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Abstract

The American system of unemployment insurance (UI) is often cited as a model for potential European unemployment re-insurance schemes. While oversimplified comparisons are to be avoided, there are lessons Europe can learn from US federal-state relations regarding UI. We distinguish three aspects of the US system: first, in the 1930s the federal government was able to solve a collective action problem that impeded the development of state-level UI programs; second, during the 1950s Congress enacted a federal backstop for depleted state UI trust funds that are used to finance regular UI benefits; third, in the 1970s the federal government added an extra layer of UI to the state system, based on an intergovernmental co-financing of benefits which intensifies during crises and thus reinforces protection and stabilization where and when it is most needed. The second and third aspects now exercise European interest, which is about buttressing national systems with a supranational layer of insurance. The American experience shows that federal-state cooperation has overcome problems of collective action and enhanced stabilization. It proved to be of great importance in the Great Recession to effectively expand the protection of unemployed workers and to backstop state UI programs in a period of high and rising unemployment and thereby to contribute in a relevant way to the stabilization efforts of the Obama Administration. However, there are also some structural weaknesses in the American system. With a view to what might be developed in the EU, we identify two risks when an extra layer of unemployment protection is added at the supranational level. First, depending on the set-up of the system, federal-level financing of UI can lead to retrenchment of state-level efforts in terms of UI schemes and macroeconomic stabilization. Second, state-level retrenchment can lead to divergence between state UI programs. The US UI model is vulnerable to these two risks, although this may not be its main current challenge. Simultaneously, these risks – and the other problems besetting the American model – are not insurmountable. We draw both positive and cautionary lessons from the American experience. A lesson is that minimum requirements regarding generosity and coverage levels of UI programs are fundamental prerequisites for any supranational re-insurance.

Keywords: Unemployment insurance, European unemployment re-insurance, macroeconomic stabilization, fiscal federalism
**Introduction**

In 2012, the report on the future of the Economic and Monetary Union (EMU), presented by the presidents of the European Council, the European Commission, the Eurogroup and the European Central Bank, suggested to create a macroeconomic shock absorption mechanism: “an insurance-type system between Euro Area countries”. One option mentioned is a fiscal capacity that would act as a “complement or partial substitute to national unemployment insurance systems” (Van Rompuy et al., 2012, p. 11). Since then, the idea of a ‘European Unemployment Benefit Scheme’ (EUBS), in particular an EMU-level ‘unemployment re-insurance’, is garnering significant attention. In her agenda for Europe, European Commission’s President Ursula von der Leyen promises to propose a “European Unemployment Benefit Reinsurance Scheme” (Von der Leyen, 2019, p. 10). The French and German Finance Ministers Le Maire and Scholz agreed to work on a re-insurance scheme and in July 2018 ECB President Draghi considered in a hearing in the European Parliament such efforts as important for the future of the Euro Area (Draghi, 2018; French government, 2018). The SPD EU-election program explicitly calls for a European fund to re-insure national unemployment systems (SPD, 2019) and senior SPD politicians including Vice-Chancellor Scholz refer to the US unemployment insurance (UI) system as a model. Besides the European Social-Democrats, the EU election manifesto of the European Greens cites the need for enhanced risk sharing to counter unemployment crises. Policy makers who favor this concept would not necessarily face a hostile audience. Opinion research shows public support for cross-border risk sharing when unemployment hits Member States, but this support crucially depends on the design features of such schemes in particular adequate benefits, incentives to take up employment and active support for the unemployed.

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1 We thank Suzanne Simonetta and Roel Beetsma for critical comments and suggestions. This version of the Working Paper replaces a July 2019-version which has been released online too early by accident.

2 See among others, Vandenbroucke et al. (2018), European Commission (2017a, 2017b), Carnot et al. (2017), Dolls et al. (2018), Beblavy and Lenaerts (2017), Vandenbroucke (2017), Brandolini et al. (2016), Strauss (2016), Dullien (2014), Gros (2014), Andor et al. (2014), Ragot (2019).

3 The former party president Nahles (2019) explained: “we need an European unemployment re-insurance along the lines of the American model. The financial power of the 27 must stand in to stabilize shocks and prevent mass unemployment. Once the situation improves, the funds will flow back.”

4 https://europeangreens.eu/priorities-2019-what-european-greens-fight#manifesto
We discuss the American UI system and identify relevant lessons. Some lessons concern shortcomings of the American system.\(^5\)

1. **EMU-level unemployment re-insurance and caveats**

The reference to UI in debates about the need for a Eurozone-level macroeconomic shock absorption mechanism is not happenstance. UI supports purchasing power of citizens in an economic downturn, and is therefore an automatic stabilizer *par excellence*. Existing monetary unions either opt for a downright centralization of UI (historically, Canada or Germany), or they demand some convergence in the organization of UI and provide re-insurance when the need is really high (like in the US, which combines centralization and decentralization). This is rational behavior for two reasons.

First, risk pooling enhances resilience against asymmetric shocks in a monetary union. The notion ‘asymmetric shocks’ should be understood broadly here: a shock that is symmetric in origin may play out very differently in individual countries because national conditions differ. The advantage of risk pooling in the face of asymmetric shocks has been the main argument in support of automatic fiscal stabilizers, and, more particularly, a degree of cross-border risk sharing in UI. Risk pooling allows the interregional smoothing of economic shocks.\(^6\)

The second reason why a degree of centralization of UI is rational policy in monetary unions also applies when shocks are completely symmetric across the union and risk *pooling* between member states has no added value *per se*. National insurance systems create a positive externality; a country that properly insures itself, also helps its neighbors. Because of that positive externality, it is a matter of common concern that all members of the monetary union organize an effective stabilization capacity. In fact, in a monetary union, we have all the ingredients of a classical collective action problem: UI increases labor costs, and without some coordination, competitive pressure militates against the organization of sufficiently generous UI. As explained in the next section, in the US, the organization of UI in the 1930s was indeed a response to a problem of collective action.

\(^5\) See also Fischer (2017), Vandenbroucke et al. (2016), Dullien (2014) and the Forum section in Volume 52 (May/June 2017) of the *Intereconomics* journal. For an excellent account of current issues in US UI, see Wandner (2018).

\(^6\) There is a relatively broad consensus that, in order to be economically effective and politically legitimate, a European scheme that organizes interregional smoothing, must be able to also organize intertemporal smoothing, that is, such a scheme must be able to issue debt at the Eurozone level. Since the business cycles of EU Member States are partly synchronized, economic shocks are partly symmetric; interregional smoothing and intertemporal smoothing must be combined, cf. De Grauwe and Ji (2017); Dolls et al. (2018).
The effectiveness of the stabilization capacity of EMU member states depends on a whole cluster of policy principles: adequate unemployment benefits; sufficient coverage rates of the unemployed with benefits; no labor market segmentation and no proliferation of employment relations that leave part of the labor force poorly insured against unemployment; and effective activation of unemployed individuals. The implementation of such a cluster of principles in each EMU Member State is a matter of common concern. The implementation of such common ‘stability-supporting’ domestic principles would benefit the Eurozone as a whole.

In our view, one of the strongest arguments in favor of EU support for national UI schemes is that European support would contribute to the national implementation of these domestic principles. Conversely, these stability-supporting domestic principles become a fortiori imperative when cross-border risk sharing is organized: countries would not agree to support each other’s UI system, if national governments cannot guarantee that their national system functions adequately.

In other words, the argument that is tabled here is not just that cross-border risk sharing would enhance the stability of the Eurozone. The argument is that, moreover, the quality of domestic policies and cross-border risk sharing would be intrinsically and mutually related: cross-border risk sharing should support the quality of domestic policies, and domestic policies should be a condition for cross-border risk sharing. However, it is not self-evident that cross-border risk sharing would, by itself and without further ado, enhance the quality of domestic policies. Two caveats are in order, which we develop on a more formal basis in the Appendix, and which are – to various degrees – illustrated by the American experience. The first caveat concerns the risk of retrenchment at the state level: the commitment of a supranational or federal authority to lend support to UI systems of states, may induce these states to retrench their own systems, or more generally, to diminish their own effort for protection of the unemployed and macroeconomic stabilization. In other words, although the supranational (or federal) commitment enhances macroeconomic stabilization on the aggregate level, the states’ own effort diminishes. The extent of this ‘retrenchment risk’ and its exact shape depend on the design of the supranational or federal commitment and on the preferences and attitudes state leaders might have concerning the protection of the unemployed as shown in the Appendix. The second caveat is linked to the first: it may be the case that this dynamic of retrenchment leads to divergence between the states’ own social policies, rather than convergence, i.e. there is a ‘divergence risk’.

A reduction in the state-level effort for macroeconomic stabilization via UI when the federal or supranational level commits itself to contribute to macroeconomic stabilization via UI (our first caveat), is also to some extent unavoidable: the fact that the federal (or
supranational) level sometimes ‘takes over’ and thus allows the state-level to play less of a role, can even be the explicit purpose of a federal (or supranational) intervention. However, the federal commitment should not lead to a structural retrenchment of state systems, and/or to divergence (rather than convergence) across states.

We will discuss these caveats on the backdrop of the American experience. In the American case, the risk of ‘reduced effort for macroeconomic stabilization’ takes the form of a real retrenchment risk. These risks have to be examined when we consider the design of a European scheme.

2. The history and outline of Unemployment Insurance in the United States

The history of American UI is relevant to any potential EMU-level unemployment re-insurance for three reasons. First, current debates about European unemployment re-insurance are a response to the Great Recession, which echoes the genesis of the American UI system. Second, American UI is a federal-state partnership wherein both levels of government have distinct and important responsibilities in terms of regulation, implementation and financing. Third, under regular circumstances states have significant autonomy in operating their systems, but during crises one of the federal governments’ responsibilities is macroeconomic stabilization, primarily through the financing of extended benefits.

In order to follow our analysis, one should keep in mind that there are three different aspects to what the US experience can teach us, Europeans. First, in the 1930s the federal American government was able to solve a problem of collective action that impeded the development of UI in the states. Second, during the 1950s federal legislation provided a federal backstop for depleted state UI trust funds that are used to finance regular UI benefits. Third, in the 1970s the federal government added an extra layer of UI to the state system, based on an intergovernmental co-financing of benefits which intensifies during crises and thus reinforces protection and stabilization where and when it is most needed. While we will show how important the final two steps were for protecting incomes of unemployed workers in times of high and rising unemployment making a substantial contribution to stabilization of the economy we will also identify caveats with regard to the third move (creating intergovernmental co-financing of benefits), which is also the subject matter of a more formal analysis in the Appendix. These caveats are intrinsically related to problems that
gradually emerged in the context of the first move, notably the lack of adequate ‘minimum requirements’ for the state’s policies.

The American UI system was created in 1935 in the wake of the Great Depression, pursuing three interlinked objectives. The first objective was to offer workers partial wage replacement during periods of involuntary unemployment, the second objective was to help maintain purchasing power and stabilization of the economy and the third to prevent the dispersal of a trained labor force and the breakdown of labor standards (Price, 1985, p. 24). Although UI made economic sense, states feared interstate tax competition: they were concerned that if they created such a scheme individually, businesses might relocate to a state without UI. The federal government could overcome this collective action problem but it had to tread lightly because of the closely guarded constitutional autonomy of states. To balance these concerns, the federal government provided strong financial incentives for all states to create UI schemes following federal requirements. If states comply with those requirements, the federal government finances their respective administration through a federal payroll tax. Moreover, if a state complies, businesses in that state have their federal tax rate reduced by 90 percent. The federal requirements concern mostly the administration and financing of the state system (to which we will return in more detail in Section 3) while states have almost complete autonomy in setting the eligibility criteria and generosity of their schemes. Under normal economic circumstances, states are required to finance UI benefits from their own UI trust fund.

The US federal government plays an important role in macroeconomic stabilization, including via UI due to legislation introduced in 1954 and 1970. In 1954, Congress enacted a federal ‘backstop’ for state UI trust funds. When state trust funds are depleted, due to an unemployment shock for example, states can receive a federal advance to pay their UI obligations. These advances have to be repaid with interest. If a state runs a trust fund deficit for consecutive years, the federal government will charge employers in that state a federal penalty-tax rate. More importantly in terms of stabilization, since 1970 federal law provides an automatic extension of the maximum duration of benefits if unemployment in a given state rises above a certain threshold (we discuss these ‘triggers’ below). These benefits are financed equally by the federal government and the states. Ad hoc emergency extensions are possible under circumstances of an economic downturn, contingent on Congressional approval. Emergency benefits are fully federally financed. The extension of benefits, (partially) financed by the federal government, follows the logic of a complementary
insurance since it adds to the existing regular state UI benefits. During the Great Recession, the anticyclical impact of the American UI system, especially of the extended and emergency benefits, was significant (Dullien, 2014, p. 63). However, the crisis also laid bare some weaknesses of the American system (Fischer, 2017).

3. The functioning of the American UI system

The basic set-up of the American UI system has stood the test of time relatively well. A crucial factor for its longevity is that states can alter important parameters of their scheme while at the same time interstate tax competition has, to some degree, been overcome. One federal objective of particular relevance for European debates is macroeconomic stabilization. A federal fiscal capacity ensures payment of benefits when state funds are depleted and by extending benefit duration in crisis periods. Also, the federal oversight of state programs has increasingly emphasized the necessity for reemployment efforts which are encouraged through federal grants and exchange of best practices. The combination of federal fiscal incentives and incremental adaptations has continued to balance state autonomy and national macroeconomic interests.

During the recent crisis the American UI system exhibited weaknesses that have been building up in recent decades. First, interstate tax competition re-emerged to the degree that it resulted in retrenchment of UI schemes and inadequate funding in multiple states. In other words, the solutions that were successful in overcoming the collective action problem of the 1930s, were gradually loosing force. As states finance regular UI benefits predominantly through taxes on employers, they are lobbied by employer organizations to lower those tax rates. To cope with reduced revenues, a number of states reduced generosity and/or tightened eligibility. Some states simply acquiesced to have near-insolvent UI trust funds. From a long-term perspective, this might not appear as rational behavior. However, short-term electoral pressures to lower tax rates on businesses can lead to myopic policy

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7 A complementary insurance can be designed in different ways: in the Appendix we illustrate that alternative design options of a federal complementary insurance have different impacts on the policy choices made at the state level. This is illustrated through Figures A3, A4 and A5 in the Appendix. The American system of extended benefits corresponds, qua logic, to a complementary insurance as shown in Figure A5; its ‘incentive effect’ on state policy-makers is better than the incentive effect of the alternative complementary insurance models shown in Figures A3 and A4 (although it should be noted that the American extended benefits are only active during periods of crises while the figures imply that they are permanently activated). However, even the design illustrated in Figure A5 does not totally preclude a degree of retrenchment and the possibility of divergence. But, as we indicated earlier, some substitution might be intended.

8 There are federal solvency targets but none of these are binding.
behavior on the part of elected state legislators. In theory, the UI system is designed to preempt interstate tax competition. The federal government levies a payroll tax of 6 percent on all employers. If a state complies with the federal minimum requirements, businesses in that state have their federal tax rate reduced to 0.6 percent. One such requirement is that states must levy their own state payroll tax on employers of at least 5.4 percent to fund their trust funds. However, federal law permits states to reduce employers’ taxes below that ‘standard rate’ of 5.4 percent on the basis of the employer’s experience with unemployment. So although the maximum rate must be at least 5.4 percent, in practice the actual applied tax rates can be lower than that. States have been exercising this flexibility to lower de facto state tax rates on employers in increasing measure – today in many states some employers have an effective tax rate as low as 0 percent – while those employers still retain their credit on the federal payroll tax. Another essential federal requirement is that the state unemployment taxes have a taxable wage base (‘tax base’) that is at least equal to the federal taxable wage base, which was set at a level deemed sufficient to prevent a race to the bottom. However, the federal tax base has not been adjusted or indexed since 1983 and is therefore increasingly inadequate. Most states have raised their tax bases (to varying, yet often insufficient, degrees), but not all. Also, the federal penalty-tax on employers in states that run consecutive trust fund deficits, which should lead businesses pressuring the state to address the insolvency of their fund, are calculated as a share of this very low federal tax base. Therefore, the penalty-tax on employers has become ineffective. As the federal minimum requirements gradually lost force over the last decades, interstate tax competition re-emerged.

Second, the triggers on which the system of extended benefits relies, have proven to be unreliable. The original triggers are based on the Insured Unemployment Rate (IUR), which measures the number of unemployed who receive unemployment benefits as a share of the jobs covered by UI. The IUR is affected by eligibility criteria that states determine themselves. A number of states have tightened eligibility over the years and the IUR became increasingly insensitive to actual unemployment trends measured by the Total Unemployment Rate (TUR) (O’Leary & Wandner, 2018, pp. 136-137). Consequently, during economic downturns extended benefits often were not triggered (O’Leary & Barnow, 2016, pp. 13-14). The reasons why certain states tighten eligibility criteria are manifold: re-emerged interstate tax competition (as explained above) and/or because states do not want

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9 In this respect, our analysis of the US system is less positive about its capacity to counter interstate competition with regard to the level of taxes paid by employers than Ragot (2019, p. 145). Ragot emphasizes the state-level obligation of maintaining at least a tax rate 5.4 percent but does not account for state flexibility to lower de facto tax rates and of the shrinking federally determined tax base. We are grateful to Suzanne Simonetta for pointing this out.
to fund extended benefits, even if they only finance half of those, but there is also an ideological aversion against social benefits in general. The extensions apply to the existing state system in terms of their eligibility and duration so unemployed workers in more restrictive states benefit less from federal funds than in more generous states. And a state with a high recipiency rate will receive a stronger push to the local economy than one with a lower one. Less generous states might assume that they will nevertheless profit from the improved situation in neighboring states but there are also important attitudinal differences towards social benefits and support for the unemployed.

Third, as a result of these developments divergence between state UI programs has increased after the recent crisis. In the 1930s, many states followed a federal template, resulting in fairly homogeneous UI schemes initially (Dullien, 2014, p. 44), but over time states utilized their autonomy more and schemes started to diverge. Currently, state schemes vary somewhat in terms of generosity and widely in terms of eligibility criteria.

Finally, although these weaknesses were noted decades before the Great Recession, most notably by the 1994 Advisory Council on Unemployment Compensation (ACUC, 1996), the federal government has been reluctant to take action. Thus, when the Great Recession hit, the federal government was confronted by 36 insolvent state trust funds and a low macroeconomic stabilization potential. Restrictive eligibility reduced the number of unemployed receiving benefits in the first place but also led to a situation in which, despite of rising unemployment, the low recipiency rate did not trigger the extension of benefit duration. In response, the federal government took extraordinary measures (Vroman & Woodbury, 2014). It proposed to finance 100 percent rather than 50 percent of extended benefits if states would adopt triggers based on the TUR (actual unemployment) rather than the IUR. Congress legislated additional federally financed emergency benefits, further extending the benefit duration to a maximum of 99 weeks. In return state UI schemes had to accept a ‘non-reduction rule’ (states could not lower their replacement rates) and were strongly encouraged to expand eligibility so that more jobless workers would receive benefits – regular, extended and emergency – thereby increasing recipiency rates. Additionally, the federal government made grants available for the ‘modernization’ of state UI schemes. States could use these grants for expanding eligibility, introducing short-term-work compensation and updating old IT-systems. The federal share of total UI benefit costs reached an historic high in 2011 (O’Leary, 2013). These measures clearly show that the federal government was concerned with maintaining the protection of the unemployed and the macroeconomic

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10 See Fischer (2017), Lenaerts, Paquier, & Simonetta (2017); O’Leary & Barnow, (2016).
11 The insolvency of state trust funds is partially explained by the severity of the crisis but also because funding levels were at their lowest point in almost two decades (Simonetta, 2018).
stabilization capacity of the UI system. In effect, during the Great Recession the federal government overcompensated the retrenchment of state UI schemes.

All newly introduced federal requirements for state UI schemes were tied to the extraordinary federal funds and expired January 2014. Since 2014, a number of states returned to the IUR triggers, abandoned modernization efforts and/or retrenched their UI schemes. Eight states exploited a loophole in the non-reduction rule to reduce the standard UI duration even during the crisis. Importantly, mostly states with the more robust UI systems maintained TUR triggers, used the modernization grants and kept systemic improvements. In contrast, states that revoked the TUR triggers, organized further retrenchment and did not utilize modernization grants were generally those with already less solvent and less generous programs. So the diversity in state UI programs that was present before the crisis was only temporarily muted but increased again post-crisis. Figure 1 shows the evolution of diversity in terms of recipiency rates.\textsuperscript{12} The graph also shows the effect of federal requirements to expand eligibility criteria during the crisis and of the extension of duration. This was only possible because the federal government could fund the extensions through an increase in public debt which states can typically not do. While this allowed the USA to use the UI system in an anticyclical manner, the specific features of this policy increased divergence after the crisis further.\textsuperscript{13}

\textbf{FIGURE 1}

\textsuperscript{12} Vroman (2018) discusses the recent changes in state UI financing in detail.
\textsuperscript{13} The important increase in the recipiency rate is a consequence of many factors including the extension of duration through the Emergency Benefits. This extension was a results of the capacity of the federal government to increase public debt during the deep recession. The OECD (2018) shows that this temporary strong increase in recipiency in this period is fairly unique among OECD countries. For broader analysis comparing the US and Europe, see Immervoll and Richardson (2013).
The post-crisis divergence is unsurprising given the design features of the American system and the resulting tensions briefly revisited in this section. What is at play, is a mixture of fiscal myopia that led to insolvency risks for many state funds, political preferences oriented against welfare and unemployment benefits in general, weaknesses in the federal response to these problems (weaknesses related to the legacy of the original solution to the collective action problem of the 1930s) and, finally, state-level incentives to retrench stemming from the more recently added complementary layer of insurance at the federal expense.

The final point is illustrated in the Appendix, which is not meant to be a complete and true presentation of the US model. The purpose of the Appendix is more general: it shows how a dynamic of retrenchment is intrinsic to the organization of complementary insurance, even when its design is such that it should, in theory, minimize that retrenchment dynamic (Section 1, notably Figure A5). It also shows how different policy preferences in different states generate different outcomes, with divergence rather than convergence being the result.

14 Schelkle (2017, chapters 4, 8, 10) argues that fiscal federalism has, in general, ambiguous effects on stabilization. States may shift the cost of bank rescues, macroeconomic stabilization and social security to the federal level. Our argument is congenial; however, our analysis in the Appendix illustrates a dynamic whereby overall (aggregate) macroeconomic stabilization increases, but the state’s effort decreases.
of complementary insurance, at least if states are free to adjust their own system as they see fit.

Recognizing the shortcomings of the US system, in 2016 the outgoing Obama administration proposed changes, such as increasing the federal tax base by almost 600 percent, expanding eligibility, introducing a nationwide floor for the maximum benefit duration set by states\textsuperscript{15} and a host of additional nationwide requirements (DOL, 2016).\textsuperscript{16} Many experts have cited the need for federal reforms, most urgently regarding recipiency rates and the tax base (for the most thorough of such proposals see Wandner, 2018). But no changes were adopted.

4. Lessons from the American Experience: inspiration and cautionary examples

It is tempting to draw a close analogy between American UI and a possible European unemployment re-insurance. However, we caution against an oversimplified comparison. The origins of the US system are distinct: in 1935, federal intervention was needed to encourage states to create UI schemes where none existed before; and during their inception state schemes were relatively homogenous. In contrast, UI programs of member states are well-established, often predating the EU. The main method for the US federal government to regulate UI is through its fiscal capacity: states are enticed to adhere to federal requirements as a \textit{quid pro quo} for 1) federal dollars and 2) for employers receiving federal tax reduction. In contrast, the EU neither has the same level of resources as the US government nor does it have the mandate to levy taxes. The process and institutions for decision-making in the EU and US are very different. The US emergency benefits that were so important for macroeconomic stabilization were approved by Congress on an ad hoc basis. European decision-making is less agile, it is more difficult to overcome resistance of a single member state. During the European sovereign debt crisis it proved neigh impossible to reach consensus about crisis resolution measures on an ad hoc basis.

What are the positive lessons of the American UI system? First, the US experience shows that it is possible to create and maintain a UI system based on federal-state co-financing that intensifies during economic crises. Second, the federal-state relationship has adjusted over time, for example through the creation of extended and emergency benefits and through

\textsuperscript{15} A floor would limit the possibility of states to lower the maximum duration below a certain number of weeks.

\textsuperscript{16} See for an excellent discussion Simonetta (2018).
encouragement of reemployment services and mutual learning. Third, the influx of federal dollars buoyed state UI schemes during multiple recessions, strengthened the capacity to provide income support during the Great Recession for the massively increased numbers of unemployed workers, and bolstered their macroeconomic stabilization effects based on the capacity of the federal government to fund through public debt (briefly discussed in footnotes 13 and 14). Fourth, the genesis of the US UI shows that conditionality, imposing requirements in return for federal funds, can work. It proved an effective way to create relatively homogenous state programs in the first place. And the federal interventions during the recent crisis showed the potential of conditionality: all states made positive changes to their programs during the crisis in return for federal funds, and many applied for the optional modernization grants. However the divergence of state programs returned after the crisis as federal funds stopped. This is a glass half-full or half-empty situation in terms of the effectiveness of time limited conditions and optional grants. This experience is relevant for EU policies which emphasize conditional funding.\textsuperscript{17} Importantly, conditionality in the USA was tied to a massive influx of federal dollars and it would require a major policy change to imagine that equivalent measures could be taken in a European context.

There are also cautionary lessons. Next to the fact that interstate tax competition re-emerged and fiscal myopia led to problems of insolvency of state funds, the current architecture of the US system also creates incentives for states to organize retrenchment of their UI programs, both with regard to the duration of the benefits they guarantee at the state level and with regard to the funding of the systems. One reason for states to limit the duration of the benefits might be the complementary nature of the extended benefits organized by the federal level. We do not mean to imply that this incentive has been the main driver of state-level retrenchment in the US. Because federally extended benefits are only activated during crises, the (perverse) incentive effect is weaker than if these extended benefits were in place permanently. Insolvency and state-level concerns about wage-cost competitiveness and ideologically motivated dislike of supporting those who do not work likely constituted more important reasons to retrench the funding of the state systems, which relies on employer contributions. Obviously, wage-cost competitiveness is also a concern for EMU member states; but the fact that American state trust funds can benefit from federal advances when they are depleted creates some leeway for inadequate funding policies at the state level.

How can such perverse incentives be neutralized? Historically, the US system did not rely on federal requirements with regard to the generosity or the coverage of state programs to

\textsuperscript{17} See Section 2.2. of the Report by the Five Presidents: “Completing Europe’s Economic and Monetary Union” and the recent discussions in the Euro Group on an EMU budgetary instrument,
preempt a race to the bottom and to ensure a sufficient macroeconomic stabilization potential; instead, it relied on a combination of financing requirements and fiscal incentives. The fiscal incentives for states to comply with federal requirements steadily diminished, since the federal tax base (which determines the actual strength of these incentives) remained unchanged since 1983 and states increasingly utilized their flexibility to reduce de facto state tax rates. Thus, both with regard to generosity and coverage and with regard to the funding of the state systems, the US now lack both an effective fiscal incentive structure and a comprehensive system of federal minimum requirements.

On the backdrop of these architectural features of the US system, the strong upward trend of the federal share of UI financing in recession years since 1958 (O’Leary, 2013) is unsurprising. Retrenchment by some states negatively affects quality of protection and the stabilization effects of the UI system, which has to be compensated by the federal government. A first general conclusion, therefore is that the potential for such perverse incentives needs to be carefully examined in the design of any EMU-level (re)insurance scheme: schemes that are based on a ‘top-up’ of national benefit systems (cf. Figure A4 in the Appendix, and footnote 7) and schemes that have the potential to ‘accommodate’ suboptimal funding policies should be avoided.

Second, even if the architecture of a Eurozone scheme would avoid those specific pitfalls, it seems that minimum requirements regarding generosity and coverage are fundamental prerequisites for any potential European re-insurance, especially because the European UI systems are already quite diverse in contrast to the relatively homogenous starting point of US UI. The diversity that emerged across US states is a reminder that differences in attitudes of the leadership of states concerning the nature of unemployment impact strongly on the protection offered and on the quality of stabilization. Therefore, the EU would be well advised to define a common approach to the protection of the unemployed.

Third, although there are historical examples of US federal reforms, more recent experience shows that is quite difficult to make nationwide structural, lasting changes. The erosion of the American model is not just due to state behavior, it is also the result of a lack of federal nationwide comprehensive reforms. The experience with federal inaction in the US regarding the tax base, coverage and replacement rates is highly relevant for Europe, since re-insurance schemes will typically be effective in periods of rising and high unemployment, hence moments that are unsuitable for imposing new and/or stricter conditions. The difficulty to pursue comprehensive reforms in the US emphasizes the need for well-developed minimum requirements at the outset of any European re-insurance. Although the definition, negotiation and implementation of pan-European minimum requirements with regard to the quality of UI and activation policies undoubtedly is a challenge, one should not
be unduly pessimistic about this. On the one hand, European-level decision-making is less agile than that of the US federal government: this observation underscores the need to build a European initiative in the realm of unemployment re-insurance, from the outset, on a solid base of minimum requirements. On the other hand, over the years, the EU has acquired extensive expertise with the definition and implementation of minimum requirements, both via hard and soft law and benchmarking, including in the domain of employment promotion policies and employment protection. The *European Pillar of Social Rights*, solemnly proclaimed in November 2017 by the European institutions, constitutes a useful general framework for the development of minimum requirements in the realm of UI and activation policies. Moreover, one should avoid the need for a succession of ad hoc measures to maintain the integrity of the system in the long run. The concept of a taxable wage base is specific to the US context, but it illustrates the point that the underlying fiscal parameters of an unemployment (re)insurance must not be vulnerable to erosion; otherwise, the long-run integrity of the system depends on new reforms over time which may be extremely difficult to implement, and therefore might not happen. Also, these fiscal parameters should not be subject to member state manipulation, as was the case with the ‘standard rate’ for state UI taxes triggers for extended benefits in the US. In fact, most proposals for a European unemployment re-insurance avoid such design problems, for instance by linking the funding to member states’ GDP. There are good reasons to pursue that direction.

In short, the American UI experience is relevant and holds valuable lessons, but that does not mean it should be used as a blueprint.
APPENDIX

The impact of complementary federal insurance (or federal support for unemployment benefits) on state-level policies: a graphical presentation

We use a simplified graphical presentation to illustrate the impact of alternative federal interventions in UI, in the context of a federation of states in which the states are primarily responsible for UI, and states may have different preferences with regard to unemployment protection, activation policies, and state levels of taxation.

The analysis sheds light on the US experience and highlights caveats for the organization of a European unemployment (re-)insurance scheme, but it is not meant to be a true representation of the US experience. The story told in this Appendix differs from the actual US story in two respects. First, the analysis takes the existence of state-level UI as given; in other words, the appendix is not about how an initial problem of collective action (as it existed in the US in the 1930s) can be overcome. The federal intervention illustrated here is not about the creation of state schemes; the basic idea is that the federal level offers an extra layer of support for unemployed people, complementing and/or buttressing existing state schemes (as will be shown below, for the purpose of this analysis, providing a complementary federal benefit scheme or, alternatively, providing funding for existing state benefit schemes, has exactly the same impact). Second, in the US, federal support is not permanent: it is triggered by economic crises. In the stylized presentation of this Appendix, federal support in the form of extended benefits is (implicitly) depicted as permanent.

Whilst this analysis is not a representation of how the US system (or the Canadian, the Belgian, the Swiss system) actually works, the analysis yields the conceptual building blocks to understand some tensions in these multi-tiered systems, which are highly relevant for any European unemployment (re-)insurance scheme.

The federal interventions, illustrated in this appendix, generate two types of risk. First, there is a general retrenchment risk: the commitment of the federation to lend support to the UI systems of states may induce the states to retrench their own systems, or more generally, to diminish their own effort for macroeconomic stabilization (as explained below, a reduced state effort for stabilization is not necessarily the same as retrenchment of the existing state system). In other words, although the federal commitment enhances macroeconomic stabilization on the aggregate level, the states’ own stabilization effort diminishes. We will show that the extent of this retrenchment risk and its exact shape depend on the design of the federal commitment. Second, and closely associated with the first risk, there is a
**divergence risk**: it may be the case that this dynamic of retrenchment leads to divergence between the states’ own social policies, rather than convergence.

UI policies whether US or European are basically characterized by features of (i) the benefits (their coverage and their financial generosity, which is determined by replacement rates, minimum and maximum levels, and duration) and (ii) the job search effort and related requirements with which the beneficiaries have to comply, e.g. the suitability of jobs they have to accept (below, we summarize this by ‘job search conditions’) and (iii) by active labor market policies to support the unemployed in finding jobs, improving their skills and capacities and to overcome other employment impediments. The retrenchment and divergence risks concern the features of the benefit system.

Figure A1 illustrates the decision problem of an individual state, when there is no federal intervention. To focus on the core issue at hand, we reduce the decision problem to a decision about the generosity of the unemployment benefits and the taxes needed to fund unemployment benefits. Moreover, we reduce the generosity of the benefit system to only one parameter: the maximum duration of the benefits. Hence, the duration of the benefits is the policy lever on which we focus (focusing on the duration of the benefits allows best to highlight the tensions in the US system, as described in the body of this paper; but our intention is not to present a complete picture of the US system). The graphs are constructed on the basis of yet another simplification: the average duration of unemployment benefits is equal to (or proportional to) the maximum duration, set by the authorities. The replacement rate, minimum and maximum benefits, are treated as constants, and not represented here. The presentation also presupposes a certain activation policy, which is not specified here, and which is deemed not to be affected by the federal intervention. The economic and employment context are treated as exogenous.18

On the horizontal axis, we have the tax rate: it is the sum of the tax rate that is necessary to fund the state’s unemployment benefits and the tax rate needed to fund other state activities; we consider the latter as an exogenous constant. Tax rates go from ‘high’ to ‘low’ in the graph. On the vertical axis, we have the number of months an unemployed person will be covered by the state’s UI (going from ‘short’ to ‘long’). The line SM is the ‘feasible set’ of UI policies: the tax rate determines the number of months of unemployment that can be covered. At point S, taxes are high and the maximum duration of UI is long (a generous policy, motivated by maximal security); at point M, there are no taxes collected for UI, hence

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18 This means that we make abstraction of the impact of changing taxation rates on economic activity and employment levels. This abstraction does not affect the argument.
the overall tax rate is low and the duration of UI is zero (hence, no UI, because there is no funding for it: M would be an extreme market-liberal policy).

The curve containing the point P is the *indifference curve* of the state’s policy-makers: they are indifferent between all the combinations of taxation and UI protection levels on this curve (they answer the question: ‘how much additional protection do you want for a given increase in taxes?’). The shape of the indifference curves depends on the preferences of the policy-makers: if they value protection high (relative to the tax burden they have to impose), the curve will be rather flat; if they value low taxation high (relative to the level of protection for the unemployed), the curve will be steep. On the basis of an indifference curve as shown in Figure A1, this state’s policy-makers will choose a policy P. In the feasible set, the policy P is the combination of protection and taxation that offers the most satisfaction to the policy-makers (at P, we have the highest indifference curve that can be attained with the feasible set of policies). Given their preferences and the feasible set, P is the optimal policy for them, somewhere in between the extreme solutions S and M. For reasons of simplicity, we always present indifference curves based on homothetic preferences (i.e. their expansion paths are linear); some of the results may not hold when preferences are not homothetic.

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19 Presenting preferences over taxation and protection policies with such smooth indifference curves is obviously a considerable simplification of reality, but it allows to illustrate the key dynamics at hand in the multi-tiered polities.
Imagine now an intervention by the federal government: the federal government adds its own UI policy to the state's policy, fully funded by the federal government. If the addition consists of a fixed, maximum number of extra months covered by UI benefits (paid by the federation), the feasible set shifts vertically upwards, from the line SM to the dashed line S'M', as shown in Figure A2.
In Figure A2, we suppose that the federation offers an extra maximum of months equal to the distance between \( S \) and \( S' \) (i.e. the vertical distance between the feasible set \( SM \) and the feasible set \( S'M' \)), independently of the state’s own system and the state’s own effort. In other words, in principle, citizens in the state on display in Figure A2 could enjoy \( S'-S \) more months of unemployment protection, without any need to increase state taxes. However, this will not be the final result. The state policy-makers will adapt their policy to the new (augmented) feasible set, on the basis of their preferences: their new optimal policy is \( P' \). At \( P' \), the duration of unemployment protection for the state’s citizens will increase, but with less than \( S'-S \) (the vertical difference between \( P' \) and \( P \) is less than the vertical difference between \( S' \) and \( S \)); the state will also use the federation’s initiative for decreasing state taxes. Hence, the complementary insurance offered by the federation will partly replace the state UI system: the state will organize a degree of retrenchment in its own system.

In Figure A3, we show that the exact reaction will depend on the preferences of the policy-makers. We show two states in the figure, with different preferences: the dotted indifference curves are ‘Democratic’: this state values social protection relatively highly; the dashed-and-dotted indifference curves are ‘Republican’: this state values low taxation relatively highly. We can see in Figure A3 that the ‘Democratic’ and the ‘Republican’ state not only have different starting points when there is no federal intervention (the Democratic state has
higher taxes and more protection than the Republican state); they also react differently. Compare the shift from D to D’ to the shift from R to R’. In the Democratic state, the federal initiative is mainly used to let the citizens enjoy more protection; taxes are diminished somewhat. In the Republican state, the improvement in protection is modest, but taxes are decreased considerably. In other words, without sufficiently stringent federal minimum requirements, we see quite different reaction patterns and much more retrenchment of the state system in the ‘Republican’ state. The federal initiative may lead to policy divergence, rather than convergence; however, given the assumption of homothetic preferences, the protection of the unemployed would be improved everywhere. (Some of the observations in this paper about the dynamics of state reactions to the ‘modernization grants’ correspond well to this theoretical analysis: ‘Republican states’ react differently than ‘Democratic states’ and return to different initial positions when the support stops.)

Now, we have to think a bit harder about the nature of the federal intervention. We have explained Figures A2 and A3 in terms of a federal ‘complementary insurance’, providing a fixed maximum extra-number of unemployment protection. Now, imagine a different federal scheme: the federal government would transfer a fixed lump sum of money to the states: this
lump sum of money would in principle allow states to increase the maximum duration of unemployment protection with $S'-S$ months. *This policy (a lump sum financial support system) yields exactly the same graphical representation and decision problem.* If there are no strings attached (no ‘minimum requirements’ with regard to how the states organize their UI), states will use this lump sum of money to improve unemployment protection in their state somewhat (but less than $S'-S$), and to reduce the taxes they levy in their state (in total, more money will be spent on unemployment protection in the states, but less own state money).²⁰ The exact new mix of protection and taxation will depend on their preferences (as in Figure A3). In other words, the two policy schemes yield exactly the same result for the state’s citizens, in terms of improved protection and reduced taxes. But in the ‘lump sum transfer’ scheme, there is no retrenchment of the system at the state level; the state system is not partially replaced by a federal system. The state system is expanded, but the funding will be partially replaced by federal money. In other words, for the purpose of this Appendix, a federally sponsored ‘re-insurance’ model, whereby financial support is given to state-level benefit systems when the latter are confronted with a severe crisis, would be presented in exactly the same way as a complementary scheme that is triggered by a severe crisis.

Note that in both schemes, the states – when left to decide on the basis of their own preferences – ‘do’ less for macroeconomic stabilization. Note also that we may see policy-divergence (between states) rather than convergence as a consequence of the federal initiative: this is the divergence risk.

Consider now a different type of complementary insurance: a pure ‘top-up’ system, whereby the federal government guarantees citizens in every state a minimum level of unemployment protection, whatever the state provides. In the context of our presentation, this ‘top-up’ would guarantee a minimum floor to the maximum duration of UI, whatever the state foresees qua maximum duration. (Hence, if the federally guaranteed UI duration is 50 months, and state A provides 25 months, the federal government adds 25 months in state A; if state B provides 35 months, the federal government adds 15 months in state B.). Such a ‘top-up’ obviously leads to very perverse incentives, as shown in Figure A4.

²⁰ Also, it could be argued that a federal backstop for state UI trust funds has a similar incentive effect if state-level politicians suffer from myopia. The availability of a federal backstop softens the budget constraints of states. Myopic state policy-makers could improve employment protection while reducing their own tax efforts by relying on the availability of federal backstop to deal with the increased risk of insolvency.
In Figure A4, the horizontal dashed line shows the federally guaranteed duration of UI benefits: the federal government guarantees to close the gap between the UI system organized by the states, and this federal guarantee (in terms of duration of the benefits). Given normally shaped indifference curves of the policy-makers, the optimal policy (from the state policy-makers’ point of view) may shift to P”. In that case, the optimal policy is a corner solution: the state tax rate needed to fund UI is reduced to zero; the state will reduce its own effort to zero, so that it does not have to collect taxes for UI, and the level of protection may well be less good than it was before the federal initiative (as illustrated in Figure A4). Note however, that other outcomes are possible, depending on the shape of the indifference curves: with a differently shaped indifference curve, it may well be the case that the policy remains unchanged at P. The logic of the model illustrated in Figure A4 corresponds to the logic of a ‘top-up’ system discussed in Beblavy and Lenaerts (2017, box 2, p. 22-23); because of its perverse incentive effects on member state policies, Beblavy and Lenaerts conclude that a ‘top-up’ model would be the most problematic variant of a European Unemployment Benefit System.

Consider now a much more intelligent federal scheme, whereby the federation adds one month of unemployment protection for each month of protection funded by the state. This
could be organized as follows: for each dollar the state spends on UI benefits, the federal government adds one dollar. In other words, the federal government pays 50 percent of the UI budget of the state. In Figure A5, this is presented as an expansion of the feasible set: the feasible set shifts from the line SM to the dashed line S'M. Whatever the choice made by the state (on the dashed line S'M), the federation will reimburse 50 percent of the benefits.

This '50 percent reimbursement' model is 'conditional' on the own effort invested by the state. Consider now an alternative way to organize such a conditional support: the federation could also organize a complementary UI scheme at the federal level, which operates on the basis of an administrative conditionality: the maximum duration of the UI benefits organized and added by the federation is equal to the maximum duration of UI benefits organized by the state. Let’s suppose, for the simplicity of the presentation, that the maximum duration and the average duration are the same; then this scheme is also represented by Figure A5. In other words, Figure A5 captures both a 50 percent reimbursement model and a conditional (or ‘matching’) complementary insurance model.
Comparing Figure A5 with Figure A2 shows that the incentive effect of this kind of scheme leads to a relatively stronger emphasis on increased protection in the states (given their indifference curves), compared to the reduction of taxation. The optimal policy (given the state’s preferences, which we depict as homothetic) shift from $P$ to $P'$. This means:

- the total maximum duration of UI shifts from $L$ to $L'$ (increased protection for the citizens);
- the months of unemployment funded by the state decrease to $0L$, which corresponds to 50 percent of $L'$ (indicated by the arrow);
- state taxation decreases from $T$ to $T'$.

Hence, in this scheme the state’s own effort will decrease ($0L$, i.e. 50 percent of $L'$, is less than $L$; the state’s taxation is reduced). However, the balance between the impact on the duration of UI benefits and the decrease in state taxation is better – if we want good UI protection – than in Figure A2.

If this scheme is organized as a conditional complementary insurance, there will be some retrenchment of the state’s own benefit system, but the retrenchment will be less than in the scheme illustrated by Figure A2. If the scheme is organized as a 50 percent reimbursement model, there will be no retrenchment of the state system, but the ‘own effort’ of the state will also decrease. In both organizational options, there will be more protection for the citizens and more macroeconomic stabilization, but the state’s effort to obtain these will decrease a little bit. But it will decrease less than in Figures A2 and A4. Finally, note that the scheme illustrated in Figure A5 would push both the ‘Democratic state’ and the ‘Republican state’ more towards ‘improved protection’, as compared to ‘less taxation’. Yet, their reaction patterns will remain different. The divergence risk is not excluded with the kind of homothetic preferences as depicted here (but it is not shown here).

The analysis in Figures A1-A5 readily applies to the US. Can we use it to understand a different type of federal architecture, such as the Belgian one? In Belgium, the benefits are fully funded (and organized) by the federal level, whilst the regions are (largely) responsible for activation. The ‘feasible set’ in a scenario of full federal funding can be represented in

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21 This type of federal support generates another type of (perverse) incentive; elsewhere, we have labeled this as an incentive for ‘institutional moral hazard’ (Vandenbroucke et al., 2016). If the federal level provides financial support for states which is sensitive to the states’ risk of unemployment, the states’ sensitivity to the risk of unemployment is thereby reduced. Institutional moral hazard, so conceived, can materialize in two ways. Let us call the program that is supported by the federal level ‘program A’; if, the cost of program A borne by states becomes lower than the cost of another state-financed unemployment-related programs (say ‘program B’), states have a financial incentive to shift caseloads from program B to program A. Also, this type of federal support gives states incentives to be less vigorous in reducing the risk of unemployment by reemploying the caseload of program A, compared to caseloads of unemployment-related programs that are state-financed or receive federal support that is not influenced by the risk of unemployment (e.g. lump sum support).
these figures by drawing a vertical line, crossing the horizontal axis at the point M. However, since the duration of benefits is not a policy lever in the hands of the Belgian regions, the analysis illustrated by Figures A1-A5 does not apply.

The general lessons learned from this analysis can be summarized as follows:

- If the federal policy objective is to increase state tax levels above the level that obtains given state preferences, it can only achieve this via minimum requirements that have a direct impact on the state tax effort (but, technically, such a direct impact might be achieved by combined minimum requirements with regard to the benefit levels and solvency of state funds).

- If the federal policy objective is to increase state benefit generosity above the level that obtains given state preferences, it can only achieve this by minimum requirements that directly impact upon state benefit generosity.

- If the federal policy objective is to increase benefit generosity – either funded by the states or by the federation – above the level that obtains given state preferences, it can achieve this by financial support or complementary benefit schemes at the federation’s expense, and/or by minimum requirements that directly impact on state benefit generosity. If the federal-state fiscal architecture limits the funding possibilities for (some) states in a period of rapidly rising unemployment severely a combination might achieve the best results.
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