis of contract prices became one of the leading to the theory and practice of the Comecon.

In order to understand the problem, it is inevitable to recall some basic postulates from the political economy of socialism and the labour theory of value. According to the Marxist approach, the concept of '*internationally necessary labour costs*' and '*international value*' should serve as the basis for Comecon prices. But again, according to Marxism, this implies the equalization of the levels of development of countries, and the formation of a common socialist reproduction process, i.e., of unified production and unified exchange within the Comecon space. We have mentioned that the basic Marxist requirement is that there should be an equivalence of exchange to prevent any exploitation of a partner country through international trade. In the absence of these conditions ('*internationally necessary labour costs*'), and while preserving the sovereignty of individual countries and national planning, and the relatively small share of socialist trade in world trade (about 6-8%), the basis of prices must be sought elsewhere. Thus, prices on

world capitalist markets come as a natural choice.

In general, prices in capitalist markets were expressed in dollars, and until 1974 the dollar had a defined gold backing (0.888671 grams of pure gold). The TR, which emerged in 1964, was defined as the value in gold, the result of an international agreement by the socialist countries. The TR had the gold content of the Soviet ruble (and therefore of the clearing ruble), i.e. 0.987412 g pure gold³⁷. From there was derived the TR exchange rate to the dollar, i.e. 1 USD = 0.9 TR (or 1 TR = 1.11 USD).

Subsequently, after the devaluation of the dollar on December 18, 1971, and later after February 12, 1973, this exchange rate became respectively 1 USD = 0.7415 TR (or 1 TR = 1.3486 USD). After the collapse of fixed exchange rates and the departure of the gold basis, in 1974, a monthly weighted average currency basket was used. From July 1978, the basket included 13 currencies, and in the 1980s on 18 currencies (IBEC, 1970, 46-47, Konstantinov, 1982, 46, 127)³⁸. Because prices in capitalist markets were volatile, and conceptually under socialism prices should be stable, various statistical corrections mechanisms were applied. Initially, the so-called 'stop prices', i.e., the price level of late 1949/early 1950 was used until 1956. Then for 1957, the average 1956 prices were used. Since 1958 was adopted the so-called 'Bucharest formula'³⁹ according to which prices on international capitalist markets should be averaged and smoothed on a quinquennial basis. For example, prices in the 1966-1970 quinquennium are based on the 1960-1964 average, for the 1971-1975 quinquennium on the 1965-1969 average, and so on. In 1976, the adjustment formula was modernized to apply a 'rolling one-year five-year basis' of averaging.

As a generalization, we get expression (1), where contract prices are a function of international capitalist prices expressed in dollars and adjusted for the business cycle

$$(1) p_k = e_{TR,USD}(\lambda p^*),$$

where,

p_k - are the contract prices in the trade within the Comecon

$e_{TR,USD}$ - the exchange rate of TR to USD (or, after 1974, to a basket of

³⁷ The TR should adopt the parameters of the ruble and the clearing ruble. The quoted rate of the TR to gold followed that of the Russian ruble defined in 1961. According to official documents and the majority of Eastern economists, this was dictated by motives of convenience and continuity, 'for simplicity and convenience' (Konstantinov, 1982, 122).

³⁸ See also Konstantinov (1982, 42-46).

³⁹ The 9th session of the Comecon was held in Bucharest.

currencies expressed in terms of the dollar), the exchange rate was adopted in indirect quotation (1USD = x TR).

λ - is the capitalist market price adjustment factor, which as we have pointed out is zero at 'stop prices', or derived from the formula of mean and moving averages

p^* - are the prices in capitalist markets, using a specifically defined sampling methodology

From (1) it can be inferred that the level of the exchange rate reflects price levels, $e = \frac{pk}{\lambda p^*}$.

Hence the theoretical controversy as to what reflected the purchasing power of the translated ruble, its gold content, or the through the relationship between contract prices and those on world markets (see for the debate, Tsarevsky, 1983, Konstantinov, 1982).

The dynamics of capitalist and adjusted, contract prices by major groups is presented in the following table 9.

Table 9

**World and contract price indices by major commodity group
(1970 base = 100)**

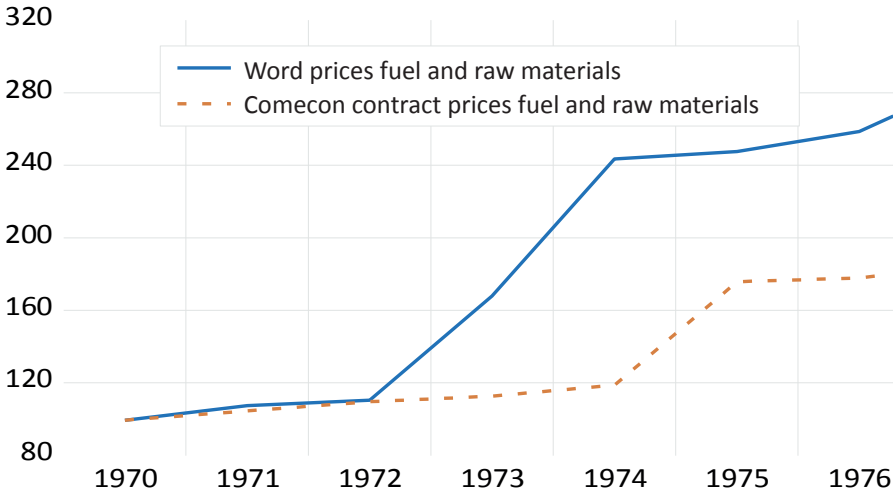
Prices	1971	1972	1973	1974	1975	1976	1977
Contract prices	105	110	113	119	175	177	185
World prices	108	111	168	243	247	258	289
Dev. in %	- 3	- 1	- 55	- 24	- 62	- 81	- 104
Contract prices	96	107	108	111	135	148	150
World prices	103	121	176	216	201	203	240
Dev. in %	- 7	- 14	- 68	- 105	- 76	- 55	- 90
Contract prices	101	108	105	116	127	145	151
World prices	103	112	117	128	141	148	157
Dev. in %	- 2	- 4	- 12	- 12	- 14	- 3	- 6

Source: Bogomolov, 1980, 157 (and primary sources cited therein), own calculations (dev. = word - contractual).

Despite the slower increase in contract prices, one can see the fundamental change that occurred after 1973/1974. They are presented in charts 6, 7 and 8.

Chart 9

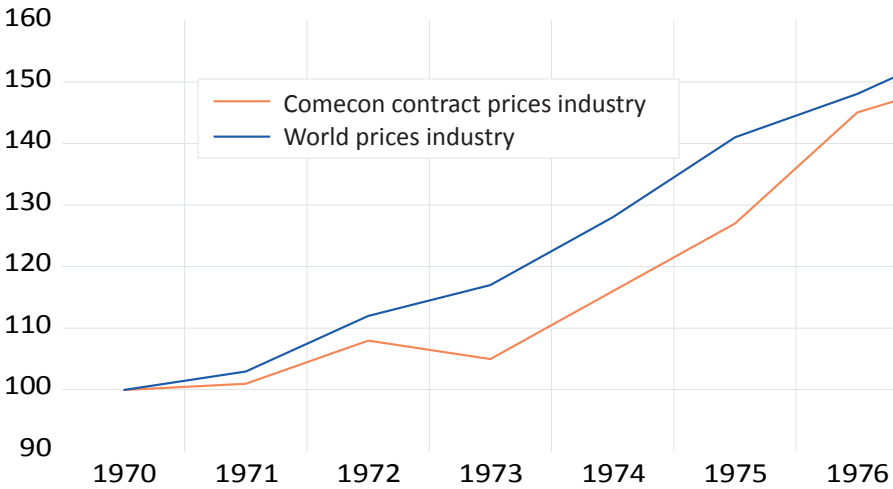
World and Comecon Prices on Fuel and Raw Materials



Source: Bogomolov, 1980

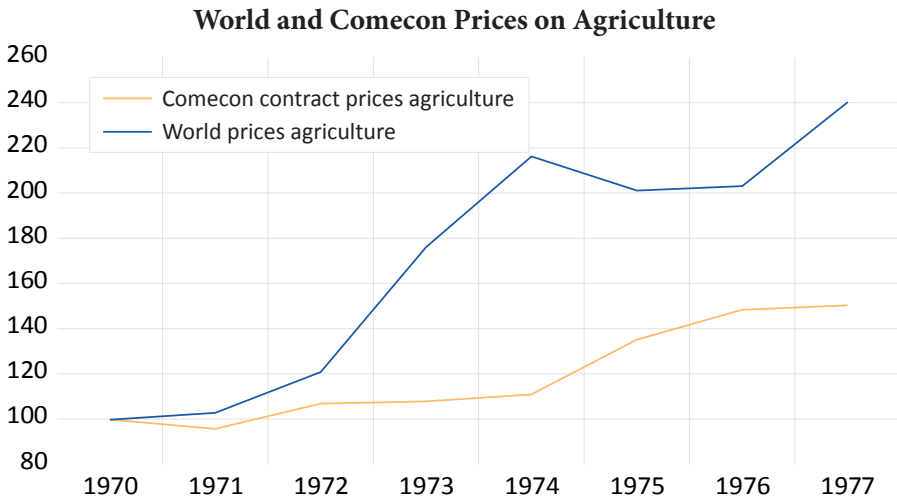
Chart 10

World and Comecon Prices on Industry



Source: Bogomolov, 1980

Chart 11



Source: Bogomolov, 1980

Hence, exchange rate of TR to national socialist currencies $e_{tr,i}$, was determined by purchasing power parity, i.e. between contract prices p_k and p_i – national prices. For p_i was taken the average level of wholesale, producers' prices in country i . These rates, $e_{tr,i}$ were not actively used, except in some internal country calculations related to foreign trade turnover, and for bartering, etc. These exchange rates did not reflect retail prices, and in general there were large deviations from total purchasing power parity.

Pricing and purchasing power of the transferable ruble in the non-trade sector

Let's turn to *non-trade payments*, where the exchange rate formation methodology was radically different⁴⁰. Although they are not large, no more than 5%, the non-tradable transactions were constantly growing, and directly affected the population (tourists, students, postgraduates, diplomats, employees in general enterprises, etc.). Indeed, here the 'equivalence problem' took on a strong ideological significance.

“Things are different in the area of non-trade turnover. The related operations of purchase and sale of goods take place not on the international market but on the domestic market [...]. On the domestic markets of the

⁴⁰ See in detail Konstantinov (1982, chapter VII, 200-212), as well as the discussion in Daskalov and Maslarov (1990).

socialist countries there is neither a common currency nor uniform prices for similar goods. On the contrary, these prices, by virtue of economic, historical and other peculiarities, differ considerably from country to country. Nor are the average price levels the same, hence national currencies express different price scales. As a result, domestic national prices do not solve but create a problem of *non-equivalence* in non-trade settlements. In this respect, special exchange rate instruments are applied to achieve equivalence in the settlement of trade in a given area: an exchange rate to exchange national currency into another and a coefficient of deviation of domestic prices from those of the international socialist market to exchange national currency into the collective currency, and vice versa [...] Trade between countries is carried out at foreign trade prices. In this connection, to balance the accounts of non-trade transactions, a necessity arises in the exchange of national currency into transferable rubles, which can then be used to receive goods through the channels of foreign trade. This act ensures the equivalence of settlements not only at the level of individuals but also at the level of states' (Konstantinov, 1982, 202, 204-205).

Within non-trade payments, a new distinction was introduced: (i) non-trade settlements at international prices (telephone, telegraph, organized tourism, etc.), which were transferred directly into TR, and (ii) non-trade settlements at national prices, where spending was directly in national currency and at national prices.

We will focus on the latter, which were more important. Here several methodological steps were formulated, generally as early as 1963. At the beginning, the exchange rates of the individual countries to the Soviet ruble were formed according to the level of retail prices, and according to a previously agreed consumer basket. Second, the bilateral exchange rates of all the Comecon countries against each other were formed using the rates thus obtained (i.e. the soviet retail ruble served the consumer market base). Finally, third, to these exchange rates, were added premiums or discounts (after bilateral negotiations) that reflected differences in consumer preferences in the two countries, etc.

Let's go back to the principle of the total settlement. As a result of payments between pairs of countries, bilateral debit and credit balances were recorded at the level of national banks. At the end of each year, the balances were converted into TR and included in the total balances at IBEC. At the end of the year, the balances should be zeroed out, to arrive at a total equivalence between the countries on non-trade payments. This implied the last

transformation and adjustment. Here again, the Soviet ruble was used as the base to which bilateral exchange rate deviations were calculated, through the so-called 'adjustment factor'. In other words, the balance, which was in national currency, was converted first into Soviet rubles at the bilateral rate for non-trade payments, and then divided by the 'adjustment factor' to convert it into TR⁴¹. Or:

'In international settlements for non-commercial payments, a coefficient is applied alongside the exchange rate to convert these payments from national currencies into the collective currency and vice versa, in order to ensure equivalence in the settlements. This coefficient represents the ratio of domestic retail price levels calculated on agreed sets of commodity representatives and paid services. The given coefficient is calculated on the basis of the unified commodity structure (a notional set of goods and services at retail prices in the national currencies of the Comecon member countries), which is also used to determine the non-trade rate' (Konstantinov, 1982, 207-208).

The exchange rates of non-trade payments, and especially the ratios by which the balances of non-trade transactions were included in the total balances in the IBEC (by the so called adjustment coefficients), were subject to a confrontation between countries. The country with an active balance on non-trade transactions sought to have a lower adjustment coefficient, i.e., to receive more TR, and the one with a passive balance sought to have this coefficient higher in order to pay less TR. In practice, the Soviet Union imposed its will, and because of its active balances, aimed to reduce the conversion ratio. Thus, from 3.4 Soviet rubles per TR, in 1971 the coefficient became 2.3 per TR, and in the late 1970s, it declined to 1.9. Before the collapse of the Soviet Union, it was already 1.7 Soviet rubles for 1 TR⁴².

Almost all the problems associated with multiple pricing and purchasing power could be simplified and even overcome with a convertibility of the TR. Let's take a brief look at this topic.

The problem of convertibility of the transferable ruble

Debates about the convertibility of national socialist currencies and the transferable ruble have accompanied socialist integration from the very beginning, but have become increasingly important over the years. Here we will discuss briefly the convertibility of the transferable ruble within the

⁴¹ For example (example from Konstantinov, 1982, 208). If the coefficient for the Soviet ruble (SUR) was $\beta = 1.7$, i.e., 1 TR = 1.7 SUR (or 1 SUR = 0.588 TR), then one could establish the relationship between TR and any national currency, such as 1 TR = $(3.20 \times 1.7) = 5.44$ DDM. Then, if the negative balance was 600 thousand DDM, this became 110.3 thousand TR.

⁴² Ivanov (1989, 390-391).

Comecon economy (so-called 'regional convertibility'), which according to a number of economists was then a key issue for accelerating multilateral payments and integration between countries. Using the definition from those years:

'Convertibility essence lies in the provided on an economic basis and officially guaranteed by the state the opportunity to exchange the national currency against the currency of other countries in order to use it to make payments abroad, resulting from planned foreign economic relations, in which conditions are created for rational adaptation of the national economy to the requirements of the international market and for its effective participation in the international division of labour. [...] The currency convertibility mechanism generally includes exchange rates of the convertible currencies and agreed rules for their regulation, a foreign exchange market, a reserve currency and a collective support toolkit. The same elements apply to convertibility under socialism, with the difference that they operate according to the specific conditions and needs of the planned economy. A key element of convertibility is the exchange rate. For the conditions of regional currency convertibility within the Comecon, these are the rates of the national currencies to the TR and their rates between them.' (Stoimenov, 1984, 65, 97)⁴³.

In reality, in practice, there was no link between the transferable ruble and national currencies, they were closed currencies circulating in certain areas that did not cross, or if they crossed it was done administratively. Prices and pricing of trade and non-trade flows were extremely heterogeneous. The purchasing power of the transferable ruble was highly segmented (despite the common basis for tradable flows that of capitalist states, and attempts to synchronize consumer price structures for non-trade payments). Since socialist economies (except the USSR) were highly open, convertibility became an important lever for determining the efficiency of foreign trade and hence the internal efficiency of individual industries, activities and individual enterprises. Convertibility mattered for the overall macro efficiency of an economy. In fact, convertibility led to efficient specialization within the Comecon, to intertwining of reproduction cycles and to acceleration of integration within total reproduction. Over time, various convertibility projects were discussed and debated, both in scope and degree, in intensity. It is interesting to note that there were almost distinctly national positions. For example, Russian economists were the most conservative and moderate, while

⁴³ According to the summary of the same author, convertibility has the following functions (at macro and micro level): adaptive, stimulating, controlling, integrating and political functions (Stoimenov, 1984, 69-75). The same author provides a comprehensive review of the convertibility debate and the positions of economists from different countries (ibid. 80-95).

Polish and Hungarian economists were the most radical. As for the degree of convertibility, here the opinions ranged from complete non-convertibility, through partial, to full convertibility. In general, a consensus opinion was reached on partial convertibility, due to the general principles of national planning and foreign trade monopoly (although multilateral planning and some market and monetary mechanisms were developed and accepted).

Regarding the scope, it was understood that convertibility in non-commercial payments should be the starting point. These payments affected the citizens of the Comecon countries and were the visible side of the problem. A number of attempts at common rules were made (1973 agreement), as well as individual experiments (e.g., Poland and GDR in 1972-1973), but in general the problem of consumer price comparison remained unsolved. As far as trade payments are concerned, things were considerably more complicated here because of the problem of the contract price basis, which was externally set for the Comecon. From a purely theoretical point of view, it is believed that the basis for contract prices should be internal to the Comecon, and follow the Marxist concept of socially necessary labour costs formed as common to the Comecon, i.e. – ‘international socially necessary labour costs.’ However, this is an unattainable goal, given the weak integration and the lack of movement of labour, capital, etc. Capitalist prices remained as the basis, but despite their smoothing, they brought in the cycles of Western economies, inflation, etc. (see charts 6, 7, 8). Moreover, a number of national deviations (so-called exchange rate coefficients) were superimposed on the contract prices themselves.

The main issue was to determine the level of the exchange rate, whether it should be based on the structure of national production or on the structure of trade (structure of exports or structure of total trade turnover - exports plus imports). The convertible ruble was seen as a reserve currency that would perform these functions on a cashless basis. A number of economists, mainly Polish (Kaliński, 2013, Kaliński and Dwilewicz, 2014), went further and proposed the reserve currency to be gold (at the outset the transferable ruble itself was defined to gold). It was almost unrealistic to talk about convertibility to Western currencies. In general, the lack of convertibility hindered both multilateral payments and the integration process.

IV. Concluding reflexions

In this study we have analysed the Comecon as an organization that proved unable to develop multilateralism mainly because of issues related to domestic planning that encouraged autarky and, at best, bilateral exchanges. Hence

the Comecon tended to promote bilateralism instead of multilateralism. From there it is interesting to compare it with another experience of regional integration through a clearing mechanism: the EPU which ruled the intra-European trade from 1950 to 1958 (Faudot, 2020). In fact, it was in the years when the EPU countries were moving from multilateral clearing to market convertibility that the Comecon made the first attempts at multilateral settlement and clearing.

The EPU had from its beginning the clear objective to develop multilateral trade and end up with the convertibility of member countries' currencies. The political objective underlying this organization was the capitalist restoration of Western Europe through the reestablishment of industrial competitiveness to better rival with the Soviet Union. More generally, its objective was to struggle against the threats of communism in these war-torn countries. In fact, until 1950, Western Europe's trade was under bilateral rules and the attempts to improve them were unsuccessful. The slow progress of intra-European trade did not satisfy the governments involved as well as the United States agencies. The EPU was a consequence of the Marshall plan: the idea was to organize a clearing union for a more efficient use of the US dollars supplied by the United States to Western partners. The US dollar was the true hard currency 'as good as gold' and was subject to a shortage. The clearing union at the centre of the EPU was therefore of the utmost importance to liberalize international trade.

The creation of the EPU allowed and even encouraged countries (let's say, e.g., country A) to record a bilateral deficit with country B compensated by a bilateral surplus with country C despite the difficulties of the post-war years. Without the clearing union, countries would have looked for bilateral balances, which means that country A would have decreased its import from B (to reduce its bilateral deficit) and country C would have reduced its imports from A (also to reduce its bilateral deficit). The EPU's clearing mechanism had a clear expansionary effect. The clearing mechanism was particularly useful in this period of dollar shortage.

The EPU was explicitly designed to be temporary. As the participating countries were also members of the newly created International Monetary Fund, they were committed to making their currencies freely convertible as soon as possible after the war.⁴⁴ Furthermore, Western Europe's governments desired to end exchange control inherent in the clearing union of the EPU. For these reasons, the EPU countries adopted a clear liberalization agenda

⁴⁴ The EPU prevented the implementation of the basic policies decided at Bretton Woods in 1944 due to the continuation of wartime exchange controls. As a result, taking the EPU into account, the Bretton Woods period lasted barely 13 years, from December 1958 to August 1971.

that wanted not only to reinforce multilateral trade but also to bring the EPU to its own termination. Although some countries pushed for accelerating the termination of the Union (notably the Federal Republic of Germany and the United Kingdom) while others such as France and Italy preferred to maintain it for a few additional years, all countries agreed on the temporary nature of the EPU.

The Union was a great success. No less than 70% of the intra-European trade was settled through the clearing (compensation) mechanism (Table 5). This performance enabled Western Europe to save gold and dollars and greatly encouraged regional integration. The EPU contributed also to reduce Western Europe's dependence on US dollar, a lasting characteristic of European monetary integration. We present the bilateral positions and settlements within the EPU in table 10.

Table 10

Bilateral positions and settlements within the EPU, 1950-1958

	Deficits	Surplus	%
<i>Bilateral positions</i>	23323	23323	100
Compensations (multilateral and through time)	16282	16282	70
Effect of interest payments, initial balances as grants, existing resources, etc.	283	184	1
Balances settled in gold and credit, including:	6658	6757	29
▪ Gold			
- Settlement of monthly accounting positions	4306	4144	23
- Repayment of credit	1050	1180	
▪ Credit			
- Ordinary (in quotas and extensions)	1117	1315	6
- Initial balance loans	35	Ø	
- Special gold credits	150	118	

Source: The authors, adapted from EPU (1959, p. 39)

We can observe that the clearing mechanism of the EPU was *instrumental* in solving the liquidity issue that had dwindled international (and especially intra-European) trade of Western European countries immediately after the war. It was part of the plan to overcome the dollar shortage for the period required to restore the competitiveness of the area. The United States

pushed for the implementation of the EPU even though the Union involved discriminatory measures against the United States' economy. However, all the policymakers and advisors (or to be more accurate, almost all of them) agreed to dismantle the clearing apparatus once this objective was reached.

In comparison, the clearing mechanism of the Comecon was not conceived as an instrument of regional multilateralism. Korbonski (1990) considered that it was first used as a reply to Western initiatives for regional integration such as the European Economic Community and the EPU. It became then a tool for the residual trade occurring between countries that had adopted domestic plans with, in a sense, autarkic behaviors (Łazor and Morawski, 2014).

As a whole the present study has shown us the principle and practical limits of monetary integration between socialist economies. To the basic problems, in addition to national planning and the state monopoly of foreign trade, we can add the principle of equivalent exchange (based on the labour theory of value), the law of planned and proportional development, the underestimation of market mechanisms and private property, and finally low account of convertibility, as an important lever for effective specialization and development of any economy. In this perspective, in the absence of market mechanisms and supranational planning, sooner or later disintegration is reached.

This is also a specific lesson for the creation in today's reality of trade and geo-economic blocs, which could not last long, if one does not go either in the direction of market mechanisms of specialization and integration, or towards some form of supra-nationality and general planning and administration of bloc members economies.

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Session 3: Markets, States and Monetary Unions

Central Bank Credit and Capital Market Integration: A Research Agenda for the Austro-Hungarian Case (1868–1914)

Kilian Rieder¹

1. Motivation

The euro area has a unique institutional set-up, built around 19 not yet fully integrated national financial markets and 19 national fiscal policies, with limited coordination. This presents the risk of our monetary policy stance being unevenly transmitted across the union.

– Christine Lagarde, ECB Sintra Forum on Central Banking 28 June 2022.

Capital market integration is crucial for the even transmission of monetary policy in a currency area (Constancio, 2016). Unified capital markets ease frictions that inhibit firms' access to equity and external finance. Moreover, deeply integrated capital markets can help severing the sovereign-bank nexus in times of financial distress and facilitate risk-sharing inside a monetary area (Dell'Ariccia et al., 2018). Ultimately, a well-integrated capital markets union may also reduce the need for fiscal interventions in the case of asymmetric shocks (Leandro et al., 2016).

