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“European fiscal policy reforms, banking union and public goods theory”

Thesis submitted for the degree of Doctor of Social Sciences: Political Science at the University of Antwerp to be defended by

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1 Introduction

1.1 The euro crisis and institutional reforms in banking and fiscal policy

The euro area crisis sovereign debt crisis shook the European Union (EU) to its core. Largely originating in the global financial crisis, it turned into a crisis of the euro system and its institutions. The euro was pushed to the brink of collapse, while leading to spiralling public debt, recession, as well as unprecedented levels of unemployment and social hardship in the eurozone periphery.

This also resulted in a crisis of trust (Foster and Frieden 2017) and legitimacy of the EU (Schmidt 2015), leading to large-scale protests against EU policies, a rise of euro-sceptic parties in national and EU parliaments, (against austerity in the South, and against common liability in the North) and the rise of technocratic and populist governments like in Greece and Italy (Hernandez and Kriesi 2016; Kriesi 2018; Bickerton and Invernizzi 2017).

A major reason for this turmoil was the inadequate institutional architecture of the Economic and Monetary Union (EMU). It had failed to prevent the crisis and proved unable to get it under control and deliver financial stability. The most important institutions in this respect were arguably those in European fiscal and banking policy, as the crisis had its origins both in the financial sector and member state finances. It were also those two fields which saw the most momentous reforms, aimed at alleviating the ongoing crisis and at preventing future ones.

This dissertation concentrates on gauging the success of these post-crisis institutional reforms, which are central to the functioning of the euro and the EU and its ability to deliver public goods such as economic stability, growth and prosperity to its citizens and thereby legitimate its existence. It does so by conducting a comparative case study of the institutions of European fiscal and banking policy before and in the wake of the euro crisis, employing public goods theory as analytical tool.

In European fiscal policy this includes an analysis of the Stability and Growth Pact (SGP) before the crisis and subsequently the study of the institutional reforms enacted during the crisis comprising the establishment of fiscal rescue funds, including the European Financial Stability Facility (EFSF), the European Financial Stabilisation Mechanism (EFSM) and the European Stability Mechanism (ESM), as well as the reforms of the SGP. This includes the legislative

reforms encapsulated in the so called “six-pack”, “two-pack” and the fiscal compact, with such innovations as the European Semester and the Macroeconomic Imbalances Procedure (MIP).

In banking, this dissertation examines first the institutional and regulatory environment before the crisis, including the Committee of European Banking Supervisors (CEBS). It will then look at the reformed banking supervision and banking resolution architecture established during and after the crisis. In banking supervision this includes the European Banking Authority (EBA), the single supervisor located at the European Central Bank (ECB) and the Single Supervisory Mechanism (SSM), as well as reforms of banking regulation mainly in form of the Capital Requirements Directive IV (CRD IV) and the Capital Requirements Regulation (CRR). In banking resolution, it analyses the CRR and the Bank Recovery and Resolution Directive (BRRD), the Single Resolution Board (SRB), the Single Resolution Fund (SRF), the fiscal backstop located at the ESM, as well as emergency liquidity assistance and European state aid and insolvency law. It also includes a discussion of European deposit insurance, including the Deposit Guarantee Scheme Directive (DGSD) and the European Deposit Insurance Scheme (EDIS) which so far only exists on paper.

1.2 Variation in success of anti-crisis reforms

Generally, there seems to be a consensus that the reforms in European banking and fiscal policy have not been enough to create a coherent governance system for the EMU that can sustainably deliver financial stability in the eurozone (Jones et al. 2016; Quaglia 2019; Mayes 2018).

Most would also agree that the outcomes of the crisis reforms display significant variation with respect to different measures of success such as depth in integration, supranationalisation or bringing about sustainable stability.

