

Fiscal federalism for the euro area? Hamilton’s Paradox in the political economy of monetary solidarity

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Hamilton’s Paradox and the euro area crisis

The lingering crisis of the euro area (EA) has made leading observers call for the completion of the economic and monetary union with fiscal federalism.¹ The insights of *Hamilton’s Paradox* (Rodden 2006) provide most useful caveats to such plans: “federalism can lead to spectacular debt accumulation and disastrous failures of macroeconomic policy.” (Rodden 2006: 2; cf Rodden and Wibbels 2002) Jonathan Rodden’s work on fiscal federalism takes the advantages of decentralised government seriously but stresses the inherent commitment problems in fiscal unions with differentiated powers of spending, borrowing and taxation. Formal assignment of functions to different levels, in the tradition of Musgrave (1959) and Oates (1972), cannot overcome this problem as it is undermined by the political logic of power-sharing.

Hamilton’s Paradox makes us understand that the problem of federations may not be so much that the federal level is weak but that it is not credibly weak. Hence, it is taken for a free ride by lower-tier governments, forcing the federal government’s hand to bail them out with central resources. The implicit bailout guarantee by the federal level that characterizes most federations has a weakening of market discipline in its wake (Rodden 2006: 93-94): credit ratings are too optimistic and debt accumulation of member states is too cheap.

The EA crisis poses a puzzle for this framework, however. In the EA, spending, borrowing and tax authority is fairly aligned: member states have “the means of extinguishment”, exactly as Hamilton requested (Rodden 2006: 75). Intergovernmental transfers are fairly minimal, the Union is above all a “regulatory polity” (Genschel and Jachtenfuchs 2014). There was simply no fiscal commons at the European level any member state could try to over-graze. The ECB has to observe a strict prohibition of monetary financing of sovereign bond issuers. Thus, the no-bailout clause should have been credible. Greece, a member state with notorious difficulties to attain fiscal sustainability, triggered the EA crisis but it is a small economy. One might have let the country default without much effect on the euro’s hard currency status.

¹ The most advanced “roadmap towards fiscal union” has been proposed by a well-publicised report of the Padoa-Schioppa group (Enderlein et al 2012). The authors take the problem of public debt and financial market imperfections seriously and are mindful of the political resistance to grand integration projects among EA citizens. They avoid the simplistic demand for a transfer union that proponents of Optimal Currency Area theory keep on repeating (Krugman 2013: 446).

It was the contagion in bond markets and the damage to banks in major member states that made the European Council chose another path, at the urgent request by the US administration (Barber 2010). Four more countries were bailed out whenever their government bond issues were shunned by markets, but not before. The programmes, monitored by a troika of European Commission, IMF and the ECB², came with severe strings attached; the harshness of the conditions has made governments fail amidst political unrest that produced new parties challenging the establishment. No government would wish to be exposed to such humiliation; Ireland and Spain tried hard to avoid a bailout programme by taking austerity measures pre-emptively. But market panic required them to seek additional external assistance.³

This paper argues that all existing theories of fiscal federalism have the problem that they are confined to *fiscal* federalism. Rodden (2006) goes beyond the Keynesian income flow analysis by Musgrave (1959) and notices that debt finance involves financial markets and their perceptions of implicit guarantees by the centre. But in the tradition of fiscal federalism, he sees the problem of excessive debt only on the demand side of states, not on the supply side of finance. Yet, US history provides ample evidence that financial markets were typically the source and rarely the pure victims of fiscal recklessness at lower levels of government. This means that the commitment problem can also be one of too little commitment to share in the risks that has befallen some members. Their endogenous risk-taking – endogenous to the insurance arrangement that a federation entails – can be productive and not excessive, as the blanket term of moral hazard suggests. If the downside risk materializes, the fortunate have a tendency to defect and not honour their promise of risk-sharing. The commitment to no-bailout has a lack of commitment to insurance as its flip side. This comes at a cost, not least to let a containable crisis escalate and engulf the federation/ union as a whole.

In the next section, I contrast my reading of the US crisis in the 1840s with the account of Rodden (2006: 55-71); I also touch briefly on crisis of free banking and the Savings & Loan debacle of the 1980s and '90s. Then I look at the EA crisis and argue that its pattern of a diabolic loop resembles those of major US financial-fiscal crises. Financial instability in pre-New Deal US and in the EA was caused by missing interfaces between fiscal, monetary and financial policies, a point that I will not pursue here in any detail except to say that federalism is one of monetary, fiscal and financial integration. The last section concludes. We need to apply Hamilton's Paradox to the monetary-financial-fiscal set-up of federations, not just to its fiscal side. The commitment problem that Rodden (2006) spots is too narrow: it is a dilemma of responsiveness by the central risk pool, to paraphrase Rodrik and Zeckhauser (1988). This conceptualisation reveals that bailouts also provide an insurance service for the commons when an intruder (the banking system) devastates the ground, rather than the herders themselves.

² Spain received only a bank restructuring programme from the European Stability Mechanisms (ESM), in which the IMF was not involved.

³ Ireland was forced by the Council to request a programme; Spain fought hard for its bank restructuring programme only in order to avoid conditionality on the government. Cyprus engaged in the most dubious manoeuvres that involved credit from Russia and competing for deposits of questionable reputation before it had to turn to the EU bailout fund.