Modern central banks have devised specialized tools to address unwarranted short-run financial fragmentation not justified by country-specific fundamentals when it impairs the monetary policy transmission mechanism (Bernoth et al., 2022). Yet, these instruments, such as the European Central

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Bank's Outright Monetary Transactions (OMT) and the Transmission Protection Instrument (TPI), are not intended as a substitute for genuine capital market integration in the medium to long run. Conventionally, structural reforms and legal harmonization, including regulatory convergence – rather than central bank interventions – tend to be invoked as the “go-to” solutions for reducing remaining information asymmetries and other credit market inefficiencies.

While the long shadows of the financial and real dislocations after 2007–08 provided a special impetus for fostering the banking and capital markets union in the euro area and elsewhere, policy-makers' preoccupation with capital market integration is not a phenomenon of the twenty-first century. In fact, historically, European central banks were concerned with capital market integration for a wide variety of reasons that went far beyond the narrow realm of monetary policy transmission. Rather than focusing on mitigating short-term fragmentation, many banks of issue assumed an active role in forging secular financial integration during the long nineteenth century. The widespread foundation of regional central bank branches reflects these pursuits. For example, the Banque de France leveraged its branch network to boost the allocative efficiency of interregional investment flows (Bazot, 2014). Similarly, the Bank of Japan established local branches to kick-start financial development in the hinterland (Mitchener and Ohnuki, 2009). In Southeastern Europe, capital market integration was even an intrinsic part of state-building agendas (Morys, 2009). Infights concerning the locations of future central bank branches between the different constituent parts of the Habsburg monarchy meant that capital market integration was a deeply political issue that tied regional financial interests to regular discussions about the renegotiations of the Austro-Hungarian Bank's charter (Jobst, 2010; Jobst and Kernbauer, 2016).

Despite the fact that the role of central bank branches features prominently in the literature on historical capital market integration, there is little causal evidence on the effects of these endeavors. The aim of the present research project is to generate new evidence on the causal impact of central bank branches on historical capital market integration in Austria-Hungary between 1868 and 1914. The project intends to shed new light on the question of whether branches contributed to interest rate convergence in late Habsburg Empire. It also seeks to understand the fault lines and pitfalls of historical capital market integration via central bank branching: the project will attempt to examine

whether specific forms of institutionalized discrimination against certain counterparties by the central bank could have hampered the formation of an integrated Austro-Hungarian capital market.

2. Historical background and literature

In 1867, the political and economic agenda of the so-called Austro-Hungarian Compromise calmed the constant interior tensions which had coined the Habsburg Empire for decades since the revolutionary turmoil of 1848/49.

After the Empire's defeat against Prussia in 1866, the Compromise separated the monolithic monarchy into two sovereign political entities, Cisleithania (the Austrian crownlands) and Transleithania (the Hungarian lands of the Crown of Saint Stephen). As of 1 January 1868, Austria and Hungary received independent Parliaments and fiscal autonomy, while remaining united "in the person of the common monarch" (Eddie, 1989, p.814), the maintenance of a "common army, a common diplomacy and foreign representatives" (Flandreau, 2001, p.16). In addition to these common affairs, a range of so-called "dualistic affairs", which needed "to be regulated by identical laws passed in each state separately" (Eddie, 1989, p.815) meant that not only the external relations but also the economies of Austria and Hungary remained tightly knit together. Dualistic affairs comprised the making of common external tariff policy as well as a common internal market (i.e. provisions securing the free movement of people, services, goods and capital inside the dual monarchy), the coordination of indirect taxes, the handling of sovereign debt issued before the Compromise and monetary policy.² After 1867, Austria and Hungary continued to share a single central bank and a common currency³, providing the dual monarchy with an institutional set-up akin to a *de facto* monetary union best characterized as a byproduct of "fiscal divorce", rather than the outcome of "monetary marriage" (Flandreau, 2001, p.7; 16).

² C.f. Reichsgesetzblatt für das Kaiserthum Österreich, '146. Gesetz vom 21. Dezember 1867', 61. Stück, 146. Gesetz (Gesetz betreffend die allen Ländern der österreichischen Monarchie gemeinsamen Angelegenheiten und die Art ihrer Behandlung; Vienna, 1867)

³ The Austrian National Bank (OeNB) was established as a privately owned stock company and enjoyed the note-issuing monopoly for the entire territory of the Habsburg Empire ever since its foundation in 1816. The Austrian Gulden (also known as fl. Austrian currency) replaced the Conventionsthaler in 1858 as the single common currency in the Empire.

Figure 1**Mapping central bank branches and subsidiaries
in Austria-Hungary (1912)**

This figure shows the geographic coverage of central bank branches and subsidiaries in Austria-Hungary. The larger dots represent central bank branches, whereas the smaller ones mark subsidiary locations.



Source: Jobst (2010).

This specific institutional framework meant that the Austrian National Bank (after 1878, officially re-chartered as Austro-Hungarian Bank) was the central bank of a multi-ethnic and multinational monetary union between 1868 and 1918. The Bank wielded the note issuing monopoly for the entire Habsburg monarchy, covering today's Austria, and parts of Croatia, the Czech Republic, Hungary, Poland, Romania, Slovakia, Slovenia and Ukraine. Austria-Hungary was characterized by significant regional heterogeneity in terms of economic specialization and performance (Schulze, 2007), giving interregional resource transfers a particular importance in the catch-up process (Komlos,

1983). Furthermore, operating in a context of rising nationalism towards the end of the nineteenth century, the Bank faced frequent allegations that its lending arms – the discount window and the Lombard facility – disadvantaged or even overtly discriminated against non-German regions and counterparties (Jobst and Kernbauer, 2016). Hence, the Austro-Hungarian setting provides a rich backdrop to study capital market integration and its fault lines in a historical monetary union whose governance structure resembled the euro area in many key aspects.

By 1912, Austro-Hungarian Bank operated a dense network of more than 100 branches all over the monarchy (see Figure 1). In addition, the central bank had established a considerable number of subsidiaries, i.e. partnerships with commercial banks that agreed to offer some central banking services to local customers on behalf of the Austro-Hungarian Bank in regions without branches (Jobst, 2010). Evidence on whether this branch network fostered capital market integration over time remains on shaky grounds. Available studies are dated and rely on simple correlations based on city-level data from the Austrian part of the Empire only (Good, 1977, 1984). Similarly, the presence of discriminatory practices in commercial and central banking activities is controversial. While Good (1977) suggests that national bias did affect non-German speaking groups, Komlos (1980) argues that econometric weaknesses and measurement problems weaken this claim. Michel (1976) also provides contrarian qualitative evidence from contemporary surveys that appear to exonerate the central bank from such allegations. At the same time, recent studies on good markets have found that economic integration in Austria-Hungary appears to have proceeded very much asymmetrically, according to ethno-linguistic dividing lines (Schulze and Wolf, 2012).

3. Central bank branches and market integration

The first part of this project attempts to furnish fresh, plausibly causal evidence on the following question: did the expansion of the branch network lead to more market integration? The project's identification strategy intends to exploit insights on the particular historical and institutional framework that governed the opening of new central bank branches in combination with commercial bank-level data on interest rates and balance sheets.

The Austro-Hungarian Bank's charter was renegotiated every ten years and involved tough bargaining between the Austrian and Hungarian governments. The political tensions that accompanied these negotiations were considerable

and regularly culminated in threats by the Hungarian government to establish a separate bank of issue in Budapest (Jobst and Kernbauer, 2016). After each of the four renegotiation rounds that occurred between 1868 and 1914, the Bank's note-issuing privilege was ultimately extended. Yet, the renewal of the charter always came at a price: the Bank was mandated to open a certain number of additional branches in the Austrian and Hungarian hinterland to cater to regional economic interests. Apparently, both governments had high hopes that the foundation of new branches would provide a financial impetus to the chosen locations. Their statutes obliged central bank branches to implement credit operations according to uniform rules set by the headquarters in Vienna/Budapest throughout the entire territory of the monarchy. The specific channels through which the establishment of central bank branches may have influenced regional interest rates include the dissolution of local banking monopolies (i.e. increased competition) and the channeling of increased capital flows from low-rate regions in the center to high-rate regions in the periphery of the Empire.

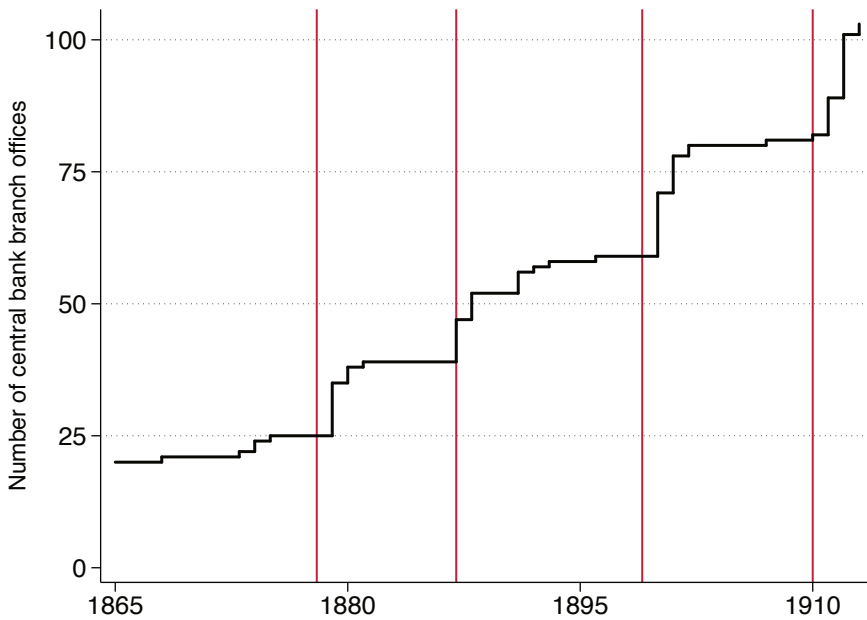
Figure 2 plots the branch network's four waves of expansion between 1868 and 1914. Due to their link to the highly politicized Bank charter renewals, the decisions regarding the timing and locations of new branches were largely outside the hands of the central bank. Still, endogeneity concerns loom large since the two governments may have chosen new branch locations by selecting generally vibrant and upcoming cities that were already characterized by increasing financial and economic convergence with the centers. Besides controlling for a wide range of possible time-varying confounding variables including city-level population, regional ethno-linguistic composition, regional occupational distribution across sectors and the presence of communication infrastructure, the project intends to implement a staggered difference-in-differences design to address these concerns.

The core idea of this strategy would be to exploit the differential timing of branch establishment across regions. As a first pass, a straight-forward setup would consist of considering only commercial bank-level interest rates in locations that ever received a branch between 1868 and 1914. The treatment and control groups would have changing compositions over time: in each year, locations that had already received a branch could be compared to locations that would only see a branch established later on. At the very least, bank-level interest rates in treatment and control group locations would have to display parallel pre-trends for this approach to furnish credible estimates.

Figure 2

Renewals of the Bank charter and expansion of the branch network in Austria-Hungary

This figure plots the number of the Austro-Hungarian Bank’s regional branches between 1865 and 1914. The red vertical lines mark the successful conclusion of intergovernmental negotiation rounds preceding the renewals of the Bank’s charter.



Source: OeNB/OeUB annual reports.

Second, while the four waves between 1868 and 1914 each resulted in the establishment of a predetermined number of central bank branches, the precise timing of branch creation could vary considerably within each wave: some branches were founded directly after the renegotiation, whereas the opening of others took the Bank several years. Hence, an alternative econometric approach would be to compare commercial bank-level interest rates in locations that received a branch earlier in a given wave to locations that only did so later on – but still within the same wave. One key identification assumption in this context is that the within-wave timing of locations was plausibly orthogonal to endogenous governmental selection criteria and rather depended on arguably random frictions (e.g. the Bank’s relative ability to quickly find or construct a suitable office building for the new branch).

$$Y_{i,c,t} = \delta B_{c,t} + \Psi' \mathbf{X}_{i/c,t} + \phi_i + \gamma_t + u_{i,c,t} \quad (1)$$

Equation 1 summarizes the projected difference-in-differences set-up: $Y_{i,c,t}$ stands for commercial bank-level interest rates as reported by bank i located in city c for year t ; $B_{c,t}$ is a dummy flagging cities that harbored an active central bank branch in year t ; X reflects a vector of bank-level, city-level and regional time-varying controls; ϕ_i captures bank fixed effects; γ_t absorbs year fixed effects; and $u_{i,c,t}$ is the conventional error term. Given the staggered entry into treatment, the project intends to draw on newly available econometric approaches to estimating difference-in-differences design in these specific settings (Roth et al., 2023).

4. National bias in central bank credit operations

The second part of this research project intends to combine unique micro data and regression discontinuity methods to analyze whether national discrimination played a role in the Austro-Hungarian Bank's discount lending framework. To elucidate the econometric strategy underlying the second part of this research proposal, a more detailed understanding of the organization of the Bank's regional credit operations is required.

Each central bank branch was home to a so called college of censors (*Zensorenkollegium*) responsible for taking day-to-day lending decisions. The directorates in Vienna and Budapest centrally appointed the censors for each of the Bank's branches in their respective territories. Censors were usually chosen among highly reputable individuals from the local business community. The Bank did not pay censors for their services but the latter could continue exercising a remunerated position in a local firm. Even a managing position in a local commercial bank was no exclusion criterion. Censors could not, however, vote on bills submitted by their own firm.

dividual counterparty the central bank was willing to hold on its balance sheet.⁵ Apart from the size of the current credit limit (if any) and the censors' proposal for the new limit, these lists contained information on the name, location, and the economic sector of the counterparties (see Figure 3). The colleges of censors decided on credit limits by simple majority. Interestingly, the head of each branch office – who was a Bank clerk and did form part of the college – could express a dissenting opinion on the college's proposal. In the end, the directorates held the decisive power to accept the branch proposals or to overrule them using the judgment by the head of the branch office or their own. The lists of credit limits, including dissenting opinions and the eventual decisions by the directorate, survived in the Bank archives of the Austrian National Bank.

Figure 4

Composition of the college of censors in Ljubljana (1912)

This figure provides an example for the available information on the composition of the college of censors at each branch. The Bank's annual report provides detailed information on the individuals in the college, including their residence, their occupation and ownership stakes (if any).

Zensorenkollegien bei den Bankanstalten und Nebenplätzen,

ferner

Vermittlungsfirmen bei den Nebenplätzen

in den im Reichsrate vertretenen Königreichen und Ländern.

Laibach.

(Filiale.)

Herr **Bamberg Ottomar**, öffentlicher Gesellschafter der Firma: Ig. v. Kleinmayr & Fedt. Bamberg (Buchdruckerei, Buch-, Kunst- und Musikalienhandlung).

- **Janesch Johann**, Privatier.
- **Knez Johann**, Landtags-Abgeordneter, Gemeinderat, Vizepräsident der k. k. Landwirtschafts-Gesellschaft für Krain, Handelskammerrat; Inhaber der Firma: J. Knez (Landesproduktenghandel, Walzmühle), Großgrund- und Ziegeleibesitzer.
- **Kollmann Robert**, Inhaber der Firma: P. Kollmann (Glas-, Porzellan- und Gemäldehandlung).
- **Kosler Peter**, Privatier.
- **Mathian Johann**, kaiserl. Rat, Architekt; Inhaber der Firma: Joh. Mathian (Möbelfabrik und Kunsttischlerei).
- **Mayr Josef**, Privatier.
- **Mühleisen Arthur**, Privatier.
- **Petricič Vaso**, öffentlicher Gesellschafter der gleichnamigen Firma (Kurz- und Nürnbergwarenhandlung).
- **Sodvan Ferdinand**, öffentlicher Gesellschafter der Firma: Franz Max Sodvan (Manufakturwarengeschäft).
- **Urbanc Felix**, Handelskammerrat; öffentlicher Gesellschafter der gleichnamigen Firma (Manufakturwarenhandel).

Source: OeNB annual report.

⁵ Credit limits were in force at all major banks of issue, including the Bank of England, Banque de France and Banca d'Italia – although the rationale and use of credit limits in these other contexts remains under-researched (Calomiris et al., 2016). In the 1920s, the U.S. Federal Reserve System also used credit limits. Known to contemporaries as basic lines, these limits were calculated individually for each member bank on the basis of the latter's reserves and capital position (Wallace, 1956; Rieder, 2021).

At this stage, the project can already build on more than 4,000 hand-collected credit limits for individual counterparties between 1909 and 1913, but it is intended to expand this collection backwards in time. Subsequently, a crucial follow-up task will be to combine the detailed information in the lists and complementary contemporary sources on the location, the name and the management of the firm to re-construct the “nationality” affiliation of each counterparty.⁶ At the same time, this project also seeks draw on the Bank’s annual report to collect the names of all individual members of the local colleges of censors to track the nationality composition of these committees over time (see Figure 4). In a final step, the project intends to match the branch-level time-varying nationality composition of branch colleges to the colleges’ proposals on counterparty-level credit limits for discount window credit.

To gauge the presence of national bias in credit limit decisions, and based on the nationality composition of the individual colleges, the project intends to construct a time-varying running variable measuring the share of Austro-German nationals on each committee. Given the practice of taking decisions on credit limits by simple majority, a share of Austro-German nationals higher 50% formally translated into Austro-German domination of the college. The project seeks to exploit this cut-off in a regression discontinuity framework. Controlling for other counterparty-level covariates, the design seeks to shed light on whether firms with non-German nationality affiliations received systematically lower credit limit proposals from Austro-German dominated colleges. Since the head of a Bank branch could communicate dissenting proposals which also survived in the Bank archives alongside the branch college’s initial proposal, and because only the directorates had the actual power to endorse the eventual credit limits, the project will also be in a position to analyze whether the local colleges’ potentially biased proposals were subsequently corrected at higher levels of management.

$$\begin{aligned}
 Y_{i,b,t} = & \alpha + \beta_1 T(G > 0.5)_{b,t} + \gamma_1 G_{b,t} + \delta_1 (T_{b,t} \times G_{b,t}) + \varepsilon NG_i + \\
 & \beta_2 [NG_i \times T(G > 0.5)_{b,t}] + \gamma_2 [NG_i \times G_{b,t}] + \delta_2 [NG_i \times (T_{b,t} \times G_{b,t})] + u_{i,b,t}
 \end{aligned} \tag{2}$$

⁶ An annual financial yearbook for Austria-Hungary, the *Compass* proves particularly valuable for this purpose. The latest editions were edited by Hanel (1915).

Equation 2 summarizes the intended regression discontinuity framework: $Y_{i,b,t}$ stands for the credit limit of counterparty i as proposed by the college in bank branch b in year t ; α is a standard constant; T ($G > 0.5$) $_{b,t}$ is a treatment dummy that turns on if the college in bank branch b is dominated by Austro-Germans in year t ; $G_{b,t}$ reflects the running variable as described above; NG_i is a dummy flagging counterparties that are not Austro-German; and $u_{i,b,t}$ constitutes the conventional error term. Equation 2 can be augmented with counterparty-level controls and time fixed-effects.

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Session 4: Inflation, Sovereignty and Monetary Unions

The Strong and the Weak: European Currencies During the Snake

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Harold James and Alain Naef¹*

Abstract

Using new data from the Bundesbank, we analyse one of the ancestors of the Euro, the European currency Snake. The system was in place from 1972 and 1979 and was the European reaction to the end of the Bretton Woods fixed exchange rate system. We show that the Snake was different for strong and weak currencies. Weak currencies had to intervene more, while strong currencies benefited from more stability. We also show that the Bundesbank cooperated on a third of the days other central banks tried to defend their currencies. And that cooperation was stronger for members of the Snake than outsiders.

Key words: fixed exchange rates, foreign exchange intervention, Snake, Europe.

1. Introduction

In 1973, the Bretton Woods system officially broke down. It had already lost most credibility in 1971 with the closing of the Gold Window. Pol-

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icymakers in Europe were keen to avoid excessive fluctuations in their exchange rates. They started to put in place schemes for exchange rate stability starting with the Snake in October 1972 before the setting up of the European Monetary System (EMS) in 1979. But countries within the snake had very different macro fundamentals. We analyze the efforts to maintain currency stability on the foreign exchange markets in the face of inflation shocks.

Here we look at the interaction of inflation dynamics, high oil prices and the effort of European countries to keep their currencies within the currency Snake, an arrangement that held all European currencies together between 1972-1979.

We use a new dataset on central bank foreign exchange intervention. We present daily data between 1973 and 1980 for 10 major European economies. Our data have been hand-collected from the archives of the Bundesbank and have not been used in research before. We find that countries within the snake intervened less than other European countries and resisted better to inflation pressure such as the increase of the price of oil.

We present new evidence on cooperation. We analyze daily intervention data and find that on one third of the times a country intervened in Deutschmark, it also received support from the Bundesbank. We also find, using a probit regression, that being a member of the Snake led to more cooperation on the foreign exchange market.

Others have looked at the Snake before. Wittich and Shiratori (1973) were the first to look at the currency agreement. They describe the new snake and show that macroeconomic alignment between countries was difficult. Carbaugh (1977) shows the role of France and the United Kingdom in breaking down the “snake in the tunnel” and left the snake to move more freely. Coffey (1987) argues that the Snake faced difficulties as it was a rare fixed exchange rate system in a world that was at the time more oriented towards floating. This made efforts to maintain the scheme more difficult. More recently, James (2012) offers an authoritative review of European monetary agreements. He reviews the Snake and its difficult beginnings. The Snake was the first

attempt for European policymaker to create a joint monetary system. Needham (2017) shows the importance of Germany and France in shaping the Snake and monetary Europe more broadly. While there has been literature on the topic, this paper is the first to focus on the Snake arrangement using intervention data to understand how policymakers operated the scheme.

This paper is divided into five parts. Part two reviews the historical background of the Snake. Part three presents the novel data set as well as some descriptive statistics on European foreign exchange intervention. Part four focuses on efforts of cooperation between European countries. Part five looks at inflation differential and how they affected the different snake countries.

2. Historical background²

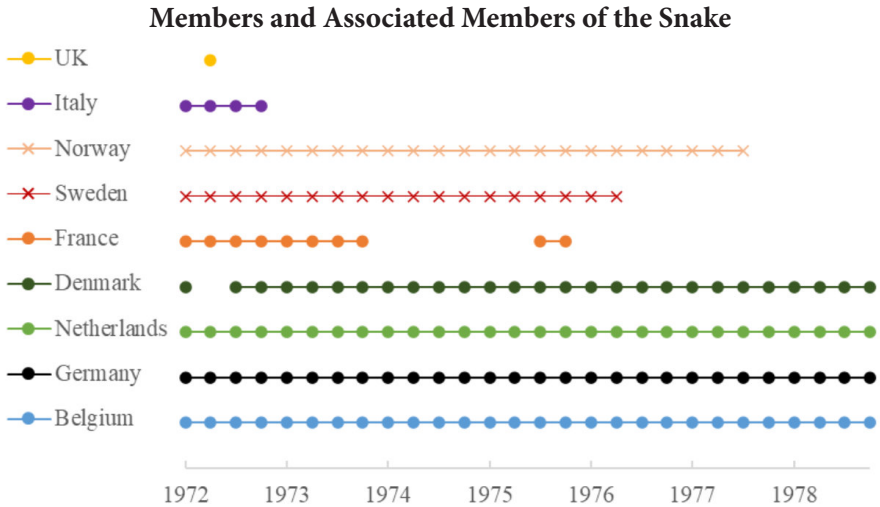
The 1970s were a key moment as it was the end of the European golden age and growth started to slow. Most European countries had different rate of disinflation and strong divergences started to emerge. The collapse of the Bretton Woods system of fixed exchange rates necessarily prompted a fundamental rethinking of European monetary issues. The idea of exchange rate stability, which was at the heart of Bretton Woods, was still the main game in town in Europe. Countries wanted to avoid exchange rate fluctuations. Europe was at the mercy of US monetary policy. Trying to maintain a fixed exchange rate with the dollar meant that all shocks to the dollar would be reflected on the Deutschmark as well as all European currencies.

After the closing of the gold window on August 15, 1971, European currencies were temporary left to float. But this was never what policymakers wanted, it was a temporary solution waiting for a better fix. The European Economic Community (EEC) Monetary Committee discussed a response on September 2, 1971. It considered different proposals of narrow fluctuation of exchange within Europe. France took the lead in international negotiations to defend the European position. In December 1971, Presidents Nixon and Pompidou met in the Azores. It was decided that the US would devalue against gold (from \$35 to \$38

² Part of this section draws on James (2012).

an ounce). The terms of a general agreement were worked out at the Smithsonian meeting of the G-10 finance ministers and central bank governors (December 17–18, 1971).

Figure 1



Note: Norway and Sweden were “associated” members of the Snake.

Marcel Théron, the Banque de France’s director-general of foreign services, made suggestions of a narrower band system. This became known as “the EEC snake in the Smithsonian tunnel.” Within this system, the Netherlands and Belgium-Luxembourg continued to have the smaller room for maneuver (1.5 percent), which was sometimes called “the worm”. The United Kingdom and Denmark joined the Snake on May 1, 1972, although their membership of the European Communities (EC) only began in January 1973. Norway, which was also expected to join the EEC, became an associate member on May 23, and remained within the exchange mechanism, although in a referendum on September 26, 1972, Norwegian voters rejected EEC membership. Sweden also applied to join the mechanism in May 1972, but the application was deferred because of a British exchange rate crisis, and the membership did not take effect until March 19, 1973. In 1975 there were also intensive negotiations about a formal association of Switzerland with the narrow exchange rate system for the most stable EC cur-

rencies, though in the last resort these discussions were unproductive. In what became known as the Basel Accord, the central banks on April 10, 1972, set out the operational details of the new system, which began to function on April 24. New “very-short-term” facilities were established to finance interventions, which was supposed to be symmetrical, with the central bank of a strong currency buying a weak currency and vice versa. As our empirical analysis shows further down, symmetry was not the rule even if most of the interventions we observe were not intramarginal and not at the margin.

Intramarginal interventions were also allowed. They needed to be approved in a process called the concertation (more on this in the data section). The central banks agreed on “concertation” procedures: the coordination of standard times for interventions, as well as the establishment of a telephone network. Here we used archival records from these concertation procedures to build our dataset on central bank intervention.

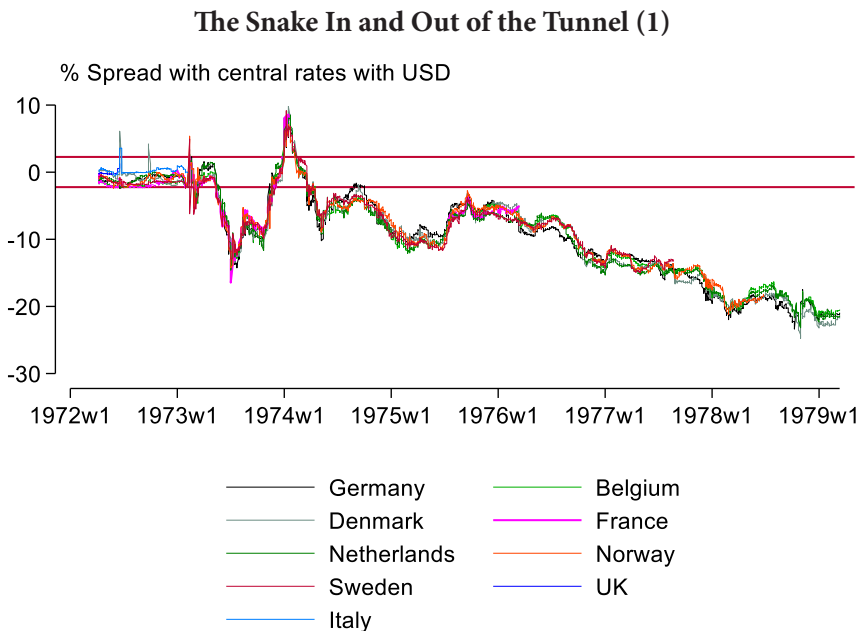
The UK was always a reluctant partner in this joint venture. On 23 June 1972, following a speculative attack, the UK left the snake. The government announced a temporary float. Ireland also left at the same time as it was in a currency union with the UK. A few day later, Denmark also left as it was a major trade partner to the UK. But Denmark kept on shadowing the snake and joined back in October 1972. The speculative attack on sterling showed that the system was far from perfect. Any attack on a single currency could potentially drag down the entire construction.

And any inflows of money into the Deutschmark would always put a strain on the whole system. In January 1973, the US ended wage and price controls. This led to large flows of dollars into the other safe asset, the Deutschmark. The resulting valuation gains of the Deutschmark forced the Bundesbank to intervene to depreciate its currency. This led to a closure of European markets on 10 February 1973. And a few days later, the dollar was devalued by 10%. Along with the measure, Treasury Secretary George Shultz announced that the US was under no obligation to intervene on foreign exchange markets.

In early March 1973 a new crisis hit Europe and both Germany and the Netherlands had to intervene to contain the appreciation of their currency. But after spending DM 8 billion or 16 percent of the value of the currency in circulation, the Bundesbank gave up. It announced that it would no longer intervene to support the dollar. France joined the move to not support the dollar and also accepted to a revaluation of 3 percent of the Deutschmark against the franc.

The Snake was now no longer fixed to the US dollar from this point on. Figure 2 depicts the movement of the snake, getting out of the “tunnel”. The dollar depreciated by just short of 15% by July 1973. But the dollar devaluation put more pressure on weak than strong currencies, accentuating the European imbalances. The DM was again revalued by 5.5 percent. Then money started to flow into the Denmark, Netherlands and Norway. In September 1973, the Norwegian krone and Dutch guilder were revalued by 5 percent.

Figure 2



The European central bank governors evolved a set of intervention

techniques, with strong pressure from the governments to undertake these interventions as far as possible in EEC currencies and not in dollars.³ They thought this would undermine the mechanism. This influenced the behavior of central banks as, the US dollar represented on average 64% of the volumes of foreign exchange interventions for central banks in the snake against 95% for the other central banks. Table 1 allows to observe that within the snake, the Bundesbank was relying more on the USD compared to other central banks. Sweden was only an associated members and the currency of its interventions suggest only a partial adherence to the rules of the snake.

War then came into play, with the Yom Kippur War putting pressure on oil prices in October 1973. This led to the dollar appreciating against European currencies. This could have provided some respite to the Snake, but it did not. The depreciation of the DM led to cheaper German exports improving competition pressure on European neighbors. France was one of the main causalities, and despite heavy intervention, France temporarily left the Snake in January 1974.

Table 1

	% of intervention volumes in USD All periods	% of intervention volumes in USD during Snake membership
Belgium	34%	34%
Denmark	66%	66%
France	73%	61%
Germany	75%	75%
United Kingdom	100%	
Italy	98%	3%
Netherlands	51%	51%
Norway	76%	65%
Sweden	83%	83%
Switzerland	98%	

Note: This counts the average share of US dollars in the volumes of daily interventions.

³James (2012) citing CoG, Meeting 64, 11–13 November, 1972, Basel.

There were attempts to redesign the exchange rate system, but these were not successful. The Snake in 1974 was struggling to deal with international monetary problems. Jacques de Larosière, the director of the treasury, was one of the critics of the system. He was a central figure in launching the Fourcarde plan, named after French Finance minister Jean-Pierre Fourcade. The French proposal included a Community credit mechanism, a European unit of account, an exchange rate system with wider fluctuation margins, and coordinated action on the Euromarkets. The idea was to now fix European currencies to a European Unit of Account, and no longer the dollars. This European Unit of Account would be based on a basket of currencies.

Shortly after the French initiative, the European Commission presented another alternative to this French plan with a suggestion to integrate macroeconomic aggregates. The idea was to negotiate aspects like inflation-unemployment trade-offs internationally. German members of the Committee of Governors (CoG) were skeptical of these proposals. In December 1974 there was an agreement at the Committee of Governors to introduce an experimental system of limiting currency movements on EEC markets to a daily limit of 1 percent. This limit could be relaxed for very stormy days. But again this proposal did not meet enthusiasm on the other side of the Atlantic. There were however exchange rate management discussions with the Americans in March 1975. US policymakers were worried that European operations would weaken the dollar. Discussions around the benign neglect of the dollar emerged again, this idea that by not intervening to manage the dollar, the US put a burden on the rest of the world (an idea still present today with the taper tantrum or general monetary tightening which can affect emerging markets). In March 1975 the EEC central banks announced an agreement in which they renounced “aggressive intervention,” and according to which they were supposed to limit daily fluctuations of their currencies against the dollar to 1 percent. But the agreement quickly proved unworkable in the light of continued exchange volatility, and in December 1975 it was modified so as to allow the rule to be broken in the interest of coherence of the Snake. In practice the March 1975 agreement was never really enforced, and as

early as June 1975 the Snake ministers and governors concluded that “at present it is impossible to introduce firm rules for supporting dollar intervention.”⁴

On May 9, 1975, France returned to the Snake. The move had been preceded by renewed French insistence on institutional innovation. In April 1975 there was an agreement at the European Council to establish the European Unit of Account, and Fourcade claimed that within five years the EUA would be, along with the SDR, the major means of international payments. The new currency, like the SDR, was based on a standard basket, and that basket included all nine EEC members; in other words, it was not confined to Snake participants.⁵ While returning, France argued for more frequent interventions and for tighter bands with the dollar. The Bundesbank accepted the idea, thinking it could lead to more monetary discipline in view of future integration. The Snake would be at the center of the future European monetary project. This new discipline led to public debates about fiscal sustainability.

Italy was then under pressure in 1976 and had to turn to both the European Monetary Cooperation Fund (EMCF), a fund set up to support weaker currencies, and the IMF for assistance. In 1977 inflation in the Nordic countries started to take its toll (11.1 percent in Denmark, 11.5 in Sweden and 9 in Norway). Germany also saw 9 percent inflation in 1977. But the pressure on exchange rates soon resumed. Sweden undertook a further 6 percent devaluation. On April 4, 1977, Sweden devalued by 6 percent, and Denmark and Norway by 3 percent. But this was not enough and in August Sweden devalued by a further 10 percent before leaving the Snake.

By 1977–1978 it looked as if every approach to reform had failed. In particular, European-level integration was faltering. The European Monetary Cooperation Fund (EMCF) which had been set up to try to

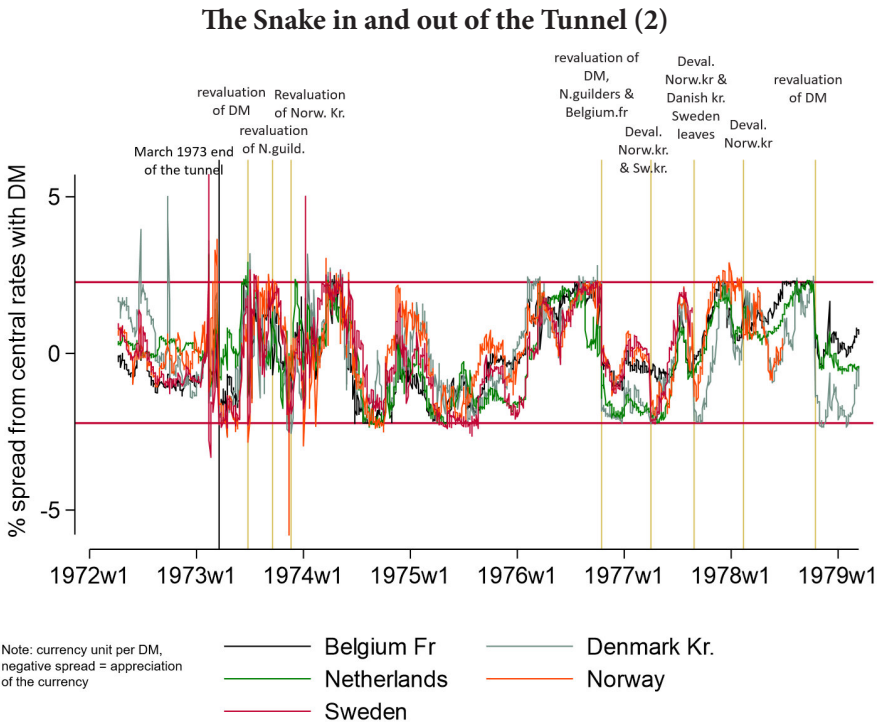
⁴ James (2012), quoting Banca d'Italia, Studi 618, June 16, 1975, Summary of Snake Ministers' and Governors' Discussion. BdF, 1489200205/57, November 16, 1979, EEC Note.

⁵ The European Unit of Account was defined as the sum of the following monetary amounts: Deutsche Mark 0.828; British pound 0.0885; French franc 1.15; Italian lire 109; Netherlands guilders 0.286; Belgian franc 3.66; Luxembourg franc 0.14; Danish krone 0.217; Irish pound 0.00759.

ease tensions and lend to members was not successful. It was meant to replace the IMF but this did not happen. The Snake was mainly a system based on the DM and not a truly integrated currency agreement. The decline in 1977-78 was no longer seen as a “benign neglect”, in which the US played a passive role, but a “malign neglect”, in which the US artificially depreciated the dollar. This meant capital flows into Germany which in turn created instability within the Snake as it meant weak currencies depreciating against the strong ones.

In March 1979, the Snake left space for the next attempt in European monetary union with the launch of the European Monetary System (EMS). This system would last, in its different incarnation, until 1999, when the European caterpillar finally flew off as the Euro, the butterfly result of 30 years of European integration. Figure 3 depicts the movement of the snake around its margins and the dates of realignments of the exchange rates for their members.

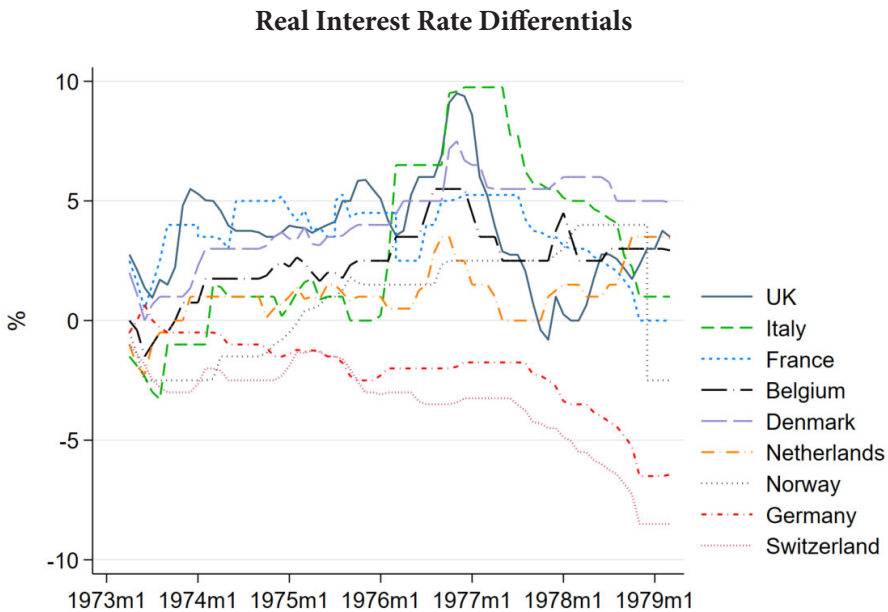
Figure 3



2.1. Weak and strong currencies

After the Bretton Woods period, European countries were divided into two groups: weak and strong (Needham 2017; James 2012). Weak currency policymakers lobbied for more IMF quotas and increases in international reserves. They were keen to use foreign exchange interventions. Strong currency countries were against IMF credits as they potentially encouraged deficit countries to live beyond their means. Macroeconomic conditions diverged among European countries. Belgium and Italy experienced recurring high public deficits during the 1970s while the other European countries limited their annual deficit around -1% or less of their GDP. Inflation rates were higher than 10% on average during the period 1973-1980 in Denmark, France, Italy, and in the UK while Switzerland and Germany remained under 5% on average. Figure 4 plots the real interest differentials between European countries and their core countries. For members of the snake, we define Germany as the core country. For members outside of the snake and for Germany, the core country was the US. Figure 4 shows that Germany and Switzerland stand out as having real interest rate consistently smaller than the US for all the period while within the snake, all countries had higher real interest rate compared to Germany, the Netherlands being the closest to the German rate.

Figure 4



Source: Global financial data.

Contemporaries often spoke about weak and strong currencies. Here we quantify these distinctions using Principal Component Analysis (PCA). PCA allows reducing a variables into a smaller number of variables, without losing their characteristics (Jolliffe and Cadima 2016). We use PCA to classify currencies into weak and strong currencies during our period. The idea is that weak currencies had lower interest rates and higher inflation differentials with Germany. Because of these higher inflation differentials, and thus lower credibility, we expect them to intervene more frequently on the foreign exchange market. On the contrary, strong currencies mirrored Germany. When the US or Germany raised interest rates, the Netherlands would react by raising rates as well. This would limit their interventions in the foreign exchange market. On the other hand, Italy might not follow as quickly with a German interest rate hike. The Banca d'Italia would try to delay a rate hike with foreign exchange intervention instead.

Table 2

Variable (interventions)	PC 1
Germany	0.58
Netherlands	0.56
Belgium	0.41
Denmark	0.32
France	0.17
Sweden	0.12
Norway	0.11
Italy	0.11
Switzerland	0.09
UK	0.09

Note: Switzerland's is only available for part of the period and its position in the PCA does not accurately reflect the strength of its currency.

Table 2 presents the results for intervention pattern. The first component selected by the PCA ranks Germany first, followed by the Netherlands and Belgium. Looking at this ranking, it almost perfectly matches the perception of what people called strong currencies at the time. Then Italy and France are closer to being weak currencies.

3. Data

Our data on foreign exchange intervention are drawn from the archives of the Bundesbank.⁶ We have data for Belgium, Denmark, France, Germany, Ireland, Italy, the Netherlands, Norway, the UK and Switzerland. Our data starts in 1973 for all countries but Switzerland, which only starts in 1976. For each country we have intervention records for up to 10 different currencies. For example for France, we have interventions in dollars, Deutschmark, Dutch florins, Swedish Krona, Belgian francs, Swiss Francs, Norwegian Krona and Danish Krona. The data shows over 16512 observations creating a database of over 339,000 entries when counting days with no intervention in a given currency.

Interventions were recorded by the Bundesbank in hand-written tables which we have digitized. We are the first to present this data. This information was shared by central banks through a process referred to as “the concertation” (Konzertation in German). Central bankers in Europe and some other advance economies started to share their intervention operations to avoid crossfire and coordinate policy better. This started in the 1970s to make sure intra-margin intervention were coordinated. The concertation data were meant to be comprehensive. We interpret these data to encompass both spot and forward transactions. Also, these interventions should be interpreted as sterilized, and working separately from monetary conditions and interest rates.

There were three rounds of telephone discussions on each trading day between the EEC central banks, the Sveriges Riksbank, and the Norges Bank at 10:00 A.M. and 11:30 A.M., and then at 4:05 P.M., after the close of European business. In 1975 the Federal Reserve, the Bank of Canada, and the Swiss National Bank joined the network (James 2012). The early rounds of the concertation call were marked by poor telephone sound leading to some information losses. Eichengreen and Naef (2020) also use similar data for the period of 1986 to 1995. The appendix presents the data for each single country and Figure 5 below offers an overview.

⁶ Bundesbank reference B 330-27183, Handwritten ledgers.

Figure 5

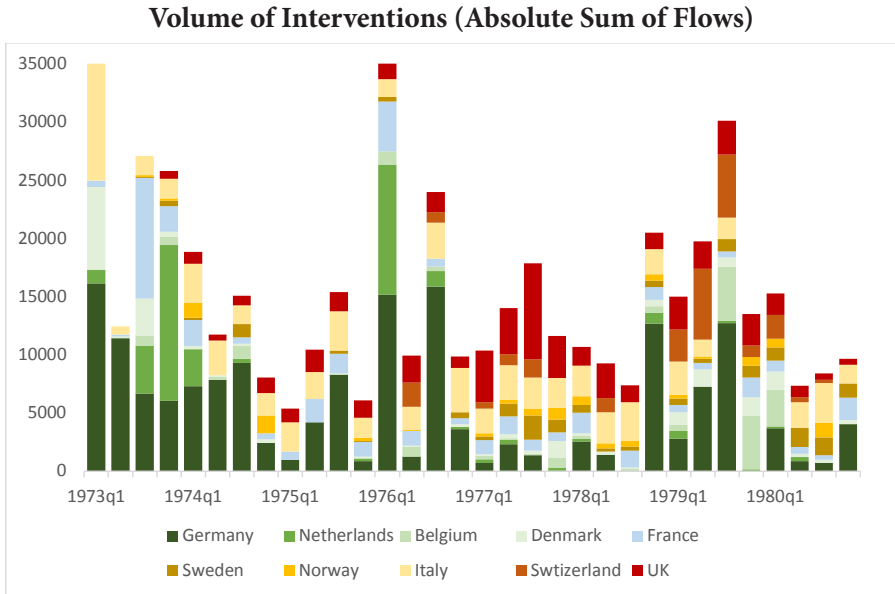
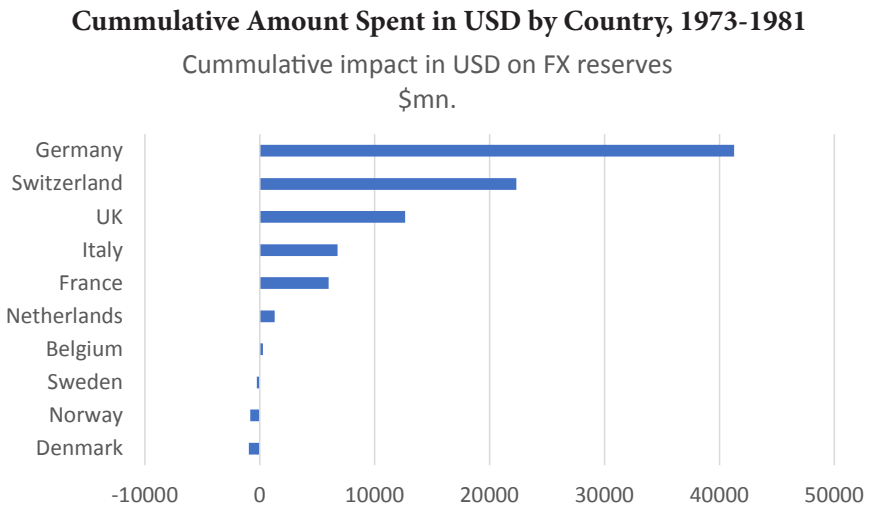


Figure 6 show the net amount spent on foreign exchange markets by each country between 1973 and 1981. Summing up all numbers from Figure 6 shows a net position of \$28.2bn. In other words, Europe was able to build up its reserves against the dollar during that period.

Figure 6



4. Cooperation after Bretton Woods

Here we ask a simple question. Did European central banks cooperate on the foreign exchange market during the Snake? The Bretton Woods period has been characterized as a period of cooperation among central banks (Toniolo and Clement 2007; Borio and Toniolo 2008; Bordo, Monnet, and Naef 2019). But what happened after? Here we analyse cooperation among European central banks after the Bretton Woods period.

We focus on two forms of cooperation. First, did countries support each other in intra-European interventions. For example, when France was trying to defend the French franc against the Deutschmark, did the Bundesbank help? Second, we look at coordination among European countries against the dollar. In this second interpretation, we asked who defended the Snake against the dollar? Later, the Plaza (1985) and Louvre (1987) Accord would be times of coordinated European interventions against the dollar, but did such interventions occur already in the 1970s?

As we have seen in the data section, central bankers were talking to each other during the concertation, these daily interactions to coordinate intervention. Intervention within the Snake margin where only authorized after consultation with other Snake members (Wittich and Shiratori 1973).

Central bank cooperation is always hard to measure. Here we use a simple definition of cooperation. Cooperation occurs when two central banks intervene in the same direction. For example, the Bundesbank buying French franc to support the Franc, and the Banque de France selling dollars to do the same. As most countries were mostly intervening in dollar (85% of interventions) and Deutschmark (13% of interventions), we will focus on these two currencies.

There are no events in our dataset of central banks intervening against each other. Remember that this was exactly the point of the concertation calls put in place among advanced economies central banks, as explained in the data section.

To establish if there was intra-margin cooperation, we look at interventions of all snake members in Deutschmark. We focus on the Deutschmark as 65% of non-dollar operations by snake members were done in Deutschmark.⁷ There were only limited interventions among other European countries.

Was the Bundesbank supporting central banks selling Deutschmarks? When a central bank was selling Deutschmarks, it did so to make its currency

⁷ Intervention by other countries in different European currencies are too infrequent to do any analysis.

appreciate against the mark. A cooperative stance by the Bundesbank would be to buy that currency to also help it appreciate. This could then either be financed by the Bundesbank itself, or by the country trying to defend its currency.

Table 3**Bundesbank Cooperation with Other Snake Members**

	Percentages of days Germany cooperates with	Germany cooperated (No of days)	Country sells DM (No of days)
France	13%	22	170
Netherlands	27%	19	71
Belgium	36%	64	180
Sweden	37%	34	91
Denmark	46%	63	137
Norway	53%	30	57
Total	33%	232	706

Table 3 shows the number of days when a snake country was selling Deutschmarks in the hope to make its currency appreciate. Out of these days, we list the number of times the Bundesbank supported a country. This gives us a percentage of German cooperation, per country. Overall, the Bundesbank cooperated on around 33% of the time. One third of the time a country was selling Deutschmark, the Bundesbank helped by buying that country's currency.

Table 3 also shows that not all countries were treated the same. France intervened 170 times to defend the French franc against the Deutschmark, but the Bundesbank only supported the French operations 22 times, or 12.9%. Norway on the other hand benefited from more support from the Bundesbank. Germany supported Norway on 52.6% of interventions. It is unclear if this was a policy stance of Germany or because France requested help from Germany less frequently.

We have now seen the story for intra-European interventions. But what about interventions against the dollar? 85% of European interventions were in dollars. Here the question is whether these interventions were coordinated.

If these interventions were coordinated, countries would together decide to either buy or sell dollars. This to either weaken or strengthen their currencies against the dollar. But ideally, they would avoid having one currency try

to get stronger against the dollar, while another tried to get weaker, as this would create imbalances within Europe (remember that the Snake had to move together against the dollar).

Table 4 is an attempt to capture that coordination in Europe. It shows the number of times at least one central bank was buying dollars to weaken its currency, while the listed central bank was selling dollars to defend its currency. It shows central banks moving the Snake in opposite directions, one making the Snake weaker while and another trying to make it stronger. Italy seems to have benefited from most “cooperation” from its peers. That is, most of the times it was selling dollars, other countries refrained from getting stronger by buying dollars. Norway on the other hand was often defending its currency while others purchased reserves.

Table 4

	Percentage with at least one country going against listed country	Dollar sales (No of days)	Others not cooperating (No of days)
Cooperation with Germany	75.98%	537	408
Cooperation with Norway	96.15%	182	175
Cooperation with Sweden	89.25%	465	415
Cooperation with UK	78.62%	580	456
Cooperation with France	90.14%	213	192
Cooperation with Italy	68.75%	672	462
Cooperation with Netherlands	89.19%	111	99
Cooperation with Belgium	85.37%	123	105
Cooperation with Denmark	88.01%	292	257
Cooperation with Switzerland	91.60%	119	109

We also test inter-European cooperation using a probit regression. We assess the determinants of the probability of a cooperation between the Bundesbank and other countries. We use the distance of the spread with the Deutschmark with the 2,25% margins of fluctuations to test the commitment of the central banks to the central rates. We control for country and quarter fixed effects to capture the main macroeconomic fluctuations.

	(1)	(2)	(3)
	All countries	Snake countries	w/ fundamentals
Snake member	1.02***		
	0.00		
Distance to int. points		-1.56***	-0.99***
		0.00	0.00
Real rate diff#distance int. points			-1.88***
			0.00
Country FE	Yes	Yes	Yes
Quarter FE	Yes	Yes	Yes
Observations	27255	11208	11208

* p<0.1, ** p<0.05, *** p<0.01

We find that snake members had a higher probability to cooperation. The Bundesbank cooperation with other central banks was more frequent when the spread of their currencies with the Deutschmark was closer to the intervention points. In addition, the Bundesbank was cooperating more with countries close to the interventions and with weak currencies, i.e. which had a positive real interest differential with Germany.

Another way to capture European cooperation against the dollar are in Figure 7 and Figure 8. First, Figure 7 shows Germany's behavior in comparison with all other Snake countries. The two lines are sometimes correlated and sometimes negatively correlated. Germany at times played along with other Snake countries and other times not.

Figure 8 shows that European countries tended to sell more dollars than Germany did for the beginning of the period. But in 1977, the tendency reversed. Other snake countries were able to accumulate large amount of dollars while Germany only to a lesser extent.

Figure 7

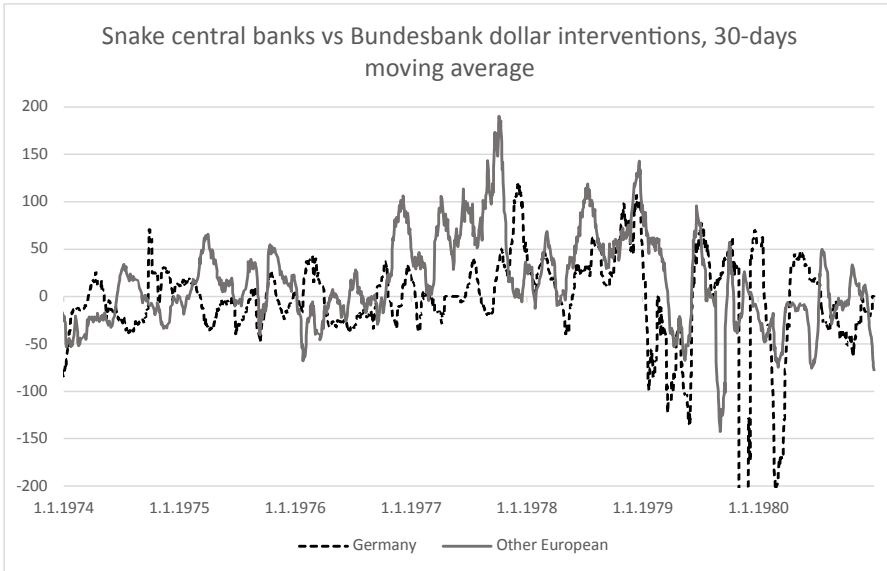
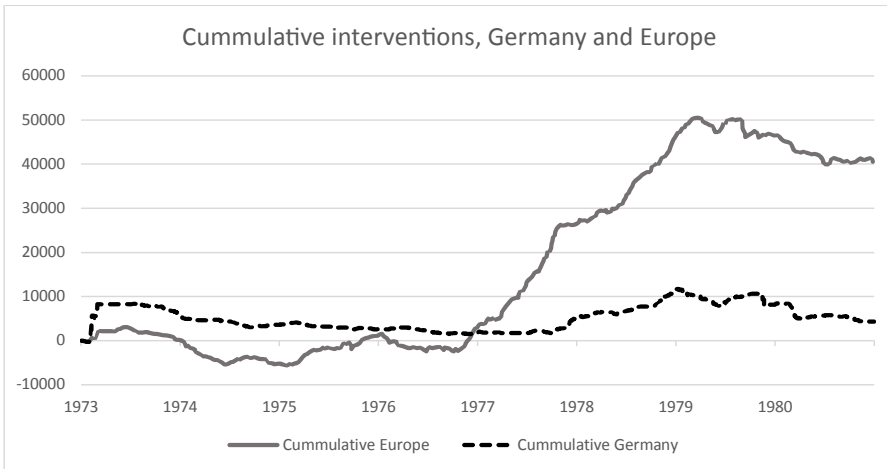


Figure 8



5. Do inflation differentials make for more volatile currencies?

Do inflation differentials with the core country play a role in intervention? Do countries with higher intervention differential intervene more and more frequently? To answer these questions, we run a panel data analysis on ten

European countries over the period of the Snake ‘outside the tunnel’, from March 1973 to March 1979, following equation⁸.

$$I_{c,d} = \beta_0 + \beta_1 D.snake_{c,d} + \beta_2 D.F_{c,d} + \beta_3 (D.snake_{c,d} \times D.F_{c,d}) + \lambda_c + \gamma_{(c,q)} + e \quad (1)$$

$I_{d,c}$ is the dollar value of all foreign market interventions for country c and day d in all currencies, $D.snake_{c,d}$ is a dummy coding 1 if country c was a member of the snake of day d . $D.F_{c,d}$ is a dummy coding 1 if country c had a positive differential with its core country on day d (remember core countries are either Germany or the US). We study differentials for inflation, and real interest rates. For example, Germany having a lower real rate differential than the US for all the period, it would be consistently coded 0. We interact the membership of the snake with the fundamentals to observe if central banks within the snake behaved differently when facing different national macroeconomic situations. We include country fixed effects noted λ_c and country \times quarters fixed effects to capture unobserved country-varying macro fundamentals which could vary per quarter. This thus captures variations in public deficit or current account balance. It also captures devaluations and revaluations as there are no instance a country changed twice per quarter its parity with its core country.⁹

Table 5 presents the result of this analysis. The first two column tests the impact of membership of the snake, the third and fourth includes the effect of inflation differential with the core country, the last two tests the impact of real interest rate differentials.

We find that snake countries intervene more, especially to fight appreciation. Snake countries facing inflationary pressures build more foreign exchange reserves than other countries but did not intervene more to defend their currencies. Finally, we observe that snake countries with weak currencies let the strong ones defend the Snake alignment but they build more reserves, while strong currencies countries were associated with less reserves buying operations on the foreign exchange markets.

⁸ The panel is unbalanced as there is no data for the interventions of the Swiss National Bank before October 1975.

⁹ We chose quarterly fixed effects as the best international macroeconomic publication of the time, the International Financial Statistics of the IMF published quarterly data for such statistics during our period of interest. We make the hypothesis that market participants did not have much within-quarter information on other potential macroeconomic fundamentals that could impact foreign exchange markets.

Table 5

The Determinants of Foreign Exchange Interventions

	(1)		(2)		(3)		(4)		(5)		(6)	
	<u>Baseline</u>		<u>Inflation</u>		<u>Real Interest rate</u>		buying	selling	buying	selling	buying	selling
	reserves	reserves	reserves	reserves	reserves	reserves	reserves	reserves	reserves	reserves	reserves	reserves
Snake membership	1.68**	0.70***	1.23*	0.90***	-5.90**	2.94***						
	0.02	0.00										
Inflation			-0.79	0.48								
			0.18	0.29								
D.inflation#snake			4.32*	-0.96								
			0.08	0.54								
D.Real interest rate differential									-3.34	0.28		
									0.11	0.68		
Real interest rate differential									8.44***	-2.31**		
# Snake member									0.01	0.02		
Constant	7.41***	4.01***	7.83***	3.76***	10.62***	3.74***						
	0.00	0.00	0.00	0.00	0.00	0.00						
Country FE	Yes	Yes	Yes	Yes	Yes	Yes						
Country x Quarters FE	Yes	Yes	Yes	Yes	Yes	Yes						
Adjusted R ²	0.084	0.074	0.084	0.074	0.086	0.074						
Observations	40826	40826	40826	40826	40826	40826						

6. Conclusion

This paper is the first to offer a quantitative review of central bank intervention during the European Snake between 1972 and 1979. We offer a principal component analysis that offers statistical backing to the idea of there being two groups of currencies in the Snake: strong and weak currencies. Strong currencies had to intervene less frequently while weak currencies had to intervene more frequently.

We also give a first quantitative assessment of cooperation during the period. Looking at daily intervention data, we find that on one third of the times a country intervened in Deutschmark, it also received support from the Bundesbank. Using a probit regression, we find that being a member of the Snake led to more cooperation on the foreign exchange market. Snake members did cooperate more than non-Snake members.

Finally, we look at inflation and intervention behavior. We find that Snake countries facing inflationary pressures build more foreign exchange reserves than other countries but did not intervene more to defend their currencies.

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Appendix (Preliminary)

Table 6

	Belgium	Denmark	France	Germany	Ireland
Mean	-9.6	-2.8	13.7	4.1	-2.3
Median	1.8	1.0	15.0	-0.5	-4.0
Maximum	127.0	176.0	399.7	2661.0	250.0
Minimum	-296.0	-151.0	-505.0	-1480.0	-80.0
Std. Dev.	42.7	22.2	65.2	154.3	21.1
Sum	-2818.5	-1711.3	8907.2	4352.1	-572.7
Sum Sq. Dev.	531336.8	298859.8	2770702.0	25475161.0	111360.2
Observations	293.0	608.0	652.0	1071.0	251.0
	Italy	Netherlands	Norway	Sweden	UK
Mean	3.7	7.8	4.2	-9.7	11.2
Median	10.0	5.6	4.0	-10.0	7.0
Maximum	320.0	604.0	160.5	372.0	614.0
Minimum	-465.0	-617.0	-129.5	-154.0	-391.0
Std. Dev.	60.6	67.2	35.7	30.9	73.1
Sum	5510.6	2373.9	1700.1	-7190.8	17073.3
Sum Sq. Dev.	5531611.0	1374441.0	518813.0	705488.8	8155330.0
Observations	1506.0	305.0	407.0	740.0	1527.0

Chronology

Here we retrace the major events occurring during the period 1973-1980. This is based on (James 2012)

1973

Jan. 1 Denmark, Ireland, and United Kingdom join the EEC

Feb. 12 Devaluation of the U.S. dollar by 10 percent

Feb. 13 Italy leaves Snake

March 2 Currency markets closed

March 11–12 EEC Council of Ministers reaffirms 2.25 percent fluctuation margins but ends fluctuation margins with dollar

March 12 CoG report on currency valuation

March 14 Norway and Sweden become associate members of Snake

March 19 Currency markets reopen

June 29 Snake realignment: revaluation of Deutsche Mark by 5.5 percent

Sept. 17 Snake realignment: revaluation of Netherlands guilder by 5 percent

Oct. 16 Arab oil embargo: first oil shock

Nov. 19 Revaluation of Norwegian krone by 5 percent

1974

Jan. 19 France leaves Snake

March 4 Harold Wilson (Labour) forms government in United Kingdom

March 18 Italy uses short-term monetary support

June 26 Failure of Herstatt Bank

Sept. 16 Fourcade plan for new exchange rate system presented to EC Council of Ministers

December G-10 Basel Committee on Banking Regulations and Supervisory Practices created

1975

March 8 Marjolin report: “Europe is no nearer to economic and monetary union than in 1969.”

March 10–11 First meeting of reformed European Council (heads of state or government with ministers of foreign affairs)

April 21 Introduction of European Unit of Account (EUA) as basket of nine currencies

May 9 France returns to Snake *de facto* (formally on 10 July)

Nov. 1 All Saints' Day Manifesto published in *Economist*

1976

January Italy starts negotiations for IMF standby arrangement

March 15 France leaves Snake

July 26 Netherlands Finance Minister Wim Duisenberg proposes target zones for non-Snake members

Oct. 18 Snake realignment: revaluation of Deutsche Mark against Netherlands guilder and Belgian franc by 2 percent; devaluation of Swedish krona and Norwegian krone by 1 percent and of Danish krone by 4 percent

1977

Jan. 3 United Kingdom obtains two-year standby credit of SDR 3,360 million from IMF

April 4 Snake realignment: devaluation of Swedish krona by 6 percent, and of Norwegian krone and Danish krone by 3 percent

Aug. 28 Sweden suspends association agreement with Snake; central rates of Norwegian krone and Danish krone reduced by 5 percent

Oct. 27 EC Commission President Roy Jenkins speech in Florence on monetary union as goal of European Community

1978

Feb. 13 Snake realignment: devaluation of Norwegian krone by 8 percent

April 7–8 European Council summit in Copenhagen with “*fi reside chat*” on monetary coordination

May 12 First meeting of British, French, and German representatives about European Monetary System (EMS)

July 6–7 European Council summit in Bremen with proposals by French President Giscard d'Estaing and German Chancellor Schmidt for “zone of monetary stability in Europe”

July 16–17 G-7 summit in Bonn presses Germany and Japan to undertake expansionary policies

Sept. 18 Council of Ministers agrees that the ECU will be at the center of the EMS

Oct. 16 Snake realignment: revaluation of Deutsche Mark by 4 percent against

Danish krone and Norwegian krone, and by 2 percent against Netherlands guilder and Belgian franc

Nov. 1 German Chancellor Schmidt and Italian Prime Minister Giulio Andreotti meet in Siena

Nov. 20 ECOFIN meeting finalizes details of EMS

Nov. 30 Chancellor Schmidt explains the EMS at a Bundesbank Council meeting

Dec. 4– 5 European Council meeting in Brussels agrees establishment of EMS

Dec. 12 CoG accepts “Agreement between the Central Banks of the Member States of the Europe an Economic Community Laying Down the Operating Procedures for the European Monetary System”

Dec. 12 Norway leaves Snake

1979

Jan. 1 EUA replaced by ECU (European Currency Unit)

March 13 EMS in effect

Detailed intervention data

	Largest dollar sales by Germany (to defend the mark)		Largest dollar purchases by Germany (to devalue the mark or build reserves)
22/11/1979	-1480	01/03/1973	2661
16/11/1979	-1460	08/02/1973	1695
01/02/1979	-525	09/02/1973	1636
10/03/1980	-488	06/02/1973	1501
20/02/1973	-474	02/02/1973	828
02/04/1979	-445	21/02/1973	443
05/03/1980	-340	06/12/1977	394
06/03/1980	-324	28/06/1979	370
18/05/1979	-320	05/12/1977	290
25/01/1979	-300	07/11/1978	277
02/01/1974	-277	23/11/1977	258
17/05/1979	-255	03/10/1977	250
07/03/1980	-243	19/12/1978	245
03/07/1979	-240	01/02/1973	240
13/02/1979	-225	18/12/1978	228

	Largest dollar sales by France (to defend the franc)		Largest dollar purchases by France (to devalue the franc or build reserves)
22/01/1974	-505	02/03/1973	400
10/02/1976	-352	01/06/1977	257
12/02/1976	-299	09/05/1975	235
21/01/1976	-268	30/10/1980	210
23/01/1976	-257	12/12/1978	193
22/01/1976	-256	26/04/1978	190
11/02/1976	-241	10/05/1978	183
03/02/1978	-203	13/05/1975	174
09/02/1976	-182	29/06/1978	170
15/07/1976	-181	30/03/1977	167
26/12/1980	-178	03/07/1978	167
02/02/1978	-171	01/10/1975	165
08/11/1977	-167	10/10/1979	164
13/07/1976	-156	07/10/1975	159
03/02/1976	-147	28/07/1978	157

	Largest dollar sales by Italy (to defend the lira)		Largest dollar purchases by Italy (to devalue the lira or build reserves)
27/06/1980	-465	03/09/1979	320
18/10/1976	-440	29/09/1975	311
26/06/1980	-366	03/07/1978	244
29/12/1980	-280	30/06/1976	178
20/06/1980	-244	25/07/1980	175
13/01/1978	-233	18/05/1978	162
01/09/1975	-230	09/12/1976	155
24/06/1980	-200	01/06/1977	150
14/08/1980	-200	20/02/1975	150
02/07/1980	-195	30/07/1980	150
24/12/1980	-180	24/07/1980	150
05/05/1976	-175	29/07/1980	145
16/03/1976	-156	26/08/1975	141
25/04/1974	-156	18/10/1977	140
19/10/1976	-155	02/11/1977	140

	Largest dollar sales by the UK (to defend the pound)		Largest dollar purchases by the UK (to devalue the pound or build reserves)
30/10/1979	-391	27/07/1977	614
24/06/1976	-333	03/10/1977	604
03/04/1978	-324	14/09/1977	593
17/09/1979	-304	30/03/1977	567
17/05/1978	-300	28/07/1977	425
18/11/1974	-300	08/09/1977	386
23/10/1979	-297	30/03/1979	378
07/09/1977	-292	13/09/1977	330
14/02/1977	-290	27/06/1977	328
26/04/1978	-278	19/08/1977	307
24/08/1976	-276	16/08/1977	307
20/04/1978	-274	29/09/1977	305
19/09/1977	-262	29/06/1977	295
24/05/1977	-259	25/08/1977	275
13/05/1975	-259	12/10/1977	270

Figure 9

Reserves by Advanced Economies, 1971-81

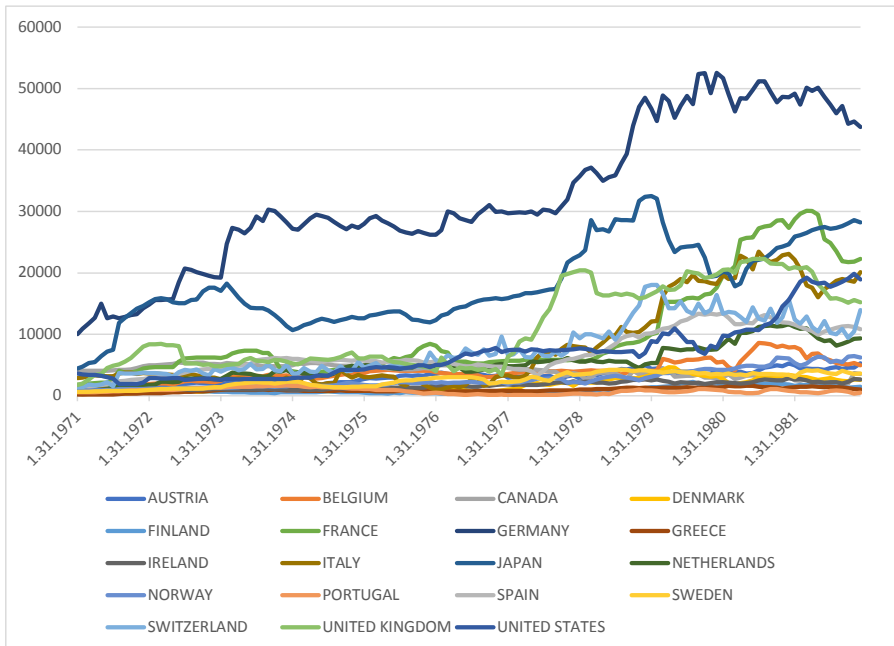


Table 7

	Belgium	Denmark	France	Germany	Ireland	Italy	Netherlands	Norway	Sweden	UK
Belgium		0.11	0.06	0.16	0.05	0.03	0.13	0.03	0.10	0.02
Denmark	0.11		0.09	0.06	0.01	0.02	0.10	0.06	0.08	0.00
France	0.06	0.09		0.06	-0.01	0.09	0.00	0.05	-0.03	0.00
Germany	0.16	0.06	0.06		0.00	0.01	0.36	-0.01	-0.01	0.04
Ireland	0.05	0.01	-0.01	0.00		0.03	0.01	0.00	0.04	0.02
Italy	0.03	0.02	0.09	0.01	0.03		0.02	-0.05	0.04	0.05
Netherlands	0.13	0.10	0.00	0.36	0.01	0.02		0.05	0.00	0.03
Norway	0.03	0.06	0.05	-0.01	0.00	-0.05	0.05		0.05	-0.05
Sweden	0.10	0.08	-0.03	-0.01	0.04	0.04	0.00	0.05		-0.04
UK	0.02	0.00	0.00	0.04	0.02	0.05	0.03	-0.05	-0.04	
Average	0.077	0.059	0.033	0.073	0.017	0.027	0.077	0.015	0.027	0.008

Figure 10

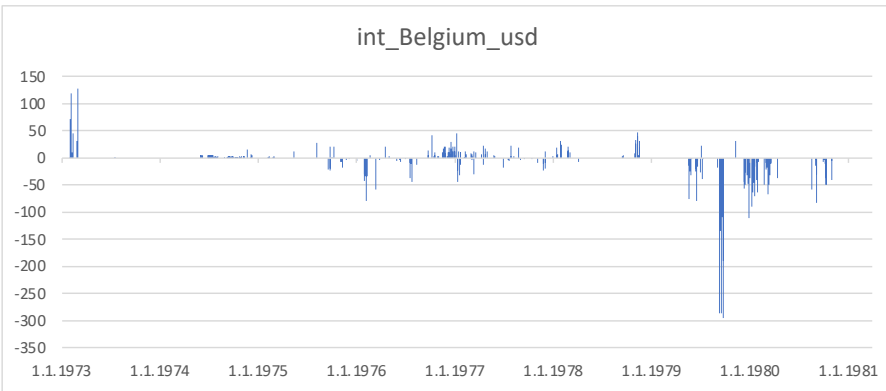


Figure 11

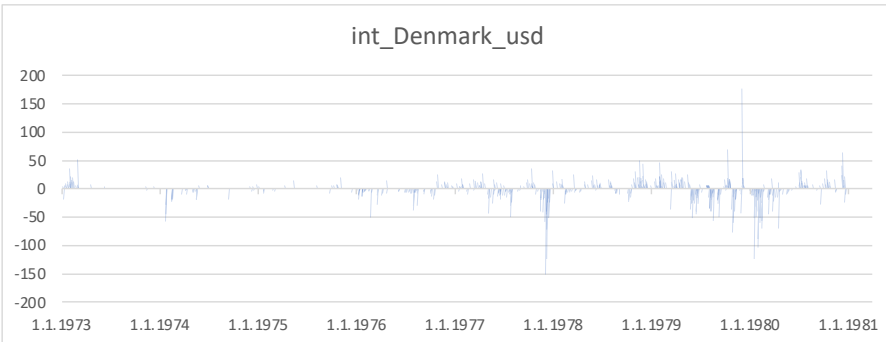


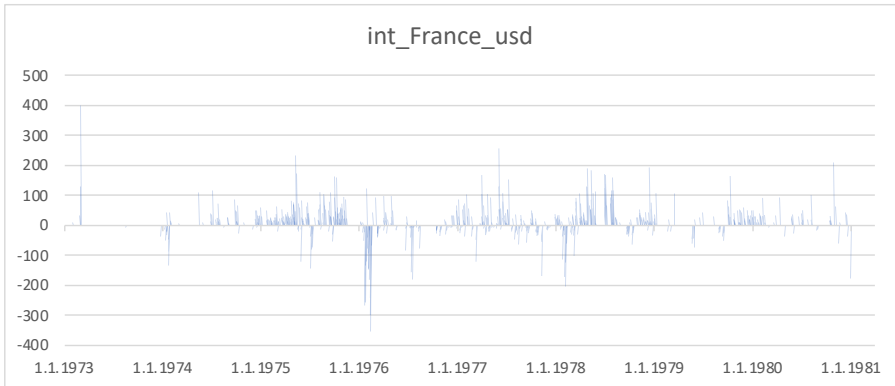
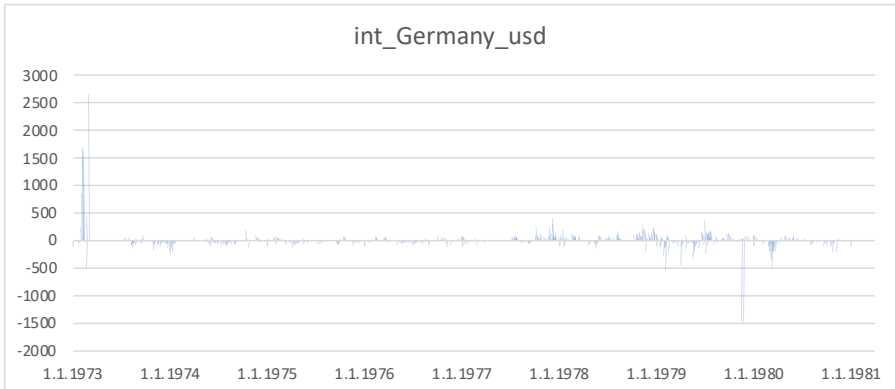
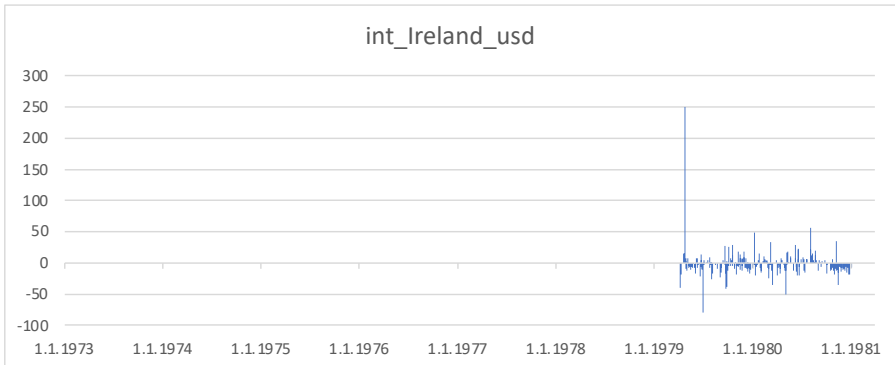
Figure 12**Figure 13****Figure 14**

Figure 15

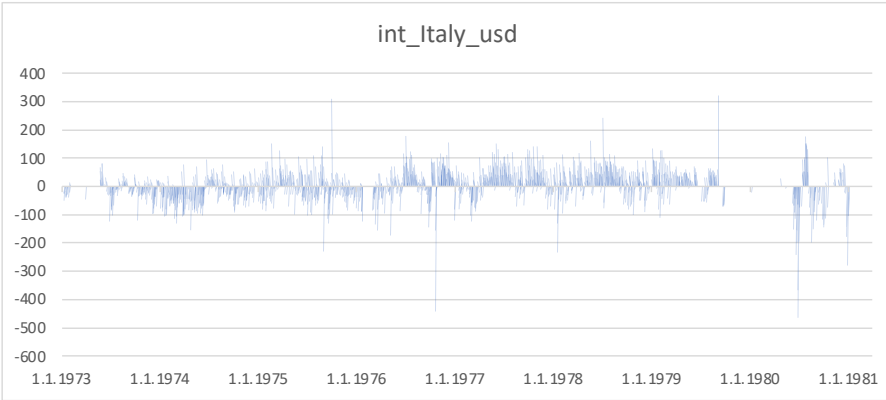


Figure 16

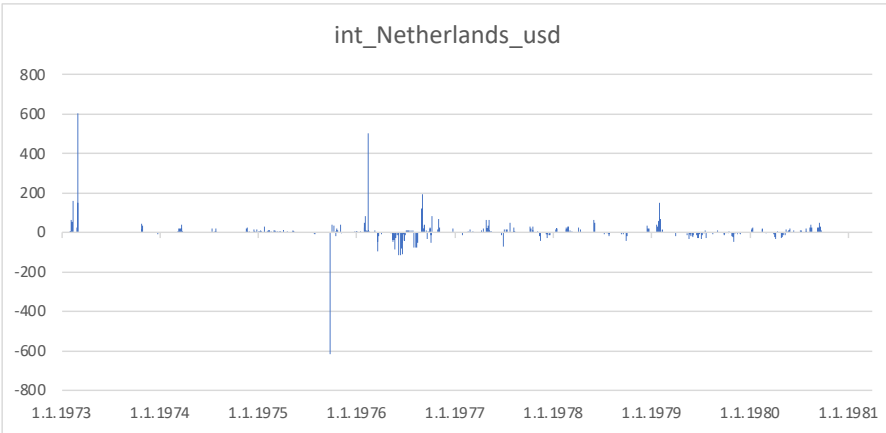


Figure 17

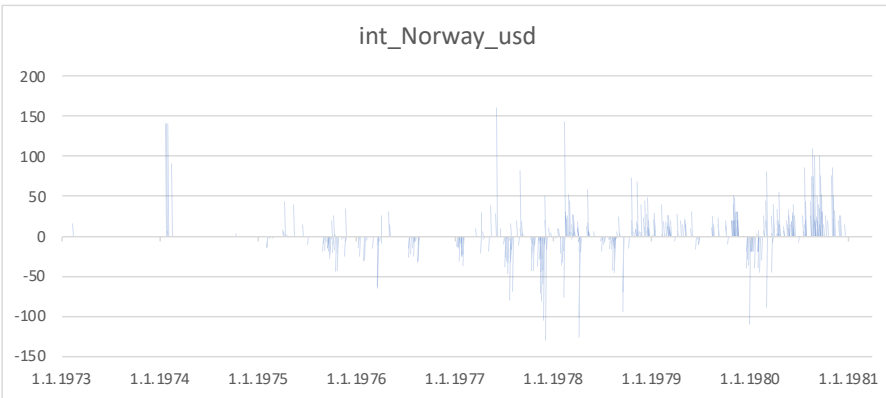
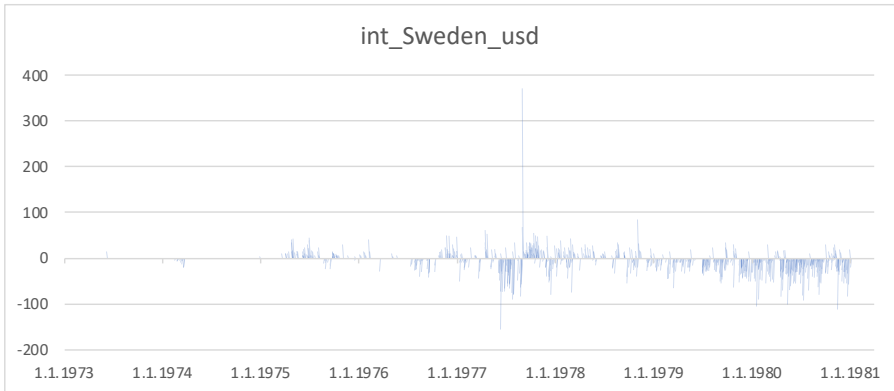
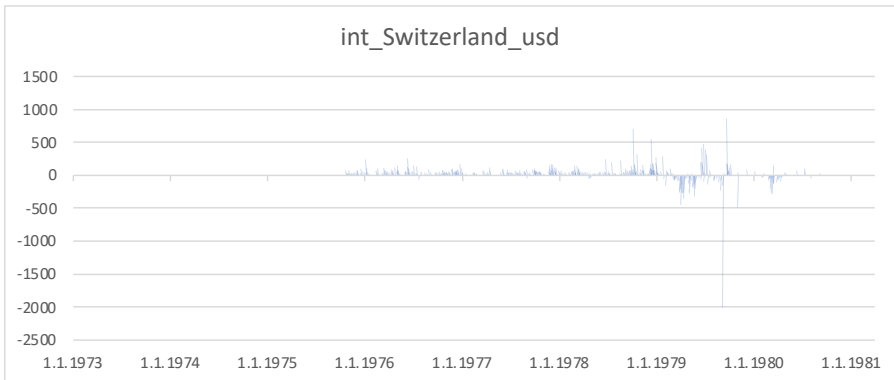
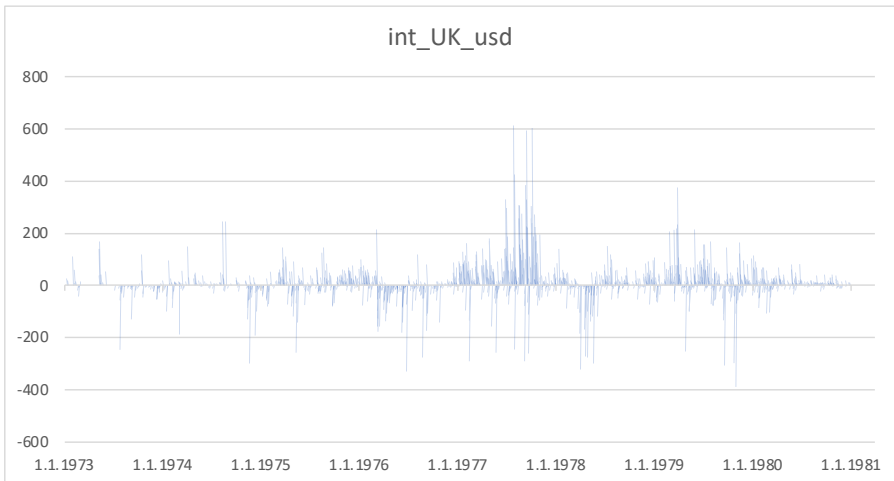


Figure 18**Figure 19****Figure 20**

Session 4: Inflation, Sovereignty and Monetary Unions

A Question of Sovereignty: Great Britain, the European Monetary System and the Formation of a Eu- ropean Monetary Union

Juliane Clegg

Abstract

The paper analyses the British debates about European monetary cooperation in the 1980s, especially the European Monetary System and the Exchange Rate Mechanism as precursors of Economic and Monetary Union. It explores why Britain rejected closer monetary integration as answer to the profound economic and political upheavals of that time and identifies the role of sovereignty in that decision. It argues that the main features of the British conflicts about a single currency already emerged in the late 1970s with the establishment of the EMS, though the framing of the debate changed from economic terms to a more political argumentation. While initial debates revolved around economic freedom of action, the concrete prospect of Economic and Monetary Union from 1988/89 brought the concept of sovereignty with far-reaching constitutional and legal implications into the centre of monetary debates. Drawing mainly on sources from British government and Central Bank sources, the paper shows that conceptions of sovereignty, far from immutable or universally accepted, proved changeable and highly contested. The 1980s debates about European monetary policy and the British experience with the ERM influenced the further course of British EC membership in the long-term, feeding into a growing disillusion with European integration that inhibited participation in the establishment of a single currency and culminated in withdrawal from the EU.

Introduction

On 5 October 1990, Britain's Chancellor of the Exchequer announced a decision that would change the country's economic and political fate for years to come: On Monday, 8 October 1990, Great Britain was to enter the Exchange Rate Mechanism (ERM) of the European Monetary System. This decision was supposed to end an argument that had shaken the political landscape for more than ten years. In 1979, Britain had formally joined the emerging European Monetary System (EMS), but abstained from its core element, the mechanism to stabilise exchange rates. From 1985, this course was increasingly contested in the governing Conservative Party. It incited fierce and increasingly public debates, resulting in the resignation of two senior Cabinet members and, eventually, contributing to Prime Minister Margaret Thatcher's own fall from power in 1990. At that time, however, the stakes of participating in European monetary cooperation had risen significantly after the 1989 Delors Report had put Economic and Monetary Union firmly on the political agenda.

British debates about European monetary policy of the 1980s touched upon key areas of economic policy, domestic politics and EC membership. It is thus a suitable lens through which to analyse Britain's European partnership and the vexed issue at the heart of its perceived awkwardness:¹ The question of national sovereignty. It also offers an example to study the dilemma of the decision whether to retain monetary policy autonomy or to enter a commitment to international currency cooperation: On the one hand, securing discretion in pursuing national objectives but risking isolation in the face of international challenges. On the other hand, gaining support and influence in a global context but risking being occasionally obliged to sub-optimal policy measures. The paper traces this dilemma into the 1980s and early 1990s, the formative years of the European Monetary Union. Drawing on the important work of researchers like Harold James and Emmanuel Mourlon-Druol,² it seeks to unfold the close connection between the economic, political and diplomatic dimensions of European monetary integration. It addresses the question why Britain's response to global challenges in the late 1980s differed from those of other EC members, who accepted the move to monetary union as an appropriate remedy. It argues that main features of the British conflicts

¹ See Stephen George: *An awkward partner: Britain in the European Community*, Oxford / New York 1998.

² Harold James: *Making the European Monetary Union. The Role of the Committee of Central Bank Governors and the Origins of the European Central Bank*, Cambridge, Massachusetts / London 2012; Emmanuel Mourlon-Druol: *A Europe made of Money. The Emergence of the European Monetary Policy*, Ithaca, New York 2012.

about the single currency already emerged in decisions about ERM membership. Contrary to what the controversy from the late 1990s—notably the Conservative ‘keep the pound’ campaign of 2001—might have us believe, sovereignty and its far-reaching legal and constitutional implications were not continuously at the centre of the debate, at least not explicitly. Rather, there was a shift in emphasis from economic to political framing of the arguments for and against closer monetary cooperation. Aside from changing economic preferences and strategy, historical cultural and constitutional experiences must be taken into account to explain this politicisation that brought to the fore the more philosophical term of sovereignty. Drawing on archival sources mainly from British governments and Central Bank, but also from individual actors and Germany, it focusses on discussions in the economic core executive.³

The argument proceeds in three steps: First, it analyses the 1978 decision to abstain from the ERM, weighing the priority attributed to policy autonomy and explaining why the Labour government felt unable to combine its own Keynesian policy preferences with the system of fixed, but adjustable exchange rates. Secondly, it follows the dispute from 1985 to the emergence of the 1988/1988 Delors report. This section traces how growing problems with the Conservative government’s policy of monetary targets and world economic developments prompted an intellectual reorientation on fixed exchange rates at least in parts of the Cabinet and the Bank, and prompted a renewed engagement with the basic policy dilemmas of internal vs. external discipline and discretionary vs. rules-based approaches. Thirdly, it shows how the 1988/1988 Delors report changed the balance of arguments. In this phase, monetary policy became directly connected with the wider strategic and economic questions of European integration and thus legal and constitutional sovereignty. This intersected with the short-lived British ERM membership, up until the forced exit on ‘Black Wednesday’ in September 1992. The paper closes with a short conclusion.

To deal with this complex issue, the multifaceted concept of sovereignty is essential. However, using it as an analytical focus poses considerable problems.⁴ First, it is a widespread, much debated term whose attributions are in-

³ Birgit Bujard: *The British Prime Minister in the Core Executive. Political Leadership in British European Policy*, Cham 2019.

⁴ Charlotte Rault: *Pooling, Gaining or Losing Sovereignty? Conflicting Definitions of Irish Sovereignty in the Political Discourse on European Integration*, in: *Review of Irish Studies in Europe* 3,2 (2012), pp. 108-125, pp. 110-113.

variably contingent and dependent on context.⁵ Moreover, the original definition as ultimate and supreme authority in the decision-making process of the state⁶ seems increasingly out of date, given legal and practical challenges like international contracts and norms, European integration or globalization. This and the concept's protean nature have even prompted suggestions to abandon it altogether.⁷ However, despite its death was often foretold, sovereignty persisted. If anything, its impact on British politics seems to have grown, as demonstrated by the Brexit referendum: Reappearing in the guise of 'taking back control', the idea constituted a potent political strategy for the Leave Campaign and succeeded in capturing the imagination of a large part of British citizens.⁸ As Dominik Geppert reminds, myths are not right or wrong; they are either influential or not.⁹ And while unrestricted national sovereignty might be a myth, the concept is undoubtedly influential in British debates on European integration and monetary policy. Thus, analysing the assumptions and conceptualisations informing decision makers is worthwhile and furthers our understanding of Britain's difficulty with participating in the hitherto most far-reaching European integration step, the single currency. This paper aims not to find the 'one', let alone the 'right' or 'wrong', conceptualisation of sovereignty. Rather, it strives to analyse the meaning ascribed to it in political discourses about European monetary policy. To put it in Tanja Aalberts words, sovereignty is approached 'as a question, rather than as a given'¹⁰, as a result of discourse and framing, influenced by political considerations as well as human emotions, rather than a precise and clear-cut description with universal validity. By adopting this constructivist perspective on sovereignty, the paper explores firstly how conceptions of sovereignty influenced attitudes to the semi-fixed rate system and secondly how ideas of sovereignty were used as a strategy to argue and enforce policy decisions.

⁵ John Agnew: Taking back control? The Myth of Territorial Sovereignty and the Brexit Fiasco, in: *Territory, Politics, Governance* 8,2 (2020), pp. 259-272; For the historical development and changing attributions to the term see Hans Boldt et al.: *Staat und Souveränität*, in: Otto Brunner / Werner Conze / Reinhart Koselleck (ed.): *Geschichtliche Grundbegriffe. Historisches Lexikon zur politisch-sozialen Sprache in Deutschland*, Band 6, Stuttgart 1990, pp. 4-154.

⁶ Encyclopaedia Britannica, <https://www.britannica.com/topic/sovereignty> (25.5.2022).

⁷ For an early argument see Stanley I. Benn: The Uses of 'Sovereignty', in: *Political Studies* 3,2 (1955), pp. 109-122, p. 122; Louis Henkin: *International Law: Politics and Values*, Dordrecht 1995, pp. 9-10.

⁸ Anand Menon / Alan Wagner: Taking Back Control: Sovereignty as Strategy in Brexit Politics, in: *Territory, Politics, Governance* 8,2 (2020), pp. 279-284.

⁹ Dominik Geppert: Warum können sich Deutsche und Briten in Europa nicht verstehen?, in: Dominik Geppert / Hans Jörg Hennecke (Hrsg.): *Interessen, Werte, Verantwortung. Deutsche Außenpolitik zwischen Nationalstaat, Europa und dem Westen. Zur Erinnerung an Hans-Peter Schwarz*, Paderborn 2019, pp. 13-141, p. 140.

¹⁰ Tanja E. Aalberts: *Constructing Sovereignty between Politics and Law*, London 2012, p. 3.

For the purpose of this paper, monetary sovereignty is of particular importance. A basic definition conceptualises it as the ability of a state to set its laws and policies in the monetary system without interference from other states.¹¹ Monetary cooperation raises the question which degree of interference is acceptable to attain desired policy objectives. However, three considerations complicate this seemingly simple equation, as they reach beyond the narrow monetary realm: Firstly, international currency arrangements inevitably encroach on interest rate setting and might require adaption of other policies like taxation or redistributive measures. Secondly, due to this, and the national and ideological significance ascribed to money, sovereignty in that area is often understood as indispensable component of political sovereignty – though recent currency unions between independent nation states challenge this assumed link. Thirdly, as globalised markets put severe constraints on currency management, the practical benefits of formal monetary sovereignty seem increasingly questionable, while enhancing the appeal of internationally coordinated approaches in tackling global problems.¹² These intertwined considerations fed into arguments about whether or not the constraints of a peg to European currencies would serve British interest.

1. Emergence of a ‘halfway house’: Britain and the Foundation of the European Monetary System 1978/79

Dogs in the manger were quite popular beasts in British political rhetoric, especially in the latter half of 1978. At that time, Labour Prime Minister James Callaghan and his Chancellor Denis Healey referred to them repeatedly, albeit rather unfavourably. Namely, they tried to reassure British public and European partners that they would not behave like these animals and abstain from vetoing the emerging European currency scheme in which they did not wish to participate.¹³ This referred to the initiative German Chancellor Helmut Schmidt and French President Valéry Giscard d’Estaing, who aimed to create zone of monetary stability, the European Monetary System (EMS). At its centre, the Exchange Rate Mechanism (ERM) was to limit the fluctuation

¹¹ Robert A. Mundell: Money and the Sovereignty of the State, Paper prepared for the International Economic Association Conference in Trento, September 4-7, 1997, <https://www-ceel.economia.unitn.it/events/monetary/mundell14.pdf> (25.5.2022).

¹² Paul Wilson: *Shades of Sovereignty. Money and the Making of the State*, Lanham / Boulder / New York 2021, pp. 5-7.

¹³ Denis Healey, Debate in the House of Commons on EMS, 20.11.1978, in Hansard, Vol. 959, <https://hansard.parliament.uk/Commons/1978-11-29/debates/4636f094-94c6-4d7f-ba66-4b988e66c9ef/EuropeanMonetarySystem?highlight=dog%20manger#contribution-cab53a2c-a9bb-43db-8337-c08db50e349d> (13.5.2022); Protocol of a meeting between James Callaghan and Jack Lynch, 27.11.1978, in TNA PREM 16/1638. (94).

of participating currencies to 2.25 per cent on either side of an agreed central parity. This was calculated with the European Currency Unit (ECU), a weighted composite of the nine participating currencies.¹⁴ It was not merely a technical scheme. Politically it harked back at the 1970 Werner Plan that had envisaged realisation of Economic and Monetary Union in three stages until 1980 but had been derailed by a succession of crises.¹⁵ The first attempt to create a zone of monetary stability by pegging the Community currencies had been the 1972 currency snake. However, it had foundered on economic and monetary instability. With the French Franc and others dropping out successively, it had shrunk to what was considered basically a D-Mark zone, comprising only Germany, the Netherlands, Belgium, Luxembourg, Denmark and Norway.¹⁶ For Britain, having participated in anticipation of EC membership 1973, it was a particularly bruising experience.¹⁷ The pound had to drop out after merely six weeks – a ‘chastening experience’, as Treasury official Ken Couzens would recall in July 1978,¹⁸ and one that was to hunt British attitudes to European monetary stability ever since.

The EMS was much more limited in scope than the bold proposals for a new run on Monetary Union that European Commission President Roy Jenkins had put forward in the annual Jean Monnet Lecture in Florence a year earlier.¹⁹ The inception of the system and the complex European negotiations for setting it up cannot be analysed here.²⁰ However, discussing the initial reactions of the British Labour Government under Prime Minister James Callaghan allows to point out continuities and ruptures in British interpretations of EC monetary policy.

For Britain, the EMS proposals came at a bad time, as there was already ample conflict about the European Community: Ongoing negotiations about the

¹⁴ See for the development of the EMS Mourlon-Druol, *A Europe Made of Money*.

¹⁵ For further information and sources see Elena Rodica Danescu: *A Rereading of the Werner Report of 8 October 1970 in the Light of the Pierre Werner Family Archives — a Detailed Study*, in: CVCE 2012, https://www.cvce.eu/en/obj/a_rereading_of_the_werner_report_of_8_october_1970_in_the_light_of_the_pierre_werner_family_archives_a_detailed_study_full_version_by_elena_danescu-en-fa9f4dda-beb6-4caa-8095-29cfe4e451bc.html (25.5.2022).

¹⁶ See, for example, Edmund Dell: *Britain and the Origins of the European Monetary System*, in: *Contemporary European History* 3,1 (1994), pp. 1-60, p. 5.

¹⁷ James, *European Monetary Union*, pp. 104-5.

¹⁸ Couzens, *Treasury Paper on the European Currency Snake*, annexed to ME Hedley-Miller to Kenneth Stowe, 10.7.1978, in TNA PREM 16/1635.

¹⁹ James, *European Monetary Union*, p. 213.

²⁰ Mourlon-Druol, *Europe Made of Money*; Peter Ludlow: *The Making of the European Monetary System. A Case Study of the Politics of the European Community*, London 1982; Dell, *Origins of the EMS*; Michael Franklin: *Could and Should Britain have Joined the European Exchange Rate Mechanism in 1979? A Personal Memoir*, in: *Journal of Contemporary European Research* 9,5, pp. 759-766.

Common Fisheries Policy proved testing, and, as the transition phase ended, the problem of British budget contribution re-emerged and threw up once again the thorny issue of CAP reform.²¹ Moreover, it had been only three years since Harold Wilson's 1975 EC referendum. It had succeeded in delivering a positive result, but failed to unite his split Labour Party on Europe.²² Helmut Schmidt's proposal, put to Labour Prime Minister James Callaghan in a private meeting in March 1978, thus provided a new challenge in an already difficult environment. It comprised the establishment of a Community currency pool, a European Monetary Fund and fixing of exchange rates against a European unit of account. Crucially, this scheme was to be independent of the USA and the dollar.²³ With Chancellor Denis Healey initially not informed (like his German counterpart Hans Matthöfer), Treasury Official Kenneth Couzens from the Treasury was chosen as adviser and set the tone of the first reaction.²⁴ He brought in a 'sceptical mind imbued with memories of past UK devaluations', particularly sterling's exit from the snake.²⁵

Before the Copenhagen European Council in April 1978, the Prime Minister discussed the issue with a confined group, comprising the Foreign Secretary, Cabinet Office, the Governor and senior officials.²⁶ Callaghan reported that he had told the French President Giscard d'Estaing that he would not find the proposal attractive if it would lead to a higher sterling rate than would otherwise be the case. Couzens reinforced that argument: The scheme might lock in Germany's competitive advantage by keeping the D-Mark rate low against the other European currencies, and, in turn, damage Britain's competitiveness. Moreover, he warned that it might conflict with Callaghan's recently announced five-point-plan for internationally coordinated efforts towards economic regeneration.²⁷ It could even look like 'ganging up' with the Germans against the USA. However, the Governor and Kit McMahon from the Bank

²¹ Stephen Wall: *The Official History of Britain and the European Community*, Vol. 3: *The Tiger Unleashed*, London / New York 2019, pp. 103-105.

²² Saunders, *Yes to Europe*, 2019.

²³ Kenneth Stowe, Note for the Record: Prime Minister's Meeting with Chancellor Schmidt, 12.3.1978, <https://www.margarethatcher.org/document/111468> (30.5.2022).

²⁴ Kenneth Stowe to James Callaghan, 13.3.1978, <https://www.margarethatcher.org/document/111469> (30.5.2022).

²⁵ Dell, *Britain and the Origins of the European Monetary System*, p. 4.

²⁶ Participants were Foreign Secretary David Owen, the Governor Gordon Richardson, John Hunt from the Cabinet Office and officials Ken Couzens (Treasury), Kit McMahon (Bank of England), and the Prime Minister's Private Secretaries, Bryan Cartledge (Overseas) and Nigel Wicks (Principal).

²⁷ The Plan was presented in his speech at a Finance House Association dinner, 14.3.1978. See Jocelyn Statler, *British Foreign Policy to 1985. VIII: The European Monetary System: From Conception to Birth*, in: *International Affairs* 55,2 (1979), pp. 206-225, p. 208.

of England added a more positive note. The former warned against a policy of depreciation, the latter emphasised potential benefits of greater exchange rate stability. He did not necessarily envisage a conflict with the five-point-plan, as a currency pool containing the European currencies would not damage the dollar.²⁸

In the subsequent briefing that Callaghan had commissioned, Couzens remained highly sceptical. Referring to the snake experience, he questioned the sustainability of fixed rates, given the lack of economic convergence in the EC. While Britain struggled with high inflation rates around 9 per cent, the German figure was 2.7 per cent.²⁹ While realignments were possible, he argued, the system would enhance their political stakes and make them more difficult. He considered the chances of influencing German policy marginal, what was problematic as the current snake was basically a 'German economic zone'.³⁰ This related to the problems of employment and growth that would result from an overly tight external discipline through a fixing of the sterling at too high a level. Kit McMahon's briefing, noting these difficulties as well, addressed the question of policy discretion directly: 'As with any arrangement for more or less fixed rates, there are disciplines and constraints on national policies which can have both advantages and disadvantages.' Those constraints, he wrote, had proved too severe for some countries in the snake whose inflation was higher and whose trade was less closely centred on Germany than that of the remaining countries. However, he concluded that Britain could profit from such a currency arrangement under the condition that it would be of another nature than the snake, with enhanced realignment procedures, greater credit arrangements, and greater growth prospects in Germany.³¹ The Copenhagen Council, however, confirmed from Callaghan's point of view that this would not realise, and the scheme would basically be an extended snake.³² He revealed to Schmidt and Giscard that he would take a critical stance for electoral and party political reasons. However, he agreed to a working group of three representatives to which he would send Ken Couzens as representative. Germany was to send Horst Schulman from the Ger-

²⁸ Nigel Wicks, Note of a Meeting held in the Cabinet Room, 4.4.1978, <https://www.margaretthatcher.org/document/111475> (25.5.2022).

²⁹ OECD, Economic Outlook 47, 1990, Tabelle R 11.

³⁰ Ken Couzens, Briefing: Chancellor Schmidt's proposal: reserve pooling and the snake, 6.4.1978, in TNA PREM 16/1615.

³¹ Kit McMahon, Briefing on EMS, 6.4.1978, in: TNA PREM 16/1615.

³² Callaghan note of EMS discussion at Copenhagen European Council, 7.4.1978, FOI release 248745, <https://www.margaretthatcher.org/document/111480> (25.5.2022).

man Chancellery and Bernard Clapper, Governor of the Banque de France.³³ At that point, three basic objections had come to the fore that were to reverberate in one form or the other through the 1980s debate on the ERM: First, the potential conflict of a European arrangement with a wider international scheme including the USA and thus alleviating the problems of dollar volatility. Schmidt's disillusion over US policy, one of the main motivators for his scheme, was seen with particular concern.³⁴ The perceived 'special relationship' prompted Callaghan to assume the role of a mediator, warning US-President Carter about Schmidt's stance and the monetary proposals as well as advocating closer exchange.³⁵ In the following months, American representatives came to support the EMS, so that this criticism abated.³⁶ However, the pitch of European arrangements against wider international solutions to tackle currency upheavals was to become a recurring theme in the 1980s.

In contrast, the second objection grew even more important during 1978: The criticism that the new system was a revival of the currency snake and thus favoured Germany and the small core of hard currency countries, which had survived in the parity grid. This translated into the dispute over the intervention mechanism. Britain – together with France, Italy and others – argued for the currency basket, the ECU, as trigger for interventions. This should oblige all deviant currencies to make adjustments to keep inside the bands, regardless if the deviation was up- or downwards.³⁷ Germany, in contrast, insisted on a parity grid to avoid inflationary effects. A compromise between Schmidt and Giscard in Aachen in September 1978 settled for the parity grid as the decisive calculation basis.³⁸ This not only exposed the British ousting in the negotiations after having taken a sceptical pose. It also made 'symmetry' of the system a central British demand in the negotiations, as the pound was expected to tend to the lower bands.

³³ Callaghan note of EMS discussion at Copenhagen European Council, 7.4.1978, FOI release 248745, <https://www.margarethatcher.org/document/111480> (25.5.2022).

³⁴ Nigel Wicks, Note of a Meeting held in the Cabinet Room, 20.4.1978, FOI release 248745, <https://www.margarethatcher.org/document/111483> (25.5.2022).

³⁵ Note, Prime Minister's Telephone Conversation with President Carter, 17.4.1978, FOI release 248745, <https://www.margarethatcher.org/document/111481> (25.5.2022).

³⁶ For example, Bob Hormats from the US Bureau of Economic, Energy, and Business Affairs told Michael Franklin, head of the Cabinet Office European Secretariat, that the US was not hostile to EMS, but very interested in it. Michael Franklin to John Hunt, 1.9.1978, in TNA PREM 16/1635, <https://www.margarethatcher.org/document/111573> (25.5.2022).

³⁷ Treasury Paper, European Currency Arrangements. Handling, Timing and Tactics, June 1978, in TNA PREM 16/1634, <https://www.margarethatcher.org/document/111578> (25.5.2022).

³⁸ Note on a phone call between James Callaghan and Denis Healey, 18.9.1978, in: TNA PREM 16/1635, <https://www.margarethatcher.org/document/111570> (17.3.2022); Nigel Wicks to James Callaghan, 18.9.1978, in TNA PREM 19/1635.

That criticism was closely connected to the third objection: the concern that the system would force deflationary policies on the government. Chancellor Denis Healey, who was brought into internal British discussions from mid-April, emphasized this point.³⁹ In effect, it posed the policy dilemma of exchange rate autonomy. On the one hand, a peg to European currencies would provide external discipline, support in reserves, credibility, and a better negotiation position in EC matters more general. This could be helpful to fulfil the objection of conquering inflation and provide exchange rate stability that would be conducive to foreign trade. On the other hand, it entailed a loss of policy discretion that would enable the government to prioritize growth and employment, but risk being excluded from support mechanisms and further negotiations of monetary integration. This threat of a ‘two-tier Europe’, with Britain in the second division, was brought up in April by John Hunt and remained a constant threat in the hesitant British engagement with European monetary policy.⁴⁰ The basic conflict went right to heart of the question which degree of external limitation the Government was willing to accept in order to pursue its declared objective of conquering inflation. The equation, however, was skewed towards discretion, as the new system was felt to be detrimental to central growth and employment objectives. Despite the close connection to the matter of self-determination, sovereignty was hardly mentioned in the internal debates. Not even the Energy Secretary Tony Benn, a fierce proponent of the Eurosceptic Labour fraction, mentioned this term in his EMS paper for Cabinet in July. He pleaded for a ‘British “non” of Gaullist quality’, as the proposals would lock Britain ‘into a form of union which may ruin our long-term economic future and destroy our remaining political independence.’ Even though EMS might enable Britain to extract resource transfers, he argued, it would make her structurally dependent on German subsidies. For while Germany might be willing to finance British social policy measures, they would not allow bolstering up the British industrial competition.⁴¹ Aptly, Callaghan objected on his copy: ‘we have no veto.’⁴² In addition, Benn’s far-reaching proposals for the reimplemention of protectionist measures to tackle competitive inequalities were considered unrealistic. But the issue of external control – especially by binding Britain to

³⁹ Nigel Wicks, Note of a Meeting held in the Cabinet Room, 20.4.1978, FOI release 248745, <https://www.margaretthatcher.org/document/111483> (25.5.2022).

⁴⁰ Joh Hunt to Nigel Wicks, 6.4.1978, in TNA PREM 16/1615.

⁴¹ Tony Benn, Paper for Cabinet, Britain, Germany and the proposed EMS, in TNA CAB 129/203/5.

⁴² Tony Benn, Paper for Cabinet, Britain, Germany and the proposed EMS, in TNA PREM 16/1635, <https://www.margaretthatcher.org/document/111575> (25.5.2022).

German economic management through an exchange rate peg – remained as a factor in the discussions.

However, the ensuing debates in Cabinet and in the ministerial working group GEN 136, set up in July 1978 to work out the merits of the system, dealt more with the practical merits of binding sterling to the D-Mark and the Franc and less with the more philosophical and far-reaching consequences of the ambiguous principle of sovereignty. The debates in the coming months, thus, relied heavily on the economic narratives, with the EMS framed as a technical device, functionally similar to the Bretton Woods system and the currency snake.⁴³ This, however, evoked rather negative connotations given the pound's history of repeated currency crises.⁴⁴

Avoiding the broader European implications with the thorny issue of sovereignty seemed to be a clever tactical move, given the hostility to further integration in quarters of the Labour Party, House of Commons and averse public sentiment. Asked in November 1978 in the House of Commons whether he would convey the Labour Backbencher's rejection of EMS on sovereignty grounds to his EC colleagues, Callaghan replied: 'I think that the subject of erosion of sovereignty is getting a little moth-eaten. The power of Governments to control their rates of exchange has been severely eroded in recent years.' As example, he cited the humiliating experience of the great sterling devaluation in 1976, and the inability of other countries like the USA to hold a certain exchange rate.⁴⁵ Only in November, after the decision to abstain from the mechanism had been made, Callaghan undertook to rhetorically dust off the principle in his House of Commons announcement in December 1978. This was also due to growing pressure from the Eurosceptics in his Party. At that point, however, he invoked sovereignty to justify his decision and, at the same time, made clear that the principle was not absolute. Where beneficial, a partial surrender of sovereignty was indeed thinkable:

'The control by Parliament of this country's economic and financial affairs must always be absolute, except to the extent that we ourselves decide formally to surrender a part of it [...] I would not hesitate to recommend to the House a departure from our national sovereignty for an international monetary system if I thought that it would increase growth, reduce unemployment

⁴³ Edmund Dell, Britain and the Origins of the European Monetary System, in: *Contemp. Eur. Hist. (Contemporary European History)* 3,4 (1994), pp. 1-60, p. 31.

⁴⁴ Catherine R. Schenk: *Decline of Sterling. Managing the Retreat of an International Currency, 1945-1992*, Cambridge 2010.

⁴⁵ Hansard HC Vol. 957, col. 1183, <https://www.margaretthatcher.org/document/103774> (25.5.2022).

*and make for better trading relations between the countries of the world as a whole or a part of them. But that must be a deliberate and conscious decision by this country and its people.*⁴⁶

Chiming in with a rather practical evaluation of economic benefits, the Government after April shifted their strategy to demanding high resource transfers in exchange for participation and tried to tie it to a reform of the budget and the CAP.⁴⁷ The argument was that weaker regions had to be supported under fixed exchange rates and that Britain, as one of the weaker economies, needed support. This was also seen as a way of alleviating the effects of the EC Budget problem and the disproportionate British contribution.⁴⁸ It became an important cornerstone of negotiation tactics to get the UK recognised as one of the three ‘less prosperous countries’, together with Italy and Ireland.⁴⁹ However, the ‘concurrent studies’ initiated to explore ways to further convergence did not deliver satisfying results from the British point of view.⁵⁰

The tactic did not only founder, but posed three more fundamental problems: Firstly, it exposed Britain to the charge of obstructive negotiation tactics, allegedly using legitimate European interest to extract concessions in areas that were felt to be unrelated to the narrower issue of exchange rate stabilisation. Secondly, while the UK could side with Italy and Ireland in demanding more transfers, it was hard to see which other countries should support a comprehensive reform of budget and CAP in Britain’s favour. It isolated the UK and cost Schmidt’s goodwill, who had invested a good deal of political capital into the project. Thirdly, as Edmund Dell noted, transfers had political implications. The intensified use of such redistributive policies lend a more federalist tinge to the whole project, exactly the variant of European unification that threatened sovereignty and that Britain was keen to avoid.⁵¹

In effect, economic evaluations speaking against EMS participation and the political case deemed insufficient, the ministerial working group GEN 136 decided on 10 October 1978 against the system.⁵² But group and Cabinet set-

⁴⁶ Hansard HC Vol. 959, col. 1427-8, <https://www.margaretthatcher.org/document/103794> (25.5.2022).

⁴⁷ Note, prime Minister’s Meeting with Chancellor Schmidt at Chequers, 23.04.1978, in PREM 16/1655, <https://www.margaretthatcher.org/document/111595> (25.5.2022); Denis Healey to James Callaghan, 22.6.1978, in TNA PREM 16/1634, <https://www.margaretthatcher.org/document/111578> (25.5.2022).

⁴⁸ Treasury Paper, European Currency Arrangements. Handling, Timing and Tactics, June 1978, in TNA PREM 16/1634, <https://www.margaretthatcher.org/document/111578> (25.5.2022).

⁴⁹ Michael Butler to Bryan Cartledge, 2.12.1978, in TNA PREM 16/2023 (198ff.)

⁵⁰ Kenneth Berrill to John Hunt, with attached Paper on the UK and the EMS, 28.9.1978, in TNA PREM 19/1635.

⁵¹ Dell, *Origins*, p. 12.

⁵² Cabinet Committee meeting on EMS (GEN136(78) 5th), in TNA CAB 130/1047.

tled for a solution that was to be repeated in the early 1990s, when the British Government was confronted with EMU: Partial membership. Inspired by Foreign Office official Michael Butler and also advocated by the Governor, Britain was to enter the EMS formally, but abstain from the ERM.⁵³ This succeeded in pacifying the opposing factions in Cabinet (though only Chancellor of the Duchy of Lancaster Harold Lever argued strongly for participation) and found support in the House of Commons. Also, the December European Council complied with that demand, having expected the increasingly sceptical British Government to stay out anyway. It did secure Britain a say in the system's evolution, though this did not extend to day-to-day management. But it had unwanted side effects: Now the government had to emphasise the wider objectives of the system beyond the exchange rate peg to lend any meaning to residing in such a 'halfway house'. This, in turn, forced them to positively acknowledge the more far-reaching objectives of European monetary integration that they found in fact problematic, as they pointed in the direction of monetary union.

This touched upon a lasting problem that was to persist and resulted in a lasting dialogue of the deaf in European monetary policy: The fundamentally different strategic value ascribed to European unification.⁵⁴ As early as April 1978 Ken Couzens had reported from a meeting with Horst Schulman that the Germans would seek "a philosophical (if not emotional) commitment to a broad concept of linked European currencies and a Europe more self-reliant in monetary matters." Couzens, in reply, had pointed out that such a commitment to European integration would be problematic for the British Government, even more so with a General Election looming. The British Prime Minister and Chancellor, in contrast, considered the scheme as potentially useful, though in its eventual manifestation, deflationary, device. While to Schmidt, the prospect of deepened European integration constituted a powerful strategical argument to abdicate some autonomy in monetary policy, it was a purpose Britain felt unable to support. Certainly there was no willingness to accept sacrifices in national interests for that purpose alone. John Hunt had made that clear as early as April 1978 in commenting the Britain should make sure "either that this is a scheme that we can live with or that it

⁵³ Conclusions of a Meeting of the Cabinet held at 10 Downing Street, 30.11.1978, in CAB/128/64/21.

⁵⁴ For a closer analysis of the European Community's place in the national strategies of Germany and Britain respectively see Mathias Haeussler: Helmut Schmidt and British-German Relations. A European Misunderstanding, Cambridge 2019.

founders.⁵⁵ Alas, without the rationale of European unity as a strategic benefit in itself, it was much more difficult to forego the option of quick adjustment in favour of a long-term commitment. This conflict line would reappear in the late 1980s in the negotiations about EMU, with even higher stakes in terms of political and monetary sovereignty.

When the system came into force in March 1979 – after a delay due to a wrangle about the technical details regarding the CAP – one of the first effects, however, it heralded the end of a monetary union: Despite British efforts to the contrary, the Irish pound joined the exchange rate regime and thus ended the link with pound sterling that had existed over half a century. Initial hopes that the value between the currencies – after all, 47 per cent of Irish exports still went to the UK in 1978 – squandered and from 1979 the currencies fluctuated widely against each other.⁵⁶ This was part of the EMS legacy that the Conservative government took into office with its election victory in May 1979. The tortuous debates had laid the foundation for Margaret Thatcher’s government’s wrestling with the issue.

2. Growing pressure for external discipline: The Conservatives and the ERM debate from 1985

When Labour announced to abstain from the mechanism after the Brussels European Council on 5 December 1978, this decision was chastised in the House of Commons by the opposition leader. Margaret Thatcher deplored a “sad day for Europe” and criticised that the Government had not only reached none of their objectives, but had established the UK as one of the weakest EC member states.⁵⁷ Later, in the early 1990, quotes from that statement would raise eyebrows, given her own fierce battles against ERM membership and Economic and Monetary Union. At that time, however, it was not so surprising. While Labour’s split over European integration was well known in the late 1970s, the Conservative Party represented the most influential Pro-European force in Parliament. Nonetheless, the debate in the opposition front bench was not straightforward in support of EMS. A meeting chaired by Shadow Chancellor Geoffrey Howe in October 1978 displayed considerable concern about the economic ability to keep the pound’s parity in the system.

⁵⁵ John Hunt to Nigel Wicks, 6.4.1978, in TNA PREM 16/1615, <https://www.margaretthatcher.org/document/111530> (25.5.2022).

⁵⁶ Patrick Honohan: Using Other People’s Money: Farewell to the Irish Pound, in: *History Ireland* 10,1 (2002), pp. 34–37, p. 37.

⁵⁷ Margaret Thatcher, House of Commons, Hansard, cols. 1424, 6.12.1978, online abrufbar: <https://api.parliament.uk/historic-hansard/commons/1978/dec/06/european-community-council-brussels> (Abruf 15.5.2018).

Welcoming the scheme in general without committing a future Conservative government to join should maintain the Party's European credentials and, at the same time, keeping the risk manageable. It would also provide an opportunity to chastise Labour's economic competence.⁵⁸ However, the main problem was not tying the British economy to an external anchor, as Howe emphasised in his advice to Margaret Thatcher: 'Fundamentally, we do believe in German principles of economic management and should be able to get ourselves alongside them.'⁵⁹

Nigel Lawson, who would become Chancellor in 1983, expressed a similar line. Acknowledging the attractions of an external anchor he cautioned that it would be difficult to sell it in Britain, given that the public's attitude towards European integration was much more sceptical towards European integration. However, as staying out risked ceding European leadership to a Franco-German axis it was only 'reluctantly' that he recommended joining. 'The best hope is that the system would shortly collapse after, not due to the weakness of the £, but because pressures on the lira and perhaps even the franc.' It would be best if the Labour Government would join, as it would prevent them from using the 'anti-European card'. He warned that the Conservatives should avoid a clear commitment that would 'gratuitously split the Party, just as Callaghan has united his'.⁶⁰ This pattern, with European monetary policy as a stick with which to beat the Government of the day, would be repeated once Nigel Lawson himself was in Office as Chancellor. At the same time, the potential danger of Conservative party division was visible from the beginning of the scheme. Voices like that of Simon May, from the Policy Unit, who pleaded for a more positive engagement with an external anchor, cautioning against isolation, did not prevail.⁶¹

When the Conservative government under Margaret Thatcher was voted into office in May 1979, the EMS was in operation for seven weeks. The Conservative government continued the course of partial membership and adopted the line to enter 'when the time is right'. Now it was not a Keynesian economic

⁵⁸ Participants were Shadow Chancellor Geoffrey Howe, Nigel Lawson, Lord Soames, Shadow Foreign Secretary Francis Pym, and John Nott, also in the room Adam Ridley, Mr Fallow and Simon May. Geoffrey Howe to Margaret Thatcher, 31.10.1978, in: CAC THCR 2/1/1/32; Protocol of a Meeting in the House of Commons, 25.10.1978, in: CAC THCR 2/1/1/32. The documents are also collected in Howe's papers, Bodleian Library, MS Howe dep. 159.

⁵⁹ Geoffrey Howe to Margaret Thatcher, 31.10.1978, in: CAC THCR 2/1/1/32; Protocol of a Meeting between Geoffrey Howe, Lord Soames, Francis Pym. John Nott, Nigel Lawson, Ridleym Fallon, May, 25.10.1978, in: CAC THCR 2/1/1/32.

⁶⁰ Nigel Lawson to Margaret Thatcher, 30.10.1978, in CAC THCR 2/1/2/12A.

⁶¹ Simon May, Britain and the Proposed European Monetary System, 5.10.1978, in Bodleian Library, MS Howe dep. 145.

management that was considered potentially incompatible with an external discipline, but a radical economic liberal reform programme designed to end the perceived British decline: Lower growth rates than Germany and France, higher inflation (13,6 per cent in 1979, as opposed to 3,9 and 10,7 respectively), recurring pound crises and trade union conflicts had led to a strong sense of crisis.⁶² At the centre of Margaret Thatcher's program for reinvigoration laid a monetarist approach. Though monetary targets were not unprecedented in British politics,⁶³ Margaret Thatcher's Government followed them with more conviction and adopted them as pillar of the central anti-inflation objective.⁶⁴ This added a new emphasis to the consideration of policy restrictions in the exchange rate mechanism. While Labour had focussed on the risk of deflationary effects of an exchange rate peg, Thatcher was concerned to compromise monetary targets. This addressed the potential conflict between internal money supply and external exchange rate targets. Moreover, floating exchange rates unhindered by governmental exchange rate fixing matched free-market preference.

Several meetings between the Prime Minister, Chancellor Geoffrey Howe (from 1983 Nigel Lawson) and Foreign Secretary (from 1983 Geoffrey Howe) indicated support for that stance, though the Governor of the Bank of England felt that greater attention should be paid to the merits of the system.⁶⁵ The independent domestic strategy was considered superior to an external peg. Only when this strategy ran into problems in establishing a reliable link between various monetary aggregates and inflation serious interest in an exchange rate peg, and with it the ERM, resurfaced.⁶⁶ But Margaret Thatcher still insisted on freedom of manoeuvre to conduct monetary policy according to British needs. This was not uncontested: Michael Palliser from the Foreign office commented on the minute of an EMS meeting: 'what a ludicrous argument!' and added: 'When the corpse of the British economy is laid on

⁶² Dominik Geppert: Der Thatcher-Konsens. Der Einsturz der britischen Nachkriegsordnung in den 1970er und 1980er Jahren, in: *Journal of Modern European History* 9,2 (2011), pp. 170-194.

⁶³ Harold Wilson's government officially introduced publicly-announced targets for the growth of the money supply. See Bank of England Annual Report 1978, pp. 1-10, <https://www.bankofengland.co.uk/-/media/boe/files/annual-report/1978/boe-1978.pdf> (25.5.2022).

⁶⁴ Nathalie Champroux / Nicholas Sowels: The Monetary and Fiscal Policies of Early Thatcherism and the Legacy of the Medium Term Financial Strategy, in: *Revue française de civilisation britannique* 17 (2015), pp. 135-161.

⁶⁵ Tim Lankester to Anthony Battishill, 17.10.1979, in TNA T 639/128; Tim Lankester, Note of a Meeting on EMS, 19.3.1980, in TNA PREM 19/743.

⁶⁶ Nigel Lawson to Geoffrey Howe, 15.4.1981, in CCA Lawson 1/1981; Gordon Richardson to Geoffrey Howe, 13.11.1981, in BoE 8A213/5; Kit McMahon to Alan Walters, 16.10.1981, in BoE 8A213/4; Kit McMahon, Report of a Meeting in the Treasury on EMS, 3.12.1981, in BoE 8A213/5.

the autopsy for dissection and enquiry into case of death the words: "I must retain freedom of manoeuvre" will be found engraved on Britain's heart. This has been the excuse for most of the countless wrong decisions.⁶⁷

However, it was only in 1985 after a sterling crisis in January that serious pressure for admittance to the ERM resurfaced. With the European budget crisis solved in Fontainebleau 1984, the inflation no longer out of line with EMS countries in general and the petro currency problem diminished, the Chancellor was convinced that 'the time is now right' and started a campaign to convince his Prime Minister of the System's merits.⁶⁸ Speculation and positive experiences with international currency cooperation reinforced Chancellor Nigel Lawson's advocacy of ERM membership. Also, other Institutions like the Confederation of British Industry and the National Institute for Economic and Social Research started campaigning for an entry. After a series of ministerial meetings, however, the Prime Minister ruled out quick accession in a dramatic confrontation which left her isolated. She argued that the 'Government must maintain some freedom of manoeuvre and should not tie itself to exchange rates within a rigid grid.'⁶⁹

It is important to note that the difficulty was not the principle of fixed policy targets per se. Based on the rational expectations model, the government's medium-term financial strategy relied on predictable monetary and fiscal targets anyway. A rule-based approach was to instil confidence into the markets and thus encourage behaviour helpful to the fight against inflation.⁷⁰ Diluting monetary targets could, from that point of view, undermine anti-inflationary credibility, even if the new indicators could be more effective. It would also introduce an element of external control, since the parities in the ERM were subject to approval from all participating countries. That could entail economic problems, as other member's economic situations and interests could divert from the British. Moreover, since the Government had nailed its flag firmly to the monetarist mast, deviating from it would pose political and presentational difficulties. Even more so because it would imply a close link to the system's informal anchor currency, the D-Mark, and thus to German

⁶⁷ Note of a Meeting on EMS on 13.1.1982, in FCO 30/5165.

⁶⁸ Rachel Lomax and David Norgrove, Chancellor's Paper for the Prime Minister's seminar on EMS on 13.11.1985, 11.11.1985, in TNA PREM 19/2162.

⁶⁹ David Norgrove, Minute of a Meeting on ERM on 13.11.1985, 14.11.1985, in TNA: PREM 19/2162. Reports of the meeting in Nigel Lawson: *The View from No 11: Memoirs of a Tory Radical*, London 1992, pp. 499-500; Margaret Thatcher: *Downing Street No. 10. Die Erinnerungen*, London 1993, p. 962; Geoffrey Howe: *Conflict of Loyalty*, London 1995, pp. 448-50.

⁷⁰ Patrick Minford: *Inflation and Monetary Policy*, in: *Oxford Review of Economic Policy* 6,4 (1990), pp. 62-76, p. 63.

policy. Though German economic strength did not yet evoke the backlash it would in the wake of reunification, it raised concerns about too severe a discipline and deflationary effects.⁷¹

Echoing the Labour discussions under James Callaghan, however, 'sovereignty' was hardly mentioned in the internal debates at that times. It came up in the House of Commons debates; but the decisive meetings in Downing Street No. 10 before 1988 operated with the less politically charged phrases 'freedom of action' or 'room for manoeuvre'. That avoided more fundamental debates on the complex constitutional and legal implications of the ambivalent term. Admittedly, briefings from John Redwood warned against the loss of sovereignty, delivering Britain's economic destiny in German hands and thus accepting 'a hair shirt of teutonic prickliness'.⁷²

But they remained the exception and did not gain traction with Chancellor Nigel Lawson, the Cabinet member responsible for the issue. He did not regard ERM membership as an abdication of sovereignty. On the contrary: In a meeting with the Prime Minister, the Foreign Secretary, the Governor and other ministers and officials he argued that the notion of complete freedom outside the ERM was 'illusory' anyway: 'the Government never had complete freedom of action in the real world. Its economic policy depended critically on confidence in the markets and that confidence could be greater if the Government had made the commitment to the ERM'.⁷³ In his opinion, the monetary strategy had been useful, but was 'running out of steam'.⁷⁴ The ERM peg, he argued, was easier to explain, more clearly understood and thus more effective than the somewhat arcane money aggregates. To maintain the integrity of a coherent strategy and thus credibility, he was at pains to emphasise continuity. Aptly, a common EMS paper of Treasury and bank of England was titled 'Reinforcing the Strategy'.⁷⁵

For Lawson, the decisive factor was that the commitment was revocable: If the external restraints through the parity grid would prove too severe, or in case of excessive speculation, the Government could suspend membership at any time. There was no provision for that in the agreements, but the other

⁷¹ David Norgrove an Margaret Thatcher, 27.9.1985, in TNA PREM 19/2162; David Willets an Margaret Thatcher, 27.9.1985, in TNA PREM 19/2162.

⁷² John Redwood to Margaret Thatcher, 27.9.1985, in TNA PREM 19/2162; Quote in John Redwood to Margaret Thatcher, 12.2.1985, in TNA PREM 19/2162.

⁷³ David Norgrove, Minute of a Meeting at Downing Street No. 10, 14.11.1985, in. TNA PREM 19/19/2162.

⁷⁴ Nigel Lawson, paper on EMS, 11.11.1985, in TNA PREM 19/2162.

⁷⁵ Treasury and Bank of England Paper, September 1985, in TNA PREM 19/2162.

ERM members had no sanction provisions anyway.⁷⁶ Also, the ERM would not involve the creation of permanent supranational institutions. The responsible bodies – ECOFIN and Monetary Committee – remained strictly inter-governmental.

Lawson was not concerned with the European merits of ERM membership. A Treasury paper makes that very clear: ‘The main argument for joining the ERM is not to replace a missing dimension from our European policy. [...] The fundamental issue is whether entry would provide the Government with an opportunity to restate its economic policy and give a new impetus to counter-inflationary policy.’⁷⁷ In this assessment, Lawson differed from Foreign Secretary Geoffrey Howe or Governor Robin Leigh-Pemberton who also started to press for ERM entry. Both of them attached more importance to the political dimension of European unification. However, they were careful to frame their arguments in economic terms to give them more legitimacy in the eyes of the Prime Minister. Accordingly, an internal FCO paper argued that a ‘decision on Britain’s adherence to the ERM must continue to rest primarily on the economic arguments.’⁷⁸ All of them, however, did not regard the mechanism as a substantial threat to national sovereignty.

Notably, this was not even Margaret Thatcher’s argument. After she had rejected ERM membership in November 1986, Howe and Lawson continued to highlight the advantages of EMS in public speeches, though cautiously. When she rejected joining the grid publicly in the House of Commons in mid-1986, she did so on the grounds that it would deny Britain a flexible handling of the exchange rate and force it to defend the parity either by spending precious reserves on intervention or raising interest rates.⁷⁹ While her annotations on John Redwoods papers indicate that she saw attractions in his arguments, and she was unwilling to bind her hands by external targets, Margaret Thatcher herself did not argue with the wider case of national independence – at least not yet. Her economic adviser Alan Walters, who became one of her most influential sources of advice, also argued against entry. However, he did so because he considered a fixed exchange rate system not sustainable. He claimed that it would be a ‘gift for speculators’, lead to instability in interest rate setting, pointed to lower growth rates of the member countries and saw

⁷⁶ David Norgrove, Minute of a Meeting at Downing Street No. 10, 14.11.1985, in: TNA PREM 19/19/2162.

⁷⁷ RG Lavelle to Peter Middleton, 6.2.1985, in: TNA: T 438/325.

⁷⁸ Paper für ein Meeting der DUS am 24.2.1985, Februar 1985, in: TNA: PREM 19/2162.

⁷⁹ Hansard, Vol. 99, Col. 171, 10.6.1986, <https://hansard.parliament.uk/Commons/1986-06-10/debates/a01ecaaf-c36d-40d2-ac3a-aef7d73aca68/PrimeMinister> (25.5.2022).

it as an excuse for maintaining capital controls.⁸⁰ Notably, while totally opposed to EMS, he was ready to contemplate Economic and Monetary Union. A transition to fully fixed exchange rates with a European central bank would be preferable to the ‘half-baked’ system of an adjustable parity grid.⁸¹ This argument, however, rested on economic grounds and paid little attention to the political and sovereignty considerations that made Economic and Monetary Union unthinkable for the British Prime Minister.

Given Thatcher’s continued resistance against ERM entry, Nigel Lawson, together with the Bank of England, started the so-called ‘shadowing’ in March 1987. Without formal affiliation, he pegged the pound to the stable D-Mark, thus creating an ‘informal membership’ - without the explicit consent and admitted knowledge of his Prime Minister. This avoided an open conflict between Chancellor and Prime Minister, at least for the moment, and alleviated the political problems of surrendering of policy discretion in favour of a closer orientation towards German policy. However, it also meant accepting the restrictions of a semi-fixed exchange rate without benefiting from the full range of the system’s support mechanisms.

A study of the Credit Swiss First Boston – which the Chancellor found ‘very thorough & on the whole very sound’ – predicted that the ‘living in sin’ would ‘get increasingly difficult politically. In the long-term marriage or separation are the only alternatives.’⁸² Indeed, the policy of placing a cap of 3 D-mark on the pound rate created political tension had to be abandoned in early 1988. Even after that, it created a considerable backlash. Not only did Margaret Thatcher reject exchange rate pegging openly in the House of Commons, when she stated that ‘there is no way in which one can buck the market.’⁸³ Encouraged by her economic adviser Alan Walters, she held it responsible for the ensuing ‘Lawson Boom’ with annual growth rates around 4,3 per cent, but also increasing inflation exceeding 10 per cent in 1990.⁸⁴ The open rift between Prime Minister and her Chancellor, damaging the economic prospects, was also noted by the Foreign Department of the Bundesbank. With hindsight, they criticised the policy as ‘unfortunate’, since the course had

⁸⁰ David Norgrove, Minute of a Meeting between Margaret Thatcher and Alan Walters, 2.7.1987, in TNA PREM 19/2675.

⁸¹ Alan Walters, extracts from a book in the Observer of 22.10.1989.

⁸² Gerald Holtham, Giles Keating, Peter Spencer: EMS: Advance or Face Retreat (CSFB Economics), September 1987, annotated by the Chancellor, filed in TNA T 640/531.

⁸³ Hansard, Vol. 129 col. 517, <https://hansard.parliament.uk/Commons/1988-03-10/debates/69ef4526-207a-4de6-8e71-272991e29283/PrimeMinister> (25.5.2022).

⁸⁴ Julian Amery to Margaret Thatcher, 4.5.1989, in TNA PREM 19/2676.

proven too low, enabling an inflationary base rate decrease from 10,5 to 7,5 per cent, and moreover had shaken the confidence in an exchange rate-based policy.⁸⁵

Two conclusions can be drawn from the first ten years of EMS: Firstly, from the start, a strict distinction was made between economic arguments that broadly included factors like the effect on inflation or interest rates and political arguments like European policy, party political and electoral considerations. There was a clear prioritisation of economic arguments that were considered more legitimate. However, this separation remained artificial, as even technical targets are the results of political preferences.⁸⁶ The framing in economic terms served to depoliticise the issue and thus kept control to the actors that were deemed competent in the technical issues. As with the EMS realignments, there was an effort to rationalise decisions that would be complicated otherwise, e.g. by emotionalising devaluations of national currencies. At the same time, it meant that the political concept of sovereignty was not discussed in depth. Secondly, the British government regarded currency as a central element of domestic policy. Giving up some discretion was not yet deemed a threat to national sovereignty. While the principle of fixed aims was considered unproblematic – after all, it was the very basis of the rational expectations approach – these had to be reversible. Even where the Government tied its own hands with fixed rules on money supply or exchange rate targets in order to gain economic advantages, it did not want to give up the option of exerting political influence or changing the course.

3. Sovereigntist backlash: The perspective of Economic and Monetary Union 1988-1992

In 1988, the prospect of economic and monetary and the Delors Committee changed the British EMS debate fundamentally. The 1988 Hanover European Council entrusted a Committee, chaired by Commission President Jacques Delors, with the task of studying and proposing concrete stages to realize Economic and Monetary Union. This objective had been stated in the 1985/86 European Single Act.⁸⁷ British attempts to avoid a Committee of ‘wise men’, to entrust the work to the existing institutions of the Committee of Governors or the Monetary Committee and to restrict the range as far

⁸⁵ V. Hartmann to L. Gleske, 14.6.1989, in Bundesarchiv B 330/52544.

⁸⁶ Jim Tomlinson: *Managing the Economy, Managing the People. Narratives of Economic Life in Britain from Beveridge to Brexit*, Oxford 2017.

⁸⁷ European Council in Hannover, 27./28.6.1988. Conclusions of the Presidency, https://www.consilium.europa.eu/media/20606/1988_june_-_hannover__eng_.pdf (25.5.2022).

as possible to exclude the aim of a European Central Bank succeeded only partially.⁸⁸ Thus, the Committee's composition instilled considerable distrust on Margaret Thatcher's part. By putting the European Commission President Jacques Delors in the chair and associating experts beyond the Central Bankers, it brought in a political element. This added to Margaret Thatcher's general discomfort with the development of the EC in a federalist direction, all the more as she suspected a Commission's attempt to encroach on member states' sovereign powers. This was a feeling she expressed strongly in her Bruges speech in September 1988.⁸⁹

Her discomfort was compounded by the functioning of the Committee. As the Governors attended in a personal capacity, their work was beyond direct control of the governments. She was wary about Governor Leigh-Pemberton's stance: He advocated ERM entry and she did not trust him to take a firm stance with his central bank colleagues. Rather, she pinned her hopes on Bundesbank President Karl-Otto Pöhl, whom she admired and got on well with, and trusted to be more robust in rejecting federal aspirations.⁹⁰ However, it seems that Margaret Thatcher overestimated both his ability and his will to resist the strong political pressure for monetary union. Leigh-Pemberton was tasked to hammer home the implications of EMU in terms of loss of national sovereignty, as Thatcher was convinced (in his assumption encouraged by Pöhl),⁹¹ that it would be unacceptable to other governments, would they only realise the full implications of EMU.⁹² Despite his attendance in personal capacity the Governor provided Prime Minister, Chancellor and Foreign Secretary with papers on a sub rosa basis. The tone of the drafts made clear that the result would be in conflict with the British stance on sovereignty. This increased Thatcher's and Lawson's concerns so much that they even pleaded for a British minority report.⁹³ However, the Governor refused as he felt this would only isolate Britain without hindering progress towards Monetary Union. The final document, he argued, was evenly balanced between the Brit-

⁸⁸ Charles Powell, Note of a meeting between Margaret Thatcher, David Hannay and Roger Lavelle, 24.6.1988, in TNA T 641/641; Geoffrey Howe to Margaret Thatcher, Issues for the Hanover European Council, 17.6.1988, in TNA T 640/641; Nigel Lawson to Margaret Thatcher, Hanover: Monetary Cooperation, 23.6.1988, in TNA T 640/641.

⁸⁹ Oliver Daddow / Christopher Gifford / Ben Wellings: The Battle of Bruges: Margaret Thatcher, the Foreign Office and the Unravelling of British European policy, in: *Political Research Exchange* 1,1 (2019), pp. 1-24.

⁹⁰ Charles Powell and Alex Allan, 14.12.1988, in TNA PREM 19/2675.

⁹¹ Mallaby, Telegram No 427 to FCO, Report of Press Conference by Pöhl, 7.5.1988, in TNA PREM 19/2675.

⁹² Briefing: Delors Committee: Meeting on 15 February, 14.2.1989, in PREM 19/2675.

⁹³ Paul Grey to Margaret Thatcher, 4.2.1989, in TNA PREM 19/2675.

ish pragmatist and other more idealist views.⁹⁴ However, the Prime Minister was not convinced. ‘Obviously’, remarked Thatcher’s foreign policy adviser Charles Powell, ‘we do not like the report.’ The requirement of Treaty change and Paragraph 39 were especially problematic. It obliged every participating country to all stages to a single currency. To Powell, this was a victory of ‘ideologues’ over the ‘pragmatists’.⁹⁵

Despite their growing differences regarding ERM membership, Thatcher and Lawson were in complete agreement that the Report, published in April 1989, was unacceptable on sovereignty grounds. Lawson made that clear to his colleagues at the April ECOFIN.⁹⁶ Trying to avoid an overly negative tone, he acknowledged the report as an ‘extremely valuable and thorough piece of analysis’. However, he made clear that Britain could not support a federalist development: ‘Our view of the Community is one of independent sovereign nation states working evermore closely together. We cannot accept the transfer of sovereignty which is implied by the Delors report. EMU as spelled out would in effect require political union, a United States of Europe. That is simply not on the agenda now or for the foreseeable future.’⁹⁷ Thatcher wrote: ‘We are not prepared to subscribe to full Economic and Monetary Union for the reasons which Nigel Lawson and I have both set out: it would require a massive transfer of sovereignty and the creation of a federal Europe, which is simply not on the agenda.’⁹⁸

To them, the ability to manage the currency and budget rights were indispensable preconditions of parliamentary sovereignty. A European single currency would require institutions that constituted a federal state that would disenfranchise national parliaments where democratic rights resided. From that perspective, the single currency became a threat to democracy and indeed freedom. Even economists like Thatcher’s adviser Brian Griffiths – who had before argued strictly on economic grounds – referred now to political and symbolic value of the currency: ‘Money – along with language, culture and monarchy – is an important symbol of a nation.’⁹⁹ Thatcher agreed, telling the German Foreign Minister Hans-Dietrich Genscher that ‘a national currency and national decision-making on economic and monetary policy were

⁹⁴ Robin Leigh-Pemberton to Margaret Thatcher, 13.4.1989, in TNA PREM 19/2676.

⁹⁵ Charles Powell to Margaret Thatcher, 13.4.1989, in TNA PREM 19/2676.

⁹⁶ Report about ECOFIN, 17.4.1989, in PA AA B 224 ZA 168780.

⁹⁷ Telegram, report on the Chancellor’s Reaction to the Delors Report, April 1989, in TNA PREM 19/2676.

⁹⁸ Margaret Thatcher to Julian Amery, 12.5.1989, in TNA PREM 19/2676.

⁹⁹ Brian Griffiths to Margaret Thatcher, in TNA PREM 19/2676.

among the most substantial attributes of sovereignty in the modern world.”¹⁰⁰

However, the Report’s launch renewed interest in ERM entry, which, by now, incited fierce public dispute between Lawson and Thatcher. On the one hand, ERM membership of all states was part of the prescribed Stage 1. On the other hand, EMU served as a further argument for ERM entry. Howe and Lawson, but also British European Commissioner Leon Brittan argued that Britain had to be inside to exert influence in the forthcoming EMU negotiations and thus protect the economic interests of the City of London.¹⁰¹ It also was important to have a say in the wider development of European integration. This European dimension had hitherto been overshadowed by technical considerations. Up to now, sovereignty had not figured greatly in the ERM debate. Even the German government, interested in gaining Britain as a member with a similar stance on budget discipline, free trade and liberalised capital movements, had always delivered the argument that the mechanism would not require a transfer of sovereignty.¹⁰² However, with EMU the perspective became more complex.

Chancellor Lawson was at pains to point out that EMS was no threat to sovereignty: ‘There is a world of difference between the EMS which does not involve any loss of national sovereignty and EMU which, among other things, would involve a common single currency and the abandonment of individual national currencies. Noone [sic!] should confuse the two.’ He likened the ERM to the Bretton Woods system, which delivered stability but did not require the irrevocable abandonment of sovereignty, in contrast to a Monetary Union with a supranational Central Bank.¹⁰³ This was also illustrated by his willingness to promote wider international monetary cooperation like the Louvre or the Plaza agreement. With the more far-reaching implications of EMU, European and party political considerations became more important. The dividing line between politics and economics became increasingly blurred as the debate politicised the debate. As Lionel Price from the Bank of England’s Overseas Department noted, a previously political argument was now given economic significance. ‘Another argument in favour of sterling’s

¹⁰⁰ Charles Powell and Stephen Wall, Protokoll zu einem Treffen zwischen Margaret Thatcher und Hans-Dietrich Genscher am 30.7.1990, in TNA: PREM 19/2997.

¹⁰¹ Charles Powell to Stephen Wall, 18.5.1989, in TNA: PREM 19/2676.

¹⁰² Rüdiger von Lukowitz: Note on a conversation between Federal Minister Genscher and British Ambassador Julian Bullard on 18.12.1985, 19.12.1985, in PA AA: B 31 ZA 135330; DBA: Minutes of the 671st meeting of the Central Bank Council of the German Bundesbank, 28.3.1985, p. 14. For the sovereignty argument see for example Note on a visit of Minister of State Irmgard Adam-Schwätzer in London (13./14.7.1987), 9.7.1987, in PA AA B 224 ZA 168787.

¹⁰³ Telegram, report on the Chancellor’s Reaction to the Delors Report, April 1989, in TNA PREM 19/2676.

participation is that our influence in the Community is damaged by staying outside the ERM. This argument has long been advanced in general political terms - notably by the FCO but has now acquired a heavier economic and financial gloss.¹⁰⁴

However, even with the political stakes increased, that did little to convince the hesitating Prime Minister. She told Nigel Lawson in May 1989 that the new circumstances would not change her opinion. On the contrary, EMU would change the system for the worse and Britain should stay away from it.¹⁰⁵ Therefore, Howe and Lawson joined forces. In preparation for the European Council in Madrid in June 1989, they commissioned a joint paper from the Treasury and the Foreign Office in which they listed the reasons for joining the ERM.¹⁰⁶ Worried about the possibility of the other EC members going ahead on EMU without Britain, they pleaded for a definite date for ERM accession, so that Britain would be able to defer a decision on Stages 2 and 3. They met Margaret Thatcher one day before the Council to press their point.¹⁰⁷ During the Summit, she did set condition – convergence of inflation rates, completion of the Internal Market, a free market in financial services and strengthening of competition policy – though no date.¹⁰⁸ However, the encounter caused a lasting rift. She felt betrayed by the approach, feeling that booth had ganged up on her with the threat of resignation. Only one month later, she removed Geoffrey Howe as Foreign Secretary, offering him the leadership of the House of Commons, which he accepted reluctantly. The confrontation with Nigel Lawson continued. However, not for long: In autumn 1989 an article of Margaret Thatcher's trusted adviser appeared, criticising Lawson's policy in strong terms, and describing the ERM as 'half baked'. When Margaret Thatcher refused Lawson's following request to sack Walters, he decided to resign over her lack of support.¹⁰⁹

However, the conflict about monetary policy continued, with sovereignty taking centre stage. Despite it being quoted extensively, a clear definition of the dazzling concept remained difficult. "Sovereignty is not a fact but an

¹⁰⁴ Lionel Price, Sterling's Participation in the ERM, 29.6.1989, in BoE 3A161/200.

¹⁰⁵ Paul Gray, Minute of a meeting between Margaret Thatcher and Nigel Lawson, 3.5.1989, in TNA PREM 19/2676.

¹⁰⁶ No.10 record of conversation between Margaret Thatcher, Geoffrey Howe, Nigel Lawson, 20.6.1989, in TNA PREM 19/2665.

¹⁰⁷ Margaret Thatcher, handwritten notes, 25.6.1989, in CAC THCR 1/20/6/6/10.

¹⁰⁸ Margaret Thatcher, Speaking note for European Council in Madrid, 26.6.1989, in CAC THCR 1/20/6/6/10.

¹⁰⁹ Margaret Thatcher, notes on Nigel Lawson's resignation, October 1989, CAC THCR 1/20/7.

idea,” writes legal scholar Ulrich Haltern.¹¹⁰ Indeed, a wide variety of ideas of sovereignty circulated in the debate. Most of them referred to the traditional idea of British parliamentary sovereignty, the indivisible, unlimited legislative power of parliament, but they varied greatly in detail. The Guardian indicated the lack of clarity in November 1990. It published a series of three articles, putting forward the question what sovereignty would mean. These articles pointed out the various and often contradictory ways in which the term was used.¹¹¹

Roughly, two understandings could be distinguished: Firstly, a legal one. This referred to parliamentary legislation and budget rights. In its pure form, a pooling or transfer of competences was impossible, as it would hurt parliament’s rights. This reflected Margaret Thatcher’s and Nigel Lawson’s view. They simply did not consider the country ready to abdicate the sovereignty that was closely connected to the unwritten constitutional order. The abdication of the own currency, Lawson argued, implied an ‘irrevocable transfer of sovereignty; individual currencies have gone and all that is left is the single European currency run by the Central Bank.’ He adamantly opposed such a ‘superstate’.¹¹² When Nigel Lawson resigned, John Major became his successor. He continued the line of Lawson in rejecting the abdication of the Parliament’s freedom to make laws uninhibited by the restraints of an Economic and Monetary Union, and especially a European Central Bank. Like Nigel Lawson, he advocated ERM entry as monetary discipline – after all, inflation had reached almost 10 per cent.¹¹³ Unlike Margaret Thatcher, who found it ‘simply wrong to be trying to centralise powers in the Community’ and opposed any movement in the direction of EMU, Major was convinced that at least some concessions were necessary to avoid a two-tier Community. Thus, he proposed an ‘opting-in’ mechanism.¹¹⁴ It would give Britain the possibility to engage constructively with the scheme, even joining later, without having to cede parliamentary powers.¹¹⁵

Secondly, a political interpretation of sovereignty can be observed. This school

¹¹⁰ Ulrich Haltern: *Was ist Souveränität?*, Tübingen 2007, p. VII.

¹¹¹ Guardian of 5.11.1990, p. 23; Guardian of 6.11.1990, p. 21; Guardian of 7.11.1990, p. 21.

¹¹² TCSC, Fourth Report: The Delors Report, ordered by the House of Commons to be printed 19 June 1989, in: BoE 3A161/200.

¹¹³ Office for National Statistics, RPI:Percentage change over 1 month - All items, <https://www.ons.gov.uk/economy/inflationandpriceindices/timeseries/czeq/mm23> (25.5.2022).

¹¹⁴ Charles Powell to John Gieve, Minute of a meeting between Margaret Thatcher and John Major, 18.4.1990, in TNA PREM 19/2982.

¹¹⁵ Charles Powell to John Gieve, Minute of a meeting between Margaret Thatcher and John Major, 18.4.1990, in TNA PREM 19/2982.

of thought looked at the actual leeway in the environment of globalised markets rather than legal prerogatives. From that point of view, pooling competences could even give more room for manoeuvre, especially vis-à-vis rampant international markets. This was Geoffrey Howe's argument. He did not find 'pooling' an apt term to describe the process, as he felt it too anonymous and irrevocable. Rather, he preferred the metaphor of a thread of silk, or a rope. Woven together, they were stronger than separated, yet they maintained distinguishable: „I think that a partnership is the exercise of sovereignty jointly, strands in a rope of different colours [...] looking clearly different, retaining their difference, but nevertheless because they're woven together for this or that objective, having much more strength than they would be on their own.“¹¹⁶ From that perspective, he made clear that he was ready to share sovereignty in the long term and think more constructively about ways to a monetary union. He took a much more positive stance on further European integration and resolutely opposed emotional resentments with regard to the pound. He argued that a peg in the ERM should not be allowed to be seen as 'some fresh or shameful surrender of British sovereignty to the dominance of the Deutschmark.' There could be no 'turning back' in the political commitment to Europe.¹¹⁷

However, when Margaret Thatcher rejected further surrendering of powers to the Community, most notably with her famous 'no, no, no' after the European Council in Rome in October 1990, he found that he could no longer support her politics and resigned.¹¹⁸ Governor Robin Leigh-Pemberton, when confronted with questions about him signing the Delors Report in the Treasury and Civil Service Committee in 1989, also challenged a fixed interpretation of sovereignty: 'Sovereignty? What does it really mean? If one enters into any treaty, one's sovereignty is affected. [...] It is so closely connected to the ability of the country to act independently. [...] Parliament's sovereignty however can always be exercised by saying "We will abrogate the treaty and take the country out of the Common market."¹¹⁹ This interpretation of sovereignty also left more room for exercising powers in a European context. The official British position on monetary union, however, followed the first interpretation. But this second interpretation, advocated by Howe, remained an im-

¹¹⁶ Geoffrey Howe, Transcript of an interview for the documentary '1992 and all that', 3rd episode (8.11.1989, aired 2.12.1989), in TNA PREM 19/2982.

¹¹⁷ Speech of Geoffrey Howe, 9.10.1989, in TNA PREM 19/2984.

¹¹⁸ Geoffrey Howe, Resignation letter, in Bodleian Library MS Howe dep. 274.

¹¹⁹ TCSC, Fourth Report: The Delors Report, ordered by the House of Commons to be printed 19 June 1989, in: BoE 3A161/200.

portant argument of those who argued for a more positive British attitude to monetary union.

The consideration of sovereignty was closely connected to German economic management. However, the perception of Germany changed in the late 1980s with concrete steps towards German reunification. Previously, the link to a stable D-Mark had been cited as one of the mechanism's benefits. However, from 1989 concerns about Germany's economic strength became predominant. With regard to EMU, there was some scope for cooperation, as both countries followed similar principles with regard to liberalisation and stability policies. However, there were also fundamental differences in their reactions to the Delors Report. Germany advocated a strong independent European Central Bank and a commitment of all states to the whole process. They wanted to avoid a halfway house that would take in competences without delivering a strong, stability-oriented policy in return. In contrast, Britain wished to avoid a final commitment as long as possible – preferable forever. Moreover, Margaret Thatcher – as her Chancellor John Major – were highly critical of Central Bank independency. In late 1988, Thatcher had rejected a proposal by Nigel Lawson arguing for independence of the Bank of England.¹²⁰ This was partly because she wanted to avoid the impression that the Government would shift responsibility for the economic development. She was also worried about democratic accountability, if central economic and monetary decisions would be made by a body independent from parliamentary scrutiny.¹²¹ These fundamental differences prevented a close German-British coordination, even though the countries followed similar liberal economic principles.

To avoid the isolation following the critical attitude to the Delors Report, Britain floated two alternative proposals for Economic and Monetary Union. They were based on markets forces and supposed to retain sovereignty. The first envisaged a currency competition, loosely based on Friedrich August von Hayek's proposal for denationalised currencies.¹²² In order to win over the Bundesbank as the most important potential ally, the paper was in large parts formulated with the Bundesbank's stance in mind, as the leading official Nigel Wicks wrote to Nigel Lawson: 'Our paper, if it is to succeed, must sway

¹²⁰ Nigel Lawson: *The View from No.11: Memoirs of a Tory Radical*, London 1992, p. 422.

¹²¹ Margaret Thatcher: *Downing Street No. 10. Die Erinnerungen*, London 1993, pp. 974-5.

¹²² Friedrich A. Hayek: *Denationalisation of Money – The Argument Refined. An Analysis of the Theory and Practice of Competing Currencies*, London 1978.

the Bundesbank and through them the German Government.¹²³ However, it the paper served mainly ‘tactical’ purposes to slow down progress on the development following the Delors prescriptions.¹²⁴ This and the practical problems of that untested approach precluded it from becoming a serious alternative. A second attempt was the ‘hard ecu’, developed together with Michael Butler from the London City. The ‘hard ecu’ would be a common (as opposed to a single) currency, managed by a European Monetary Fund. It would never be devalued to avoid inflationary effects. The proposal was put forward in June 1990 by John Major. Acknowledging the importance of German support, Chancellor John Major announced it firstly in a speech to a German audience.¹²⁵ However, it did not gather widespread EC support either. The Bundesbank was highly sceptical of the parallel currency approach that had already been discarded by the Delors Committee. It did not help the plan’s credibility that Margaret Thatcher refused to acknowledge the possibility that the hard ecu could develop into a single currency in the long-term, and emphasised that she believed British citizens, if free to choose, would always opt for the pound instead of the ecu.¹²⁶

In 1990, the politicisation of the debate and the European pressure for Monetary Union were accompanied by a growing split of the Conservative Party on Europe and mounting economic problems. Britain was sliding into a recession and inflation rose. This pushed Margaret Thatcher to take political steps, while her new Chancellor John Major and Foreign Secretary Douglas Hurd, like their predecessors in office, also urged the prime minister to join the ERM. In 1990 even Thatcher’s closest economic advisers, previously anti-EMS, advocated accession. Notably, after having ascribed overriding significance to economic arguments, they now argued on a political basis. One of them wrote: ‘On balance the economic arguments are still against joining [...]. The political case is strongly in favour of entry and is becoming stronger. On balance therefore I believe the UK should enter the ERM.’¹²⁷ Thatcher was finally persuaded and expressed her agreement in principle for accession to Chancellor of the Exchequer John Major in July 1990.¹²⁸ Given the domestic,

¹²³ Nigel Wicks to Nigel Lawson, 11.10.1989, in TNA PREM 19/3741.

¹²⁴ Note of a meeting between Margaret Thatcher, Nigel Lawson, John Major, Nicholas Ridley, 25.10.1989, in TNA PREM 19/3741.

¹²⁵ John Major, Speech to the German Industry Forum, 20.6.1990, in TNA PREM 19/2983.

¹²⁶ Margaret Thatcher, Interview with the Sunday Times, 15.11.1990, in CAC THCR 2/6/4/55.

¹²⁷ Brian Griffiths to Margaret Thatcher, 18.5.1990, in TNA: PREM 19/2983.

¹²⁸ Barry Potter to John Gieve, note on a meeting between Margaret Thatcher and John Major, 12.6.1990, in TNA: PREM 19/2983.

party political as well as economic pressures, she hardly had a choice. It was not without irony that she, who had struggled for monetary freedom of action and sovereignty, had lost all options herself. However, she succeeded in obtaining a one percent interest rate cut at the point of entry, even though Chancellor John Major and Governor would have liked to postpone it.¹²⁹

On 5.10.1990, the UK announced the intention to join the ERM. On 8 October, membership became effective. However, it was not for long that Margaret Thatcher presided over it: In November 1990, she was forced to resign after a leadership challenge in her own Party, with her European policy being a driving factor. Also, ERM accession did not settle the conflicts over monetary policy. The British role in EMU and Europe remained virulent, and membership in the ERM proved short-lived: It ended involuntarily just two years later on “Black Wednesday” with a sterling crisis. Due to extensive speculation, Britain was unable to maintain the fixed parity of 2.95 D-Mark that proved too high. It constituted a severe humiliation at the hand of the markets – and of the Germans, at least in British perceptions. Reacting to inflationary pressures from reunification, the Bundesbank had raised interest rates and thus put pressure on the other currencies, with sterling unable to withstand.¹³⁰ This put a heavy strain on German-British relations at that time and made participation in EMU even less likely. However, Black Wednesday still had a disastrous effect 24 years later. It proved a turning point, inflicting lasting damage on Britain’s relation with the EC/EU, that contributed to tipping the scales in the 2016 Brexit referendum.¹³¹

At that time, the negotiations about EMU went on under Margaret Thatcher’s successor John Major. He attempted to establish a more positive overall stance on European integration. He succeeded in securing his preferred strategy of enabling progress to EMU, albeit without British participation. On the European Council in Maastricht in 1991, he secured an ‘opt-out’. In a striking analogy to the Labour Government’s decision in 1978 to stay outside the ERM, Major opted for a partial engagement as well. Alas, after a process of remarkable politicisation and a profoundly changed European environment, Major’s position was motivated by even more fundamental concerns – not about deflationary effects, but the very existence as a sovereign state.

¹²⁹ Robin Leigh-Pemberton to Margaret Thatcher, 4.10.1990, in TNA PREM 19/2984; Note of a meeting between Margaret Thatcher and John Major, 4.10.1990, in TNA PREM 19/2984.

¹³⁰ William Keegan / David Marsh / Richard Roberts: *Six Days in September: Black Wednesday, Brexit and the Making of Europe*, London 2017.

¹³¹ *Ibid.*, p. viii.

Conclusion

The tortuous ERM debates from 1978 laid the foundation for Margaret Thatcher's and John Major's later wrestling with EMU. Between 1978 and 1992 the significance ascribed to sovereignty in dealing with European monetary policy underwent profound changes. In 1978, the governmental debates focussed less on the complex construct of sovereignty, but on tangible financial benefits, the rejection of deflationary policies, resource transfers and the demand for symmetry. From 1985, freedom of manoeuvre and freedom of action were at the centre of the debate. Now, compatibility with the government's monetarist strategy and merits of a European exchange rate peg for conquering inflation were paramount. It was from 1988 with the perspective of EMU that the term sovereignty was used frequently in discussions of European Monetary policy. This was more than just semantics: The former concepts refer to the factual dimension of sovereignty, the ability to pursue monetary policy with discretion. However, they did not contain the legitimizing dimension of sovereignty.¹³² The emergence of that term in the monetary context shows that the single currency elicited more fundamental concerns about democratic accountability and parliamentary sovereignty than the technical ERM exchange rate peg. The revocability of such a peg was decisive for that assessment, and chimed with experiences of former commitments to international cooperation in the Bretton Woods system, the 1985 Plaza Accord or the 1987 Louvre Accord to stabilize the currency markets. The constitutional order championing parliamentary sovereignty, historical experiences with European integration as well as the symbolic value ascribed to the pound as an expression of national identity played a major role for the British stance on EMU. Thus, besides economic factors, specific interpretations of historical experiences and national symbols shaped the willingness to transfer autonomy in monetary policy.

The perspective of a single currency led to a politicisation of the ERM debate. In the end, political factors played a decisive role in the decision to join. However, controversies over European monetary policy remained. 'Black Wednesday' left long-lasting resentment with European integration, and the struggle over a single currency continued. The pound became a contested, yet powerful symbol for national sovereignty, for some even precondition for a national existence. 'Abolish the pound and you abolish Britain' warned John Redwood.¹³³ However, even absence from the Euro zone proved momentous

¹³² Rault, Pooling, pp. 110-1.

¹³³ John Redwood: *Our Currency, Our Country. The Dangers of European Monetary Union*, Harmondsworth 1997, p. 19.

in 2016: According to David Cameron, British exclusion from the decisions of that ‘integrationist core’ that increasingly shaped the EU’s development was a major reason for calling Britain’s EU referendum in 2016.¹³⁴ In the campaign, sovereignty played a key role. The leave Campaign successfully harnessed sovereignty as a political umbrella term to wrap complex demands in a simple, highly reductionist message.¹³⁵ Calls to keep the pound remained a powerful cornerstone of this message, glossing over the more complex question whether some sharing of sovereignty can be useful to maintain the capability to act efficiently vis-à-vis globalised markets or foreign policy challenges. The ERM episode might not have created the link between national pride and the pound’s exchange rate – the ‘devaluation’ has been treated as a sign of shame before. However, it helped to establish Europe as one important threat to the pound’s integrity. The question of political and economic sovereignty remains present for the time being. And, as recent developments in the European Union about the development of the Eurozone demonstrate, this is not only the case in Britain.

Abbreviations

CAC:	Churchill Archives Centre, Cambridge
ECU:	European Currency Unit
EMS:	European Monetary System
EMU:	Economic and Monetary Union
ERM:	Exchange Rate Mechanism
TNA:	The National Archives, London
PA AA:	Politisches Archiv des Auswärtigen Amtes
BoE:	Historical Archive of the Bank of England

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¹³⁴ David Cameron: *For the Record*, London 2019, S. 400.

¹³⁵ Anand Menon / Alan Wagner: Taking Back Control: Sovereignty as Strategy in Brexit Politics, in: *Territory, Politics, Governance* 8,2 (2020), pp. 279-284.

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Closing Remarks

Harold James

Thank you very much, everyone, for this absolutely wonderful two days and very, very rich discussion. This isn't really a keynote. What I wanted to do is to wrap up some of the threads that we've been having in this very rich series of interventions over the two days. I thought it might be useful not to summarize each paper but to think about some themes that went through. And I think there are three themes, for me at least, that stood out in terms of the inspiration of this meeting.

The first inspiration, I think, is unambiguously – we kept on coming back to that in discussion after discussion – the European Monetary Union and the tensions, stresses, strains, advantages, and disadvantages of the monetary union. Thomas Mayer said that the euro was a phenomenon born out of a temporary period of peace and low inflation, and I think that gets part of the story right. It's going to be much more difficult in an era of war, higher inflation and higher interest rates; and that's the series of shocks that we're bracing ourselves to prepare for.

The second ghost that is hanging over this conference – Nikolay Nenovsky raised this most clearly in his paper – was the creation of the currency blocs and the question of whether the 1930s might provide a forestate of the dramatic threat that we might once again be facing. Nikolay raised the question of whether this wasn't one of the fears that Kristalina Georgieva had when she spoke a few weeks ago in a meeting in Zurich. Well, the 1930s are indeed a story of a very different kind of currency union in the sense that these were not formal currency unions, but they were currency blocs, currency arrangements, and there was, maybe I say this with a British accent,

also a relatively beneficent area of the sterling bloc. The Scandinavian paper from Gjermund Forfang Rongved showed actually in the details of the convergence of the Scandinavian currencies after 1931, how following Britain was a choice made by some but not all of the Scandinavians. The Scandinavian sterling bloc was a relatively benign version of the bloc phenomenon, and the Reichsmark bloc a much less benign, indeed positively malevolent, form of economic imperialism. The dollar area: North and South America really linked together in the dollar area already in the 1930s. And some people have argued, quite convincingly, that a lot of the post-war monetary order comes out of people – in particular, Harry Dexter White – who were working with the Caribbean and with Latin America in the 1930s. So what is happening is a kind of globalization at the United Nations Bretton Woods conference in 1944 of the Inter-American arrangements. And then finally the sort of saddest and weakest element of this was the gold bloc, increasingly small and diminished, and then in 1936, destined to oblivion. And that, I think, is not the kind of world that we really want. We should think of ways of escaping from that world of blocs: obviously exactly this kind of bloc thinking is now very much in the wake of the war and of the sanctions in the air, as there's the discussion of whether Russia might not fit better into a renminbi bloc, and also of how India can pay for shipments from Russia. Escaping from the dollar is another of the themes of intense current debate. And then finally, the long history of money that Thomas Mayer began the morning with, is enormously important, because this is also a moment of technological transformation. And we got at that very much, I think, in the policy debate on parallel currencies, and when there was a response to Carmen's question about whether we think that this is a possible order coming, Carmen didn't get very many buyers of this idea of an alternative order. But I think if you had done this exercise in Central Asia or in South America, you would have gotten out a large number of people waving their arms and saying, yes, we want to get away from the dollar, and we want to get away from the ruble and we want to get away from the renminbi, we want something else; so it is probably a geographical story in which small countries want to escape via new technologies from powerful hegemons and neighbours.

Third, turning to the subject of monetary unions, rather than the ghosts that haunt our discussion, there were three kinds of monetary unions that were discussed. There's a famous 1966 spaghetti Western movie directed by Sergio Leone and starring Clint Eastwood, *The Good, the Bad and the Ugly*. There is a good monetary union: and we had a lot of discussion of that good monetary union when we heard early in the day why countries such as Serbia

or Romania or indeed Bulgaria went unilaterally into the Latin Monetary Union. And the Latin Monetary Union looks like a very positive experience, as was the Scandinavian monetary union: these operated in a world that was on the whole well ordered. So, maybe the success of the Latin Monetary Union, the long-lived success of the Latin Monetary Union, and the Scandinavian Monetary Union, is also part of the fact that they're really also related to a world that's more and more converging on a gold standard, on an international order. This was the good monetary union. And then there are the conflictual monetary unions. That was the theme analysed fundamentally in the paper on the immediate postwar period by Adrien Faudot, Nikolay Nenovsky and Tsvetelina Marinova, the story of monetary unions or currency arrangements in a world of conflicts, in a world of blocs inheriting the legacy of the 1930s. And then finally there was a very interesting discussion. Obviously a pity that Eoin Drea wasn't here to talk about his paper, because I think that had echoes for many, many people. Eoin provided an absolutely amazing story of how Britain and Ireland locked in terrible political tension – Ireland, after all, born out of a war of independence and a civil war, intensely conflictual, with enormous numbers of people killed in the course of both the War of Independence and the post-independence Civil War, and then living with a currency union with a country that in many ways stood for different things in the Second World War. Britain, the UK was a belligerent from beginning to end from 1939 to 1945, the Republic of Ireland was neutral all the time, like Switzerland, and neutrality produced its considerable problems. This kind of story of how a monetary union can possibly function in areas of conflict, I think might also be something that we think of as inspirational.

I think the fundamental thought that I would come away from this is that the kind of good monetary union of the 19th century and after the 19th century, in the early 20th century is also an era of peace. So it's very much in the Thomas Mayer kind of world: monetary union and the gold standard were born in the world of peace and trade connectedness and financial flows and falling interest rates and low inflation. So, how can we do that again? I think there is a substantial nostalgia for that. We just had this very interesting paper by Juliane Clegg at the end of the very last session of the conference. And it was a bit of a mystery to me why it is that Mrs. Thatcher, who was so dedicated to the idea of sovereignty (and, in fact, there's a very, very striking way in which the political and the economic are interconnected) was extremely resistant to going into the European monetary system. The Treasury and the Bank of England wanted to do that and they wanted to push it, but they couldn't really push her because she wasn't the kind of person who could be pushed.

Who could possibly have an influence on Mrs. Thatcher? And the Governor of the Bank of England asked the already very powerful, very charismatic chairman of the Federal Reserve Board, Alan Greenspan, to give Mrs. Thatcher a phone call. And Alan Greenspan explained in that phone call that the EMS was fundamentally like the gold standard in the nineteenth century. It was a disciplinary method. Discipline was a word that Mrs. Thatcher liked: it would provide a spine for economic policy in the UK, and that idea of a spine externally generated by a fundamentally benevolent outside view comes from the gold standard and still has its very, very powerful appeal. And so when we're thinking about this – many papers touched on this – why is it important for small and vulnerable economies and small and vulnerable countries to join up with other countries? It's not just about learning from them, but it's also about getting a spine. And maybe in this world of tension and difficulty, what we really should be looking for is indeed some kind of international spine, some mechanism that allows us to have good monetary unions rather than bad or ugly monetary unions. So let's think about the way in which we can embed this discussion of monetary unions into a general and global perspective that provides for stability and hopefully keeps some of those positive elements that Thomas sadly – maybe rightly, but sadly – feels are disappearing. Doesn't that spirit need to be revived? Thank you so much. I have enjoyed the conference and I have enjoyed the great hospitality of the Bulgarian National Bank.

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