Most accounts regard the creation of a single supervisor at the ECB as a decisive step ahead in European integration and a supranationalisation of banking supervision (e.g. Howarth and Quaglia 2016, Veron 2020), while some regard it as only a half-way reform which does not include the bulk of European banks and is unworkable without the completion of other banking union institutions (Donnelly 2016, 2018). Inversely, most consider the reforms of the SGP as relatively little delegation of power to the European Commission with low effectiveness (e.g. Darvas et al.

2018, Claeys 2020), while some have regarded them as far-reaching empowerment of the Commission (Seikel 2018).

The ESM has been judged as a great progress towards more resource sharing, but also criticised as essentially intergovernmental organisation with insufficient funds (e.g. Gocaj and Meunier 2013; Seikel 2018). The resolution framework of the Single Resolution Mechanism (SRM) including the SRB and the SRF have been regarded as robust progress towards supranationalisation of banking resolution by some (e.g. Quaglia and Spendzharova 2017), while others have regarded it as essentially intergovernmental framework, that has done little to provide effective centralised resolution (e.g. Donnelly 2016, 2018). Most commentators would agree, however, that European banking resolution has turned out weaker than the common system for banking supervision. Furthermore, the lack of EDIS has been lamented by virtually all accounts as decisive missing piece of European Banking Union (e.g. Donnelly 2016, 2018).

The reaction of policymakers has also been mixed. The SSM as the core piece of the new European banking union has been called the most significant integration step since the Maastricht treaty by decision makers (Schäuble 2014; Draghi 2013). The SGP has famously been dubbed stupid by former Commission president Romani Prodi (Rommerskirchen 2019: 15), and it has not commanded much more respect even after its reforms from many (Schmidt 2015), while politicians like Merkel have praised it as a major step towards more stability. Elke König, the head of the SRB has criticised the SRM as being hardly able to resolve even one systemic bank (König 2018a)[1]. Policy makers like Merkel have regarded the ESM as having pivotal significance for the functioning of the EMU (Neuerer 2012), while others like Berlusconi have criticised it as unworkable (Wiener Zeitung 2012).

These different assessments about the success of post-crisis reforms and the variations in such assessments amongst the different new or reformed institutions in European fiscal and banking policy makes a comparative case study particularly interesting. While academics and policy makers have been using different criteria to gauge the success or failure of institutional reforms, this dissertation will employ the concept of institutional strength to provide an original measure of the variation of the given institutions.

[1] Elke König at a conference in April 2018: https://www.youtube.com/watch?v=E3CibWPUktA

Studying variation in this way also seems to be theoretically sensible, as these cases are equivalent in several ways. First, all these institutional reforms have taken place in reaction to the financial and sovereign debt crises and their aftermath in the period of roughly 2010 to 2016.

Second, both banking and fiscal policy include institutions of the same two functional types, roughly summarised under the headwords *rules* and *redistribution*. The first, rule-making type regulates actors in their economic activity with the aim of guaranteeing stability. In fiscal policy, states have to comply with overall budget limits within the SGP, impacting their borrowing and spending behaviour, while in banking policy, banks are restricted in their risk profiles and transactions through banking regulation and supervision. This includes regulating the accumulation of risks to economic stability and growth. Fiscal and banking policy both also have institutions dealing with the eventuality of crisis, which largely involve redistribution of money and risk among member states. These include bailout mechanisms and backstops amongst others.

Despite the similarities between banking and fiscal policy, the two also exhibit differences. It is widely acknowledged that national budgets are fiercely defended as a national sovereign prerogative of member states and their parliaments, whereas banking policy is more easily considered "technical", despite the fact that, when it fails, it can lead to huge and politically extremely divisive transfers of taxpayers' money.

Furthermore, the given cases also represent examples of differentiated integration. While financial regulation and the EBA, as well as the reformed SGP apply to all EU member states or even states of the European Economic Area (EEA), the ESM, SSM and SRM only apply to the euro area. The former generally turned out weaker than the latter. This is certainly interesting to analyse and there have been accounts explaining difference in success or depth of integration by historical institutionalism and path dependence of euro membership (see below).