Revisiting history: three debt crises of US states⁴

In light of European problems with public debt, the state debt crisis of the 1840s is nowadays portrayed as a crucial episode in US fiscal history (Rodden 2006: 7-8, ch.3; Henning and Kessler 2012). It was then that the federal government's commitment to no bailout became firmly established. This is true but I argue that the commitment problem simply shifted and became one regarding the financial system in the states. But this is outside the purview of fiscal federalism which tends to treat financial panic like bad weather, an exogenous shock. Here is how Rodden (2006: 58-59) describes the financial side of the 1840s crisis: "A negative shock came with the financial panic of 1837 and the onset of a major recession from 1839 to 1843. Reaching the first decision node for subnational governments in the bailout game, many of the states continued to borrow even more aggressively [...]. They continued to borrow until the entire financial structure collapsed with the banking collapse of 1840. Borrowing ceased, work on canals and railroads came to a halt, and meager tax revenues dried up completely. Above all, the land values that propped up borrowing in the first place began to fall." This account is revisited first, followed by a consideration of what subsequent crises revealed about the no-bailout commitment.

The first point to note is that the US had no central bank when the crisis broke in the 1840s and experimented with an extreme version of federalism, fiscal *and* monetary sovereignty, instead. When the Anglo-American War ended in 1815, the federal government assumed states' debt (Henning and Kessler 2012: 10) and a Second Bank of the US was founded to deal with the financial mayhem. It exchanged the inflated banknote issue for specie, writing down debt in the process; as before, it issued a legal tender for fiscal purposes (Broz 1998: 239). Its twenty year charter (1816-1836) coincided with an "era of internal improvement". States invested massively in physical and financial infrastructure. This raised their (domestic and foreign) debt to levels that were 50% above the debts they had incurred in the two wars before combined (Wallis et al 2004: 1). The Second Bank under President Biddle financed some of this infrastructure, thus acting as a development bank, not least to build constituencies in the states. But it also tried to rein in credit expansion with a view to external stability: whenever the dollar exchange rate fell, state banks were requested to convert their banknotes, thus contracting credit and generating demand for the dollar. This quest for stability put Biddle at loggerheads with President Andrew Jackson, known still today as the incarnation of populist conservatism. The President challenged the Bank's policies as an exercise of federal power, and rallied the states behind him in a "Bank War" that the central bank was bound to lose (Giannini 2011: 68-71). The charter of the Second Bank was not renewed.

What followed was a period of experimentation with state-sponsored financial innovation, as well as free (un-chartered) entry into the market by note-issuing banks. These experiments were backed by those who favored devolution of powers and elastic credit (Helleiner 2003: 123-139). Free entry made the expanding union very crisis-prone. Some states sought their own remedies and introduced obligatory insurance for bank liabilities, New York being the front runner in 1829 (Moss and Brennan 2001: 148-151). This safety fund system, with some variations introduced in six states, insured mostly the bank note issue but also deposits, and combined therefore lender of last resort and deposit guarantee functions (FDIC 1998: 3-12). Each fund was paid for by contributions from banks but the state guaranteed the bond issue to set up the fund. Insurance was the pretext for closer

⁴ This section reproduces parts of chapter 4 in my forthcoming book (Schelkle 2017).

supervision, notably that banks had to hold specified assets as loss-absorbing capital. This insurance system worked reasonably well.

But competition from the free banking movement undermined the safety fund system, and sovereign debt crises in the states ruined it. Shortly after the charter of the Second Bank expired in 1836, a major borrowing spree started, ironically fueled by the redistribution of a federal budget surplus (Trescott 1955: 239-240; Wallis et al 2004: 6). It ended with the sovereign default of eight states and a Territory (Florida) in the early 1840s, while twelve other states got in serious fiscal difficulties, out of a total of 28 states. Michigan's safety fund did not survive this crisis. A common factor was that the states continued investing heavily in transport networks and creating state 'land banks' (see below) but a long drawn out recession made these investments overoptimistic.⁵ There was a divide between supposedly profligate and prudent states which made the union unwilling to bail out and assume the debt of defaulting states, for what would have been the third time in 50 years (Wibbels 2003: 498; Henning and Kessler 2012: 11).

Economic historians have put forward a variety of reasons why those who defaulted did so: was it corruption or cronyism between state officials and bank managers, incompetence of state bureaucracies in planning large infrastructure projects, or just the bad luck of an economic downturn beyond governments' control? In a widely cited study, Wallis et al (2004: 10-11) review these explanations and find them wanting in their generality. Each explanation assumes that the US was one country rather than "an empire of different geographic and economic regions at different stages of economic development" (Wallis et al 2004: 26). The only similarity in all cases was that governments invested in what they saw as their future tax base, promoting higher land prices and more intensive land use through public investment. Wallis et al (2004) document that there was actually nothing corrupt or megalomaniac in these projections. But with the benefit of hindsight we can see that these policies set up a feedback loop that made them vulnerable to the slightest shock or disappointment of projections (English 1996: 261-262; Frieden 2015).

The default of the Southwestern states in the early 1840s was due to a particular feedback loop that resembles the disastrous experience of Ireland and Spain 170 years later (see next section). The Southwestern states had invested heavily in land (or plantation) banks by issuing state bonds to them in return for a share in their capital stock. The banks were responsible for servicing this debt. The other investors were plantation owners who acquired capital stock by giving the banks mortgages on their land. These private investors could then borrow to buy more land (and slaves) to work the land. Initially, banks financed these mortgage loans by selling the state bonds given to them. In case of default, the holders of these state bonds had to take recourse to the securitized loans: the mortgages of private investors, the plantation owners.

This created the perfect conditions for a feedback mechanism between defaulting banks and states (Wallis et al 2004). As long as lending boomed, land values rose, making banks even more willing to lend against this security. But inevitably some event would eventually cast doubt on the valuation.⁶ As land prices adjusted to more pessimistic expectations, mortgage credit came to exceed the value

⁵ The latter was in particular the case in the Southwestern states, ironically because they wanted to make up for the closure of Second Bank branches which had financed considerable activity in the trans-Appalachian west (Wallis et al 2004: 6).

⁶ In 1840, the shock arose from credit tightening by the Bank of England that led to a tightening of monetary conditions in the US (English 1996: 263).

of the underlying security. This put borrowers “under water” (holding negative equity) and led them to default on their mortgages. Their default created difficulties for the banks which needed cash flow to pay interest on their liabilities, the state-issued bonds. When the bondholders approached the state government, they were told that the bonds were secured by mortgages that had defaulted or seriously depreciated. Obviously, states could have re-assumed these debts or acted as lenders of last resort, which Alabama did (Wallis et al 2004: 16). But sovereign credit was itself dependent on revenue from property taxes which collapsed with the fall in land prices and defaults on mortgages (Wallis et al 2004: table 7). Issuing new public debt was not possible at a sustainable interest cost. Four out of the five Southwestern states chose to repudiate the state debt by letting the land banks fail.⁷

One might argue that this was a disaster of the states’ own making, namely creating these land banks. Another type of feedback loop could be observed in the simultaneous experiment of free banking. Free banking was the polar opposite of diversifying risks through central pooling, as favored by Hamilton. The immediate political motivation of the free banking movement and the Free Banking Act of 1838 was a conservative-libertarian backlash against state chartering of banks: government control at any level was resented (Moss and Brennan 2001: 151, 155-160). The Act allowed banks to enter the market and issue banknotes freely as long as they fulfilled two conditions: every bank had to hold loss-absorbing capital of \$100,000 and had to cover its note issue with high-grade bonds or low risk mortgages to be held with the state’s comptroller. The high-grade bonds could initially be federal or any state bond but the list of eligible reserve assets was later narrowed down, disqualifying the bonds of other states. This was the opposite of spreading risk, since note issuing banks and their customers in the state were susceptible to similar risks.

Free banking was meant to be a risk reduction strategy imposed by regulation (Moss and Brennan 2001: 156). Yet free banking shifted risk onto the note-holders. If the bonds backing the note issue became dubious, the banknotes lost in value and traded at a discount: “there were effectively state currencies – all called dollars, but trading at different values depending upon how much faith people had in the backing of the banknotes issued by the state’s banks.” (Frieden 2015: n.p.) Free banking dissolved the monetary union and shifted risks onto those least able to bear them.⁸ The reserve requirement greatly restricted the elasticity of credit supply: “a little like trying to eliminate automobile accidents by reducing the speed limit to zero”, in the apt analogy of Moss (2002: 91). The free banks invented a new financial instrument to get around the credit constraint: their innovation was checks to be drawn on deposits. Checks economized on the use of banknotes, which allowed banks to expand their lending. Bank deposits soared relative to the controlled stock of notes and specie.

The 100% reserve on bank notes could not prevent a devastating feedback if notes were not accepted as a means of payment. When a bank panic started in 1857 because a large life insurance company could not honor its obligations towards New York banks, several of them were unable to redeem the banknotes in specie. Their attempt to sell the high-grade bonds did not help either. The specie price of bonds was bound to fall when everybody rushed to liquidate bonds in order to get

⁷ Two states (Arkansas and Louisiana) later repaid most of their debt, presumably in order to resume access to international credit markets at low cost. However, Florida and Mississippi never repaid and got access as well (English 1996: 263-265).

⁸ A later chapter of my book explains why: there was no payments system based on irredeemable bank notes (fiat money) to assure the unity of the monetary union.

specie (Moss and Brennan 2001: 157). The value of the reserve then dropped below 100%. The fall in bond prices made it less likely that the states could bail out a bank without jeopardizing their own viability, which in turn exacerbated the run on banks. A number of free banks and three safety funds failed, creating a nationwide panic in the process (Moss and Brennan 2001: 160).

What the conservative backers of free banking had not appreciated was that such a self-fulfilling panic through “fire sales” can only be stopped by spreading the risk over a larger pool. This requires centralization, either by backing banknote issues with federal bonds (provided the federation can withstand the troubles of individual states), or by creating a central bank that can act as market maker with a non-profit motive and deep pockets, buying the bonds (or more generally the reserve asset) and thus stabilizing their price in legal tender. Neither happened. Instead, eleven states wrote debt restrictions into their constitutions which became the norm of balanced budget rules for all states (Wallis et al 2004: 27). These rules amount to a no-bailout clause for the financial system and it is hardly surprising that the US economy experienced many more bank panics subsequently.

This ended only with the reforms of the New Deal: a central bank that issued a common currency and acted as a lender of last resort, a federal deposit insurance and resolution authority with the backing of federal debt (the FDIC) and a federal income tax system (automatic stabilizers). But such stabilizing capacity through federal risk pooling comes with a commitment problem that is not one vis-à-vis lower fiscal levels but vis-à-vis the financial system. The Savings and Loan crisis of the 1990s can illustrate that: The change in the monetary regime after 1971 and the Fed’s shift to money supply control in 1979 (the “Volcker shock”) led to increased exchange rate and interest rate volatility. Interest rates on government bonds rose to double digit levels. This created a major problem for the savings and loan (S&L) institutions or “thrifts”. They originated in mutual saving associations for homeownership in the early 19th century and were therefore politically cherished retail banks. Their loan business was in residential mortgages, so they were locked into long-term fixed rate assets. Because they were not allowed to pay market interest rates on deposits, they lost more and more savers when interest rates rose. Only low income households with no access to other savings vehicles stayed with the thrifts, their small savings being eroded by inflation with no interest compensation. Ironically, this regressive effect motivated the first legislation to liberalize financial markets, the Depository Institutions Deregulation and Monetary Control Act of 1980, passed under Democratic President Carter. The restrictions on interest rates on household deposits were phased out and the distinction between savings institutions removed so that they could all enter the same markets for financial products. To make up for the losses they had already incurred, rendering many thrifts insolvent, capital requirements were lowered and they were allowed to enter riskier market segments with the Depository Institutions Act (Garn-St. Germain) of 1982 under the Reagan administration (Robinson 2013). Regulators and legislators had an incentive to exercise forbearance because the federal deposit insurance fund for S&Ls (FSLIC) was de facto insolvent and many S&Ls had no access to the Federal Reserve System as the lender of last resort.

Regional recessions were the straw that broke the camel’s back: the geographic concentration of investments and lending made the risk that hit the S&Ls uninsurable at the state level (Todd 1994: 9; FDIC 1998: 49). Real estate prices, especially in Texas, fell massively and left mortgage borrowers insolvent. Many S&Ls were wiped out because the low value of the houses and condominiums did not even make it worthwhile to incur the transactions costs of marketing them for sale in severely depressed regions. The Financial Institutions Reform, Recovery and Enforcement Act of 1989 finally acknowledged the problem. A bad bank cum resolution fund restructured the sector, the insolvent

deposit insurance fund for the sector was closed down and federal insurance was from then on provided by the FDIC (FDIC 1998: 51-53).

Devastating as the S&L crisis was, a feedback loop from the S&L debacle onto state budgets was prevented. Since the 1950s, many states had sponsored the opening of private deposit insurance funds. Many failed in state-specific crises: first in Mississippi in 1976, then in Nebraska and California in 1983, Ohio and Maryland in 1985, Utah and Colorado in 1987, and finally in Rhode Island in 1991 (Todd 1994: 1).⁹ Three of the biggest calamities, that could have wrecked the state easily, are compared by Todd (1994: 8-13). One way or another, each state got an indirect federal bailout. Rhode Island received a federal loan guarantee for a bond issue to restructure and recapitalize its S&L sector. The way out for S&Ls in Ohio was short term liquidity assistance from the Federal Reserve Bank of Cleveland, aided by the governor's declaration of a bank holiday "that required all institutions insured by the failed private fund to close until they were either assured of receiving federal deposit insurance or sold or merged into a federally insured institution." (Todd 1994: 10) In Maryland, the Federal Reserve Bank of Richmond had to step into the breach and provide support to the S&Ls for more than four years. It bought time for the state government to compensate depositors out of the revenue from state-sponsored bond issues (Todd 1994: 12). But Ohio and Maryland relied too openly on offloading their problems unto the federal deposit insurance "without substantial injection of state funds" (Todd 1994: 3), acting in bad faith which Congress punished. Substantial amounts of state funds had to be used to restructure the sector. Texas experienced the biggest crisis, counting for more than half of all S&L losses. It was rescued in the so-called Southwest plan, overseen by the FDIC, which guaranteed losses of up to \$50 bn (GAO 1990).

Throughout the S&L crisis, the letter of the no-bailout norm for state budgets was honored in that the federal government did not assume state debt directly (Henning and Kessler 2012: 12). But there was still a federal safety net that prevented a feedback loop by assuring bond markets of a backstop should the state default. A price was extracted for this support: state governments had to cut public goods provision and raise taxes. Assets of about \$519 bn were restructured and the number of federally insured thrift institutions halved between 1986 and 1995. As of 1999, the cost of the S&L crisis was estimated to amount to \$153 bn, over 80% of which was borne by the US taxpayer and the rest by the thrift industry (Curry and Shibut 2000: 26, 33).

This account has two messages: first of all, a full account of fiscal debt problems that states in a federation encounter must include the role of the financial sector. This is because, secondly, fiscal crises are almost always fiscal-financial crises, often starting with a financial crash as Rodden (2006: 58) explicitly mentions but does not consider for further analysis. A firm no-bailout clause among fiscal authorities merely shifts the commitment problem and lets devastating feedback loops run their course until the federation as a whole is endangered.

On to the present: state debt crises in the euro area¹⁰

Diversity of members is a key feature – and rationale – for federalism and devolved policy powers. My work is interested in how diversity provides opportunities for risk sharing in a monetary union and asks how such risk sharing emerges as a by-product of member states' selective incentives (Broz

⁹ The sector's federal deposit insurance fund stopped accepting new claims by early 1989.

¹⁰ This section reproduces parts of chapter 6 in my forthcoming book (Schelkle 2017).

1998: 234-235). Once this by-product becomes deliberate risk-sharing, typically enshrined in institutions, I call it solidarity (monetary insofar it makes monetary union share risks). But the more diverse member states are, the more difficult is cooperation. A number of “political market failures” (Keohane 1984: 85-100) militate against it: real or perceived asymmetric information (adverse selection, moral hazard) that is more severe the more diverse members of a prospective risk pool are; commitment problems of the fortunate, once the veil of ignorance has been lifted; externalities that may become stronger as integration makes members more interdependent.

If one takes diversity seriously, there may be different vulnerabilities that can push economies into crises. It leads one to expect a certain randomness in asymmetric (non-systemic) shocks. From this point of view, an explanation for a *systemic* crisis should be found, firstly, in hard-to-insure risks and, secondly, in a setting for risk-sharing that cannot prevent collective action failure and may even provide incentives for shirking common responsibility. This failure meant that a self-fulfilling process could run its course, pushing vulnerable economies into devastating crises.

The shock causing the EA crisis was not asymmetric and idiosyncratic¹¹, but followed the *common* shock of the financial crisis. Since this shock was largely created by monetary-financial integration between all advanced economies, albeit particularly intensely in the EA, it created problems for banks in all advanced economies. Some banks were prone to insolvency once their dubious assets were properly priced, others were dragged into the abyss because contagion and fire-sales of assets led to a crash in asset prices that were actually priced correctly before the crisis.¹² The common shock wiped out loss-absorbing capital of highly leveraged and sound banks alike. Central banks came to the rescue by providing liquidity against collateral and buying assets, to stabilize the prices of these assets and ultimately to prevent a general melt-down that would have destroyed savings of households. Governments took a lot of the financial risks on their books, by becoming shareholders and by acting as guarantors of bank liabilities.

Commonality of shocks is a problem for insurance.¹³ The costs can only be shared with future generations. And governments did this, increasing public debt in a way last seen in the Second World War. They did so in order to bail out domestic banks and their savers, as well as to stabilize the economy with fiscal stimulus packages and automatic stabilizers (Schelkle 2012a). Public debt was also the counterpart to allowing households and firms to deleverage (reduce their indebtedness). For this, they have to achieve a surplus of their earnings over expenditures, for which they need a counterparty that does the opposite. Deleveraging through current account surpluses (foreign demand and debt) is more attractive, but is counterproductive in a global recession.

The common shock in 2008 and its spreading thereafter highlight the considerable and measurable integration of European financial markets (Coerdacier and Martin 2009; Waysand et al 2010: 2). But increased integration had not been accompanied by the development of a co-extensive

¹¹ As the mainstream theory of optimal currency areas claims, cf Krugman (2013: 440).

¹² See Brunnermeier et al (2009: 13-24) for a summary of these propagation and amplification mechanisms.

¹³ Evidence of co-movements in output growth can be found in a research article for the *World Economic Outlook* in October 2013: “[T]he recent global financial crisis [...] stands head and shoulders above the other events in the sample in terms of inducing strong output comovements. It is literally off the charts, with an impact on output comovements four times larger than that of any other event during the past several decades.” (IMF 2013: 86) The “other events” start with the oil-price shocks of the 1970s and include Black Friday of the mid-1980s, the ERM crisis in the early 1990s as well as the Asian and Russian crises in the late 1990s.

supervisory infrastructure and resolution facilities. Financial integration in this situation meant interdependence and heightened exposure to risk, not automatic risk-sharing through cross-border asset holdings. As early as June 2010, the BIS (2010: 18) indicated in its *Quarterly Review* how much EA banks could lose on their claims against “residents of the euro area countries facing market pressures”. At the end of 2009, when the Greek budget data began to unsettle markets and officials, banks in the EA held claims to the tune of around €1,100 bn, that is 62% of all foreign bank claims on Greece, Ireland, Portugal and Spain.¹⁴ This figure related to claims consolidated on an ultimate risk basis; in other words, if those countries defaulted, losses would have to be borne by these EA banks. French and German banks were particularly exposed, holding more than half of the combined exposure (€345 bn and €325 bn respectively). Exposure went beyond the EA: banks headquartered in the UK were the largest creditors of Ireland (€160 bn) and held large claims on Spain (€98 bn). Last but not least, there was the real threat of a domino effect among vulnerable economies: for instance Spanish banks were the largest creditors of Portugal (€77 bn).

Against this background, it is understandable that governments were reluctant to let Greece or any other sovereign default, for fear of a second Lehman moment. Sandbu (2015: 67-69, 101-104, 116-118) sees this as the greatest mistake in the management of the EA crisis: that no sovereign and private default was allowed. He sees Denmark as a successful example of a country where banks were allowed to fail; the country got through the crisis relatively unscathed, despite very high household debt. Another example is Hungary where the government effectively wrote off household debt by legislating that households could pay back their mortgages, denominated in foreign exchange, at historical exchange rates. This meant that the claims of the (foreign) banks were written down by about 30% and other governments bailed out the foreign-owned banks (Bohle 2014: 935-936; Mabbett and Schelkle 2015: 517-519). But these were essentially national solutions, through self-insurance (Denmark) or burden-shifting (Hungary); this could not work for the EA as a whole.

The commonality of the financial instability became less obvious in the months after the major hit arising from the difficulties of Greece, and this became a problem for collective action. Market observers came to perceive some EA members, rightly or wrongly, as more fragile than others. Governments were in the spotlight because, as Paul De Grauwe (2011) wrote in a widely cited paper, the ECB’s role as lender of last resort to governments was not assured, by contrast with the backing enjoyed by the British and US Treasuries from their respective central banks. Bond investors started to differentiate between high risk member states and the rest. Greece was an obvious target because of the adverse trajectory of its public finances. Yet it is not clear that this was the reason why Greek bonds were sold off after late 2009. As argued above, the downgrading of Greek bonds by Standard & Poor’s, coinciding with the ECB’s announcement that lower standards in collateralized lending would be phased out (Trichet 2009), was enough to unsettle the markets. This suggests that Greece was simply the weakest link that broke first. The next country in the line of fire was Ireland, in every relevant aspect different from Greece. From summer 2009 onwards, the Irish government had adopted an ambitious orthodox program of budget consolidation that was hoped to yield “expansionary austerity” (Guajardo et al 2014), only to be attacked in bond markets a year later because the effects were brutally contractionary.

¹⁴ BIS (2010: 18-19), US \$ amounts converted at a historical (interbank) exchange rate of 0.7 \$/€.

There was a considerable constructed and self-fulfilling element in this evolution: member states became high risk, or not, depending on market sentiment. For instance, it is not obvious why Belgium with a public debt ratio of 99.5% in 2009, up from 87% in 2007, was not in the group of countries attacked in bond markets. Two major cross-border banks, Dexia and Fortis, had to be bailed out soon after the Lehman default, in difficult cooperation with French and Dutch authorities (Pisani-Ferry and Sapir 2010: 354-355). Belgium is a divided country, and it had a caretaker government for over 500 days in 2010-11 that was legally constrained in its actions. Belgium's net international investment position was quite concentrated on the countries under pressure: the net claims of its banks on Greece, Ireland, Portugal and Spain amounted to 50% of Belgian GDP at the end of 2008 (Weysand et al 2010: table 2a).¹⁵ Similarly, Austrian banks and investors could have become a victim of contagious currency attacks on non-EA-countries in Central and Eastern Europe that were widely feared at the time. Austria's net international investment position included claims against Visegrad countries, Bulgaria and Romania to the tune of 30% of GDP (Weysand et al 2010: table 2a).

This evidence about individual countries is supported by rigorous cross-national studies. Research has provided evidence that panic and contagion, not fundamentals like high imbalances, explained why certain governments had to pay high risk premia on their new bond issues. For instance, De Grauwe and Ji (2013) estimated the explanatory power of the current account balance and the budget balance, both measured as ratios to GDP, for the level of government bond spreads. In no specification does the current account balance have any significance. The government balance does, but the best specification is non-linear, indicating that expectations of a default, a tail event, play the key role. The authors show that the crisis in 2008 marked a structural break: having underpriced risks on EA government debt before 2008, financial market investors became suddenly oversensitive to these risks. This assessment is based on the observation that non-euro ("stand-alone") countries with similar public debt ratios did not have to pay such risk premia. Only for Greece did De Grauwe and Ji find that fundamentals, specifically government finances, could explain the market reaction; for all others, the market reactions had a self-fulfilling character.

The crucial point for the political economy of monetary solidarity is that there was nothing deterministic in the turn of a common shock into a handful of country crises. It was fundamentally underdetermined whether any particular country would get into deeper troubles and, if so, which one. Greece is the only possible exception but it would, without the previous common shock, have been too small to rock the boat. After the most severe crisis in post war history, the governments of most member states were vulnerable to bond market attacks. Even France and Germany would have been vulnerable if the EU and the IMF had allowed Greece to default early and markets had taken this as a precedent for further problems, notably in Italy which has the third largest government bond issue in the world.

Given this widespread exposure to extreme market instability and uncertainty, one might have expected resolute collective action to protect the commons from devastation. Some of this was on display in 2008-09, with the G20 setting an agenda for comprehensive financial reregulation. The EA

¹⁵ However, the international investment position is based on location of the immediate lender and borrower, not consolidated on an ultimate risk basis (for instance when the guarantor of a credit is in another country, the claim would be on that other country, not on the countries in distress).

got relatively well through the first phase of the financial crisis 2008-09 (Schelkle 2012a) but was less successful in mustering collective action after 2009. How come? The answer has three elements.

First, the Greek calamity looked like the very case of fiscal irresponsibility that fiscal surveillance and the no-bailout clause were meant to prevent. Governments could not simply ignore these institutions; they had insisted that they were necessary for making the commitment to a hard currency credible. If there was some belief in these institutions, decisionmakers must also have feared that markets would take against the euro if they were lenient with Greece, a serial sovereign defaulter in its modern history (Reinhart 2010: 53). This fear cannot be entirely dismissed as delusion: the fact that the euro was never sold off and remained fairly strong throughout the unfolding crisis vindicates this reading of what markets expected, namely keeping up appearances of rule-based policymaking.

But then followed Ireland and later Spain, neither of which could be portrayed as being addicted to fiscal excess. Here the second element came into play. The panic in bond markets itself obstructed collective action: it lifted the veil of ignorance and divided the risk pool into countries that were a casualty and others that were lucky. Government bond spreads rose for some member states, but not for all. Once the veil lifts, the lucky have an inclination in any insurance scheme to regard their luck as merit and the unlucky as deserving their mishap. The “revelation” of Greece’s dismal government statistics - not really news to EU insiders - had already nurtured this inclination. The Irish government’s unilateral decision to guarantee all liabilities of Irish banks shortly after the Lehman collapse could be interpreted as self-inflicted harm which was not covered by the insurance contract. The Portuguese and the Spanish government got somewhat more sympathetic responses as they were honestly struggling to help their households and firms to deleverage. Italy and Greece got technocratic governments, under Mario Monti and Lukas Papademos respectively, that tried hard to appease bond markets.

But just when most policymakers came round to see the self-fulfilling properties of the EA crisis, Cyprus gave new impetus to the conviction that the root cause was a deep divide between a profligate periphery and a prudent core. It is hard not to see self-inflicted harm in the audacious strategy adopted by Cypriot banks, betting on a big gain from a second bailout for Greece (Lütz et al 2015: 8-9). This chutzpah was only matched by the hubris of the government, which attempted to capitalize on Cyprus’ safe haven status for Russian savers and tax evaders. And so the lucky felt vindicated in treating the unlucky as if it were entirely their fault, albeit some more than others.¹⁶ The acronyms GIPS and GIIPS stand for this pernicious rounding up of the usual suspects.

Beyond these concrete features of the crisis in 2010-12, a third problem for collective action lay in the EA’s institutional set-up, which made sovereigns in distress look as if they had failed in their duty to treat budgetary policy as a matter of common concern. Before recent reforms, only the trespassing of fiscal rules could lead to a formal warning by the EU Commission and the Council, while excessive mortgage credit or an unsustainable current account balance could not. Once the crisis hit, the fiscal accounting rules of Eurostat ensured maximum fiscal transparency, in line with internationally agreed standards, so that the socialization of private debt materialized as liabilities of

¹⁶ Differentiation between program countries came to the fore when German finance minister Schäuble was secretly filmed in February 2012, promising his Portuguese counterpart Gaspar that there was flexibility in the conditions for Portugal once firm decisions on the Greek program had been taken (N-TV [2012](#)). The revelation caused outrage in Germany and Greece.

government.¹⁷ Hence, the crisis in the EA was bound to emerge in government bond markets. When it finally made its highly selective appearance, the apparent “root cause” of sovereign debt provided the pretext for refusing collective responsibility. Given how fiscally stretched all authorities were or felt, there was little incentive for solidaristic gestures, such as introducing a joint debt instrument that would prevent countries being picked off by the bond markets.

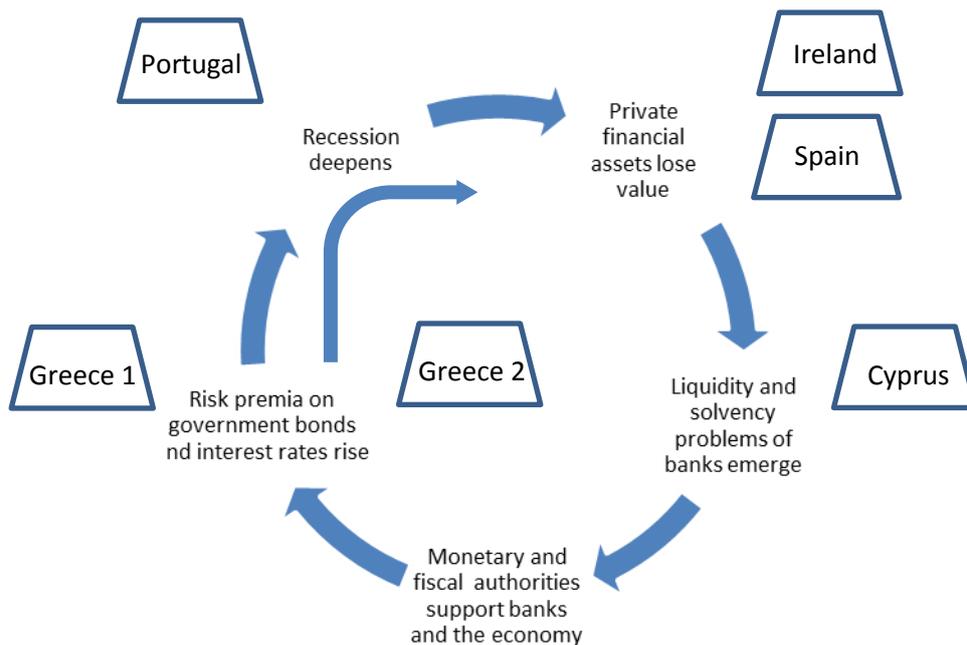
Market mechanisms – rising interest rate costs and a depressed economy – make crisis countries look as if they did not tighten their belts but added more debt instead. Officials in the Commission and the IMF, the much maligned technocrats, know that fiscal effort does not readily translate into fiscal outcomes (Larch et al 2010, Spiegel 2014) although they may have underestimated it. The Independent Evaluation Office of the IMF criticized the Fund for missing the highly adverse effects of austerity on growth and the ensuing debt dynamic (IEO 2016: para’s 65-68). The wider public, the media and other governments may be even less clear about this. Moreover, EU fiscal surveillance does little to dispel the suspicion that rising debt is always a sign of governments not trying hard enough (Mabbett and Schelkle 2016: 131-136). This played into the hands of those for whom it was more convenient to let these countries fend for themselves. Misperception, systematically created by the institutions of limited cooperation, can thus prevent collective action.

What the five countries have in common is that they were drawn into what are now officially called “bank-sovereign negative feedback loops [...] at the heart of the crisis” (Juncker et al 2015: 11). The underlying diagnosis is shared by many,¹⁸ even by those who see divergent growth regimes to be the cause for divergence and crisis in the EA (Iversen et al 2016: 10.17). The fatal nexus can start anywhere. Banking crises were arguably the starting point in three out of the five countries. This resonates with a study of all developed country crises between 1970 and 2010 by Babecký et al (2012): they find that currency (for the EA read: current account) crises and sovereign debt crises tend to follow banking crises but not vice versa. Here is how we can account for the diversity of the countries in terms of the bank-sovereign feedback loop; countries are located where they had their greatest vulnerability at the point when they needed a program (two for Greece).

¹⁷ Mabbett and Schelkle (2016) go through concrete examples of how the fiscal accounting rules treat bank rescue packages and the public sector in a recession.

¹⁸ The literature on the diabolic or doom loop has exploded after 2010. For influential accounts and/ or influential voices see the contributors to the collection by Beck (2012), De Grauwe (2011), and for the US discussion Shambaugh (2012) who added a growth crisis to the loop.

Fig. 1: Location of program countries in the feedback loop between private and public finances



As the last section explained for the US, the negative feedback loop can arise whenever a state fiscal authority has to support its banking system and cannot draw on shared fiscal resources or central bank support. Paradoxically, it is exactly this limited risk-sharing that forced member states to underwrite truly massive bailout programs. Pre-committed amounts must be large enough to deter speculation that the funds could run out. Otherwise, such speculation has the unfortunate tendency to precipitate a crisis. This is how Charles Kindleberger explained why the IMF could not fully substitute for a central bank that issues the world currency, which was the role of the Federal Reserve Bank under the dollar standard agreed at Bretton Woods (Kindleberger 2000: 216). This was also the insight on which all models of self-fulfilling currency attacks rested, the pre-committed amounts in this context being foreign exchange reserves (Obstfeld 1996). The deliberations about the size of the first emergency funds indicate that decision-makers understood the need for large funds that signaled to speculators sufficient “firing power” on the other side.

Lending programs not only enable a government to finance its activities without entering the bond market; they also act as a firewall for the governments not (yet) in distress. This means that a loan, while made to one country, can be seen as addressing a matter of common concern. This was explicitly emphasized in the European Council conclusions announcing the creation of the ESM. The Council rejected continued reliance on Article 122(2) TFEU, the provision that was used initially to help countries out of “difficulties beyond the Member State’s control” (European Council 2011: para 4). The permanent stability fund, by contrast, is “to be activated if indispensable to safeguard the stability of the euro area as a whole” (Article 136 TFEU). This highlighted how programs could help member states in danger of being next in line, notably Italy and Belgium with their large government bond issues.

The “strict conditionality” that has to be attached to every program (European Council 2010: para 3) underlines that the protection is meant to discourage behavior that makes the need for a program more likely – but it also reveals that the signing governments are aware that their mutual insurance contract can encourage risk taking. Both the size of the programs and the intrusiveness of

conditionality extend fiscal risk-sharing. Controversial as they have been, the programs are less demanding institutionally than fully-fledged fiscal risk-sharing, whereby members contribute revenue to a central budget and have current expenditure paid out of it. The counterpart of such budgetary mechanisms is that the member has much less sovereignty over its budget. The troika programs, by contrast, leave the formal sovereignty of a member state intact, for instance by asking it to initiate the negotiations and by putting the eventual Memorandum of Understanding to a parliamentary vote.

Hamilton's Paradox and the political economy of monetary solidarity

The discussion in the previous section has emphasized how incompleteness of risk-sharing is the product of a compromise between recognizing the existence of collective action problems and fearing the possibility that individual countries will exploit collective institutions due to moral hazard. Incompleteness is therefore not necessarily a design flaw that can be "fixed" once it is recognized (De Grauwe 2013). In both the EA and the US, it required existential crises to prove that the pre-crisis arrangements were untenable. A fiscal federation in the EA is a long way off because more limited solutions will be tried out first and may prove sufficient, striking a balance between solutions to competing political market failures. After the 1840s crisis, it took the US another half century of financial instability before a viable and reasonably stable union was founded. The EA has not found an institutional equilibrium yet: the banking union has still no joint fiscal backstop and any major banking crisis will overstretch the newly created resolution capacities.

Hamilton's Paradox can explain why dominant member states of the EA, like Germany and the Netherlands, are so reluctant to subscribe to a joint budget. The "very specific question" that Rodden (2006: 15) asks formulates their concern: "Under what conditions do the actions of state and local governments strengthen or undermine the overall fiscal discipline of government?" But the previous two sections show the limitations of this question, even from a member state perspective behind the veil of ignorance: fiscal discipline can be beyond the control of state and local governments because financial markets do not allow for it. From any government's point of view, fiscal discipline is, like price stability, merely an instrumental goal to ensure conditions conducive to maintaining economic well-being and political order.

It is normative public choice theory that declares fiscal discipline to be a goal in itself. It keeps Leviathan on leash and thus the single most important force of destabilization. But when financial market instability threatens to drag entire economies into the abyss, authorities are regularly in a "dilemma of government responsiveness". Rodrik and Zeckhauser (1988) have taught us that there is no real solution for this dilemma, only imperfect ways of staying away from it as much as possible. This dilemma is so inescapable because along the way of an ensuing boom-bust cycle, there has typically been some failure on the part of government to rein it in and government may even have directly benefitted from the boom while it lasted.

As soon as fiscal discipline is seen as one among many goals that can preoccupy policymakers, we can also see another version of the commitment problem. This is the lack of commitment by the fortunate to honour their obligations of risk sharing. A state fiscal crisis may actually be the sign that the regional government tries to absorb the financial shock so as to protect the rest of the economy against the negative externality of bank failures. This can be in the common interest even if the state government does it merely for the sake of its constituency. If a regional fiscal authority has not

enough shock absorption capacity, the collective of other member states – represented by a federal government or the union of member states – has a choice to share in this risk or let the member fend for itself. The fortunate are always inclined to choose the latter, denying assistance to the unfortunate, with the convenient justification that this signals commitment to fiscal discipline. Financial markets may even reward such self-serving defection with the status of safe havens.

This commitment to no-fiscal bailout can of course only shift the risk somewhere else if fiscal risk is financial in its origin. Such a shift is exactly what the US federation has managed: the risks from financial instability have been federalised and the balanced budget rules work only because of this ex ante risk pooling, monetary solidarity that came with the New Deal reforms. The FDIC and the Federal Reserve System are the front-line risk pools and perform fiscal bailouts of the states. The federal budget provides fiscal backing when major solvency issues arise after the lender of last resort has done its job and the resolution fund/ deposit guarantees by the industry are too small. This arrangement still provides bailouts for state governments which has again been performed in 2008-9. It prevented the US from entering a series of doom loops that characterized the EA crisis. But such state fiscal discipline also has costs. Balanced budget rules weaken automatic stabilizers because the states have to tighten and expand their budgets pro-cyclically (Svec and Kondo 2012). This implies free riding on the stabilization effort of the federal government.

The crisis management of the euro area shows another cost of the collective attempt to stick to a no-bailout commitment. The crises of a few states may escalate and threaten the fortunate as well. This was the situation in mid-2012 when panic was about to engulf the Italian government bond market. Heads of state then decided to form a banking union, let the ECB announce Outright Monetary Transactions in the famous “Do whatever it takes”-speech of ECB President Draghi and bring the European Stability Mechanism forward by a few months. These institutions of solidarity were the by-product of the fortunate member states’ incentives to build firewalls between themselves and the members on fire. Some fire-extinguishers were created in the process.

Hamilton’s Paradox thus comes back with a vengeance. The original paradox seems to state that the more devolved spending powers are in a fiscal federation, the more state governments will rely on central bailout capacity. We see this paradox in financial-fiscal-monetary unions as well, where state fiscal authorities have banking systems underpinned by a common monetary standard. The most readily available central capacities will be relied upon when disaster strikes. In the US, this tends to involve the federal budget, if only in the sense of providing the Treasury bonds that the FDIC is invested in, to be liquidated at low cost when needed, or in the sense of providing indemnification to the Federal Reserve when it buys dubious assets in the course of lending of last resort operations. In the EA, the only available central capacity is the ECB with its deep pockets: it was pushed into quasi-fiscal interventions by the inaction of exactly those member states that insisted on the ECB’s independence and a narrow price stability mandate (Schelkle 2012b).

This reliance on central bailout capacity can be called a dynamic commitment problem triggered by moral hazard of the members. But a wider framing that includes financial integration shows that the commitment problem is a consequence of externalities of financial instability. It can turn any state crisis, whether caused by excessive risk taking or not, into a systemic crisis of the union. This is the threat that the fortunate of an insurance arrangement face when they renege on their side of a mutual commitment. There is not only a problem of discipline but also poetic justice in Hamilton’s Paradox.

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