1.3 Explanations for institutional outcomes in the existing literature

This dissertation focuses on two main goals. First, to provide an original measure of the variation of the given institutions using the concept of institutional strength and second, it also aspires to better understand this variation using the prism of public goods theory.

Extant literature has so far focused on the deeper economic and political reasons for the success or failure of the reforms. Some have embedded such explanations in a liberal intergovernmentalist

framework, focusing on power structures and asymmetric bargaining of member states with interests informed by domestic factors but with the objective of credible commitment to the EMU as the key motivation of supranational delegation (e.g. Hennessy 2014; Schimmelfennig 2015; Howard and Quaglia 2013, 2016; Seikel 2018; Wasserfallen et al. 2019). Neo-functionalists have interpreted the crisis reforms of EMU as a 'hard case' of a neofunctional spillover (Niemann and Ioannou 2015; Jones 2015). According to them, functional spillovers from incomplete EMU led to deeper integration which member states had opposed before the crisis. Others combine neofunctionalist and intergovernmentalist explanations by distinguishing a long-term spillover dynamic and a short-term logic of political bargaining determined by asymmetric bargaining power and short-term political considerations of governments (Jones et al. 2016). For new intergovernmentalists member state interests were decisive in institutional choice, and they see little supranationalisation to EU institutions in the reforms of banking and fiscal policy, but rather intergovernmentalisation in 'de novo bodies' (e.g. Puetter 2012, 2014; Bickerton et al. 2014). Rational choice institutionalists on the other hand, underline the importance of agency of supranational actors (e.g. Epstein and Rhodes 2016; De Rynck 2014; Schmidt 2016; Dehousse 2016; Tesche 2020), while others have stressed the importance of historical institutionalist dynamics (e.g. Verdun 2015; Quaglia and Spendzharova 2017; Schimmelfennig 2016), the importance of ideas and intellectual traditions (Schäfer 2015) or employed combinations of rational and historical institutionalism (Glöckler and al. 2017).

1.4 Public goods theory to measure and understand reform outcomes

This dissertation complements these explanations and provides an alternative account which not only examines the political process of reform but also focuses on the specific institutional forms that resulted from them in European fiscal and banking policy. It does so by conceptualising institutional reforms as responses to collective action problems among EU or euro area member states, which could be mitigated to different extents. It will demonstrate how these collective action problems are endemic in the public goods traits of fiscal and financial stability, i.e. in the goods fiscal and banking policy are supposed to provide. And it will show how far these problems could be solved by institutional reform.

Indeed, as Snidal (1979: 534) pointed out, building appropriate political institutions is a question of solving public goods problems. At the same time, one has to appreciate the relationship between

politics and public goods to fully understand the genesis and functioning of institutions. Indeed, the solution of public goods problems is embedded in the broader political framework including such factors as power relations, domestic economic models and international interdependencies. Bearing this in mind, the dissertation develops an elaborate account of how the public goods features of financial and fiscal stability play out in the EU context and how they shaped the interests and the policy stances of different EU member states with different economic models. And it shows how this dynamic ultimately shaped the institutional design in EU banking and fiscal policy.

1.5 Research questions and structure of the dissertation

The dissertation therefore addresses the following four main research questions:

1. How can fiscal and financial stability be conceptualised as public goods and what role does fiscal and banking policy play in providing them on the national, international and European level?

2. How strong were the institutions in European fiscal and banking policy before and after the reforms following the financial and sovereign debt crises?

3. How far did institutions manage to mitigate public goods problems before and in the wake of the financial and sovereign debt crises?

4. How did the public goods character of fiscal and financial stability shape institutional choice and determine institutional strength before and in the wake of the crises?

The first chapter provides the theoretical underpinning of the dissertation, introducing the concept of institutional strength and public goods theory, as well as the theoretical premises and hypotheses of the dissertation.

The conceptualisation of fiscal and financial stability as public goods with inherent collective action problems will be elaborated in the first sections of the chapters on European fiscal policy and banking supervision. Then the mechanisms of fiscal and banking policy in providing fiscal and financial stability are discussed. Their institutional objectives are conceptualised as mitigating public good features by creating incentives for cooperation, as they can be found in club goods and excludable network goods. Subsequently, the different structural challenges for fiscal and

banking policy in conditions of different degrees of financial and economic interdependence, including in EMU are identified and analysed.

After this theoretical analysis of the challenges of fiscal and banking policy in the EMU, the dissertation will provide an empirical study of the institutions of European fiscal and banking policy before and in suit of the financial and sovereign debt crises. It will show how in fiscal and banking policy before the 2008 crisis, incentives stemming from the public goods characteristics of fiscal and financial stability made member states opt for weak institutional setups, which allowed them to pursue their national interests at the expense of common financial and fiscal stability. Subsequently, the dissertation delineates how the euro crisis created incentives for cooperation that trumped public goods incentives and triggered a shift in the institutional setup of European banking and fiscal policy, which yielded institutions of different strength which were able to mitigate collective action problems to different degrees. The dissertation will show how the conditions of crisis temporally shifted incentive structures for or against deeper cooperation rooted in the public goods characteristics of fiscal and financial stability. At the same time, it will show how the public goods traits in connection with the political economies of member states informed the political dynamics behind institutional evolvement.

EU member states as main units of analysis

EU or euro area member states have been chosen as main units of analysis for a number of reasons. Fiscal and banking policy are core state powers, in which member state governments usually hold particularly strong interests which they defend on the EU level. Additionally, fiscal policy (and to some extent banking policy, as well) is still primarily done on the national level and any institution building has to take these policies and the interests they are based on into account. Furthermore, at the constitutional level of the EU, where member states take decisions by unanimity and have the last word, the classical state centred model of intergovernmentalism still comes fairly close to the truth. At the same time, this account does not deny the impact of EU actors like the ECB and the Commission on institutional reform but regards them as ultimately dependent on member state preferences. This can be elucidated by the fact that none of the analysed reforms were passed without member state approval through the Council of the European Union.

Member state preference formation is seen to be rooted in a combination of two factors. First, in the character of the public good in question, and second in national political economy traits, primarily debt profiles which are rooted in the economic specifics based on ‘varieties of

capitalism' of individual member states. To achieve their preferences, member states as well as EU institutional actors are assumed to behave rationally and maximise their utility along the lines of rational choice theory.

1.6 Why is the dissertation important?

This dissertation aspires to contribute to the study of responses to the sovereign debt crisis in the EU and contribute to the political science literature on institutional choice and European integration in general. By adopting a comprehensive comparative approach and a public goods centred analysis, the author hopes to provide a fresh perspective and complement the already substantial body of research on the complex phenomenon of post-crisis reforms. The author also hopes to help directing the focus on the parameters which can make institutions in European and fiscal and banking policy effective and yield a more workable, less crisis-prone EMU. This might also hold insights for analysts and policy makers with respect to institutional reform in other policy areas or even other contexts than the EU.

The dissertation also aims to contribute to the literature on public goods theory and its empirical application in analysing institutional reform. The provision of public goods is a central, if not the central task of government and institutions in general. Indeed, the solution of public goods problems, i.e. the freerider problem has been called the most important problem of political science (e.g. see Mansbridge 2009). Public good problems exist in such diverse spheres as climate, defence, environmental, migration or digital policy. With globalisation and the lack of adequate global or regional governance, their solution has become ever more urgent. This dissertation therefore hopes that its findings on the public goods dynamics in EU post-crisis reform might also offer interesting insights for academics and policy makers in other policy fields, where institutional reform on a supranational level is similarly pressing as in the financial and fiscal sphere.

1.7 Methods, sources, terminology

The method used in this dissertation is both deductive and inductive reasoning. It is deductive as it takes existing public good theory and draws specific conclusions for the particular field of post-

crisis EMU reforms in terms of institutional success/strength. At the same time, empirical phenomena in form of the reforms in European banking and fiscal policy are taken as examples to enhance what public goods theory can tell us about institutional choice and the dynamics of integration in the context of the EU.

The author primarily relies on secondary literature and policy papers as sources, but also includes primary sources such as official EU documents, legal texts, and statements by leading politicians. The analysis mainly relies on the concept of institutional strength and public goods theory, which will be introduced in the following chapters.

The term public goods in plural is used to signify the overarching theory, namely public goods theory, or public goods' traits. On the other hand, a public good in singular is meant to denote a particular type of public goods, namely one that is non-rival and non-excludable. This will become clearer in the following chapter.

2 Theoretical bases and hypotheses

2.1 The concept of institutional strength

Political institutions may be defined as humanly devised rules and procedures – formal or informal - which constrain and enable political behaviour (Levitsky and Murillo 2008). Notwithstanding the importance of informal rules and procedures (March and Olsen 1989, North 1990a, O'Donnell 1996, Helmke and Levitsky 2006), this dissertation focuses on formal or written rules, or what Carey (2000) calls 'parchment' institutions.

There have been various conceptualisations to gauge the success of institutions in the EU. These have included depth of integration and/or the degree of delegation of power, or the level of supranationalisation versus intergovernmentalism (e.g. Seikel 2018). Success is essentially a measure of how far institutions achieve their designated goals, i.e. how effective they are. However, institutional effectiveness as a concept has proven to entail severe methodological challenges for comparing broader patterns of institutional evolution across different cases (Young 2004; Underdal 2004). Institutional strength on the other hand depicts the more rigid structural bases for effective implementation of policies of an institution and is therefore easier to conceptualise and to use as analytical tool. Strong institutions are much more likely to be effective than weak ones. So, while strength does not equal effectiveness, it nevertheless is a strong indicator if an institution can be effective and can therefore be used as proxy for effectiveness (Herschinger et al. 2011: 447).

The concept of institutional strength has been used to analyse institutional design in international institutions, like in the field of policing (Herschinger et al. 2011) as well as with regard to the European integration of core state powers more broadly (Genschel and Jachtenfuchs 2014). Based on this, the dissertation creates its own, slightly modified concept of institutional strength, which has also been influenced by Underdal (2004) and inspired by Abbott et al.'s (2000) concept of legalisation.

According to Underdahl (2004), a strong institution has three key features. Firstly, it subjects a system of activity to varying degrees of collective governance rather than individual decision-making. Secondly, it sets rules that significantly constrain the range of behaviour that qualifies as legal or appropriate, and thirdly, it increases the costs of non-compliance. One can specify these three features to derive three analytical dimensions of institutional strength which will be used in

this dissertation: the degree of centralisation of decision making, the degree of precision of the decisions and rules enacted by the institution and the degree of enforceability of those.

In the EU context, an institution is thus stronger the more decision making is pooled among decision makers and the more decision makers are independent from member state principals. The lowest level of pooling of decision making are ad-hoc negotiations among member states, while institutionalised negotiations are already a step towards more centralisation. Institutionalised common decision making is a further step towards more centralisation. The least centralised version is based on unanimity, allowing a veto to all member states. Qualified majority voting (QMV) further pools decision making, followed by majority voting and then reverse qualified majority voting2 which progressively centralise decision making. The highest level of centralisation would be complete supranationalisation which leaves decision making at the discretion of the institution.

Apart from pooling of votes, the level of independence of voting parties from member states plays a role in determining the level of centralisation of decision making of an institution. The level of independence is mainly contingent on the affiliation of voting parties, the rules determining in whose interests they should vote, and how and by whom they are appointed. Voting parties which are government representatives are more likely to vote in favour of member state rather than supranational interests, while the votes of non-governmental national representatives tend to depend less on national government interests. The more centralised and supranational the selection process of representatives (in terms of pooling of votes and the level of independence from member states of those voting), the more likely they will pursue supranational interests in an institution. To summarise, the higher the share of independent or supranational actors in the decision-making process of an institution, the higher the level of centralisation.

Furthermore, institutions are stronger the more precise their rules are. Precise rules specify clearly and unambiguously what is expected of a state or other actor in a particular set of circumstances. This means that precision narrows the scope for reasonable interpretation of rules (Abbott et al. 2001: 412). Higher precision leaves therefore less opportunities to evade the law by misinterpretation. Precision can be measured on a similar scale as centralisation of decision making. The lowest level of precision, encompass very general statements, covering almost any state behaviour, as for example a call for ‘appropriate measures’. Standards entail wordings with general instructions as for example a requirement to deliver something in ‘timely’ fashion and

[2] When a decision will pass unless a qualified majority votes against it.

leave ample areas of discretion for those supposed to follow the rules. If more specific criteria are given to judge state behaviour (e.g. specification of a time period of 'at least 2 years') this can leave still broad areas of discretion. While precisely defined criteria, often in form of specific lists, only leave narrow areas of discretion (Abbot et al. 2000: 412-415; Herschinger et al. 2011).

Finally, decisions and rules can only become effective, if they can be enforced. The degree of enforceability usually depends on the capacity of an institution to impose costs on non-compliers (Schelling 1978). This usually takes place in form of fines. Enforcement can be decided on and executed directly by the pertinent institution, delegated to a court, or it can be the responsibility of member states. In the latter case, the degree of centralisation of the decision making (as conceptualised above) on enforcement usually determines the likelihood that rules are enforced. Altogether, one can establish that the lower the control of member states over enforcement, the higher the probability that rules are enforced.

The stronger an institution is on the aggregate three dimensions of centralisation of decision making, precision and enforcement, the stronger it can be considered overall. This conceptualisation of institutional strength will help to address the second research question, namely how strong the institutions in European fiscal and banking policy were before and after the reforms following the financial and sovereign debt crises.

2.2 Institutional strength and public goods theory

2.2.1 The bases of public goods theory: excludability and type of consumption

Institutional strength can be related with the type of public good the institution is supposed to produce. This is because the types of public goods produced in a policy field hold incentives or disincentives for member states to cooperate and build strong institutions. Such (dis)incentives can in turn be addressed and sometimes be transformed by institutional reform. This transformation of incentives tends to be the more impactful, the stronger an institution is. These core arguments of this thesis will be elucidated in more depth below.

The terminology of public goods was elaborated in the economics tradition by Samuelson (1954) and was expanded and revised by economists such as Head (1962) and Buchanan (1968). Olson (1965) can primarily be given credit for the introduction of the concept into political science and

sociology. The concept of goods can best be explained with the public goods matrix, which classifies goods according to the two criteria of *excludability* and *rivalry in consumption* (or subtractibility) (Ostrom 2005). Excludability captures whether free-riding is possible, i.e. whether or not those who do not contribute to the production of a particular good can be excluded from its benefits. The level of rivalry in consumption indicates whether consumption of a certain good is rival, neutral or even complementary. Consumption is rival if an additional consumer decreases the utility of a good for other consumers (e.g. food, social benefits), neutral if the utility remains the same (e.g. TV programmes), and complementary if the utility increases (e.g. languages, technical standards). The result of this two-dimensional classification is a table with six categories of goods, representing the character of policies in terms of collective goods theory.

	High Excludability	**Low Excludability**
Rival consumption	Private goods (e.g. cohesion funds) *Medium centripetal*	Common pool resources (e.g. taxation) *Centrifugal*
Neutral consumption	Club goods (free movement of persons) *Strong centripetal*	Public goods (e.g. peace-keeping) *Weak centripetal*
Complementary consumption	Excludable network goods (e.g. the euro) *Very strong centripetal*	Non-excludable network goods (e.g. technical standards) *Weak centripetal*

Figure 1: Types of collective goods (based on Kölliker 2006).

These definitions of types of goods are always approximations in practice. Excludability and rivalry in consumption are not nominal values. Actual goods can usually be placed somewhere on a continuum between no excludability or no rivalry to complete excludability and complete rivalry. Values determining the classification of goods are therefore usually low or high, rather than absolute and boundaries between different goods are porous (Ostrom 2005).

Different types of goods involve different degrees of incentives to cooperate and therefore to ensure the production of the good in question. Among the six possible types of goods, excludable network goods make cooperation in goods production most attractive, and therefore the sufficient production of goods most likely. This is because outsiders or freeriders can be excluded from

enjoying the benefits of the good, giving them incentives to cooperate and contribute to be able to profit from the good. And because every additional consumer of the good will increase its utility (Snidal 1979: 563-564). This makes joining a club even more attractive than if consumption is neutral. The euro, the Schengen Information System (Kölliker 2001) or the European Patent (Kroll and Leuffen 2014: 361-362) have been identified as excludable network goods.

In case the good is non-rival, it is a club good, which still makes benefits exclusive to members, therefore providing an attractive advantage for those cooperating instead of those not cooperating (see e.g. Buchanan 1965). The EU and other international organisations offering a set of benefits for their members are frequently referred to as clubs. Private goods take an intermediate position, as they are excludable but also rival, making cooperation somewhat less attractive, while freeriders and outsiders can easily be excluded. Most consumer goods, but also EU structural funds or EU subsidies in the agricultural sector can be classified as private goods (Kölliker 2001: 131). Most markets are based on the production and exchange of private goods and they have proven to be a potent motor of cooperation and goods provision.

If a good is non-excludable, however, incentives for cooperation decrease dramatically, while freeriding becomes increasingly attractive. As freeriders cannot be excluded, incentives for ensuring the production of the good are low, resulting in suboptimal provision levels for such goods. This applies to non-excludable network goods. While complementary consumption might attract cooperation, the lack of excludability means that non-cooperating states will benefit from the good as well, providing little incentives to contribute. Technical product standards can constitute a non-excludable network good, from which industries and consumers outside may profit as much as those inside (Kölliker 2001). Public goods are non-rival, so that there is at least no direct competition for scarce goods (Samuelson 1954; Head 1962). In chapters 3 to 5 it will be shown that fiscal and financial stability in the EU are public goods. Common Pool Resources (CPRs) hold the highest incentives for freeriding, as they are not only non-excludable, but their consumption is also rival. The finiteness of the good creates even more pressing incentives to consume without contributing to the production of the good in order to make sure not to miss out. This unleashes a competitive dynamic creating a vicious circle using up the finite good. Fishery, raw materials, but also fiscal resources fall into this category (Ostrom 2005, Gardner 1990). Similarly, EU policies aiming at the prevention of race-to-the-bottom deregulation of environmental and social standards as well as harmful tax competition (Kölliker 2006: 179-207; Kroll and Leuffen 2014: 363-364; Dehejia and Genschel 1999: 426), and initiatives for refugee burden sharing (Thielemann 2018; Thielemann and Armstrong 2013) involve CPR problems.

The dilemma involved in CPRs is encapsulated in the idea of the tragedy of the commons (Hardin 1968), a challenge which has similarly been formalised as the prisoner's dilemma game (Poundstone and William 1993), where actors taking a cooperative stance run the risk of ending up worse off than those freeriding. But not only in the production of CPRs but also with respect to public goods, individually rational strategies lead to collectively irrational outcomes, due to the lack of excludability of freeriding.

This has been most prominently propounded by Olson (1965) in his book 'The Logic of Collective Action', where he showed that just because all members of a group would gain from it does not mean that they would act to achieve common objectives. In fact, it is rational for self-interested members of a group to go against group interest. He also showed that individual members of a group have larger incentives for freeriding, i.e. of putting their interests before group interests, the larger the group becomes. Thus, with respect to CPRs and public goods, cooperation is more likely in small groups rather than large groups. This parameter of size is called group latency. The euro area and the EU with 19 and 27 member states respectively can be defined as large, i.e. latent groups (Rommerskirchen 2019). Furthermore, game theoretic approaches link diversity of group membership with collective action failure (Ostrom 2005). As will be shown in the empirical chapters, EU member states often have quite different interests when it comes to fiscal and banking policy, mainly due to different economic models.

2.2.2 Public goods theory and EU integration

The first thorough use of public goods theory to analyse EU integration was presented by Kölliker (2001, 2006). He employed public goods theory to explain why initially reluctant EU member states would eventually join some initiatives of differentiated integration (such as the euro), while not others (like the Western European Union (WEU)). According to his theory, the centripetal effects of closer institutionalised cooperation among willing EU members on initially unwilling non-participants are strongly influenced by the character of the respective policy area in terms of public goods theory. Centripetal effects are in place if the benefits of joining a cooperative scheme are larger than the benefits of staying out. If net benefits are negative, there are centrifugal effects, which deter member states from joining. As Kölliker (2001: 135) as well as Genschel and Plümper (1997) show, the costs and benefits can also differ according to the ratio of participants and outsiders. The higher the ratio of participants versus outsiders, the stronger the net benefits of cooperation, i.e. the larger the centripetal forces.

Policy fields linked to excludable network goods offer the highest net benefits for cooperation and therefore have the strongest centripetal effects. On the other end of the spectrum, public goods offer very low or negative benefits for cooperation, yielding low centripetal or centrifugal effects. CPRs have the lowest, often negative net benefits, and therefore come with centrifugal effects, which deter member states from joining or even creating cooperative institution.

The eventual participation of initially reluctant member states is therefore most likely in policy areas involving excludable network goods, and most unlikely in areas dealing with common pool resource problems (the four remaining types of goods ranking in between these two extremes).

Kölliker shows how the EMU, Schengen and the Dublin Convention amongst others, have strong characteristics of excludable network goods and therefore initial outsiders were attracted to join these EU institutions. On the other hand, policy fields like tax harmonisation involve CPRs with centrifugal effects which deter member states from even launching cooperative schemes. Similarly, Kroll and Leuffen (2014) provide empirical evidence that in issue areas with non-excludable goods like the creation of a Common Consolidated Corporate Tax Base, enhanced cooperation initiatives in the EU are usually not even initiated.

2.2.3 The public goods character can determine the strength of institutions

Thus, non-excludability of goods produced in a particular policy area makes common institution building less likely. In fact, this dissertation will provide empirical evidence for the hypothesis that if European institutions are nevertheless built in such policy areas, they are usually weak. This has also to do with the fact, that actors attribute less value to benefits that they expect to receive in the distant future, and more value to those expected in the immediate future (Ostrom 2005: 48-49). As the immediate benefits of freeriding are usually higher than those of cooperation which often only materialise in the longer term, member states have an interest in weak rules which allow them to continue freeriding. As will be demonstrated, this was the case in European fiscal and banking policy before the crisis. However, a crisis can increase the costs of non-cooperation so that net benefits of closer integration can turn positive in an immediate, tangible way. In such cases, states are ready to cooperate more closely and build stronger institutions. This is essentially what happened during the financial and European sovereign debt crises. This will be shown in more detail in the following chapters on the cases of the institutions in European banking and fiscal policy before and in the suit of the financial and sovereign debt crises. An answer to the fourth

research question on how the type of public good of fiscal and financial stability shapes institutional strength is therefore the following hypothesis:

If institutions are built to secure the production of a public good or CPR those institutions will turn out weak, unless there is a situation where the immediate benefits of more integration are higher for member states than those of freeriding.

2.2.4 Strong institutions can manipulate the public goods character of a policy field

While the presence of public goods or CPRs in a policy field disincentivises the construction of strong institutions, strong institutions are in fact necessary for the provision of these goods on sufficient levels. This is because policymakers can address public goods or CPR problems by influencing and shaping the goods' character of policy areas by institutional design (Kölliker 2001: 147). Indeed, 'solving' public goods problems is a question of developing the appropriate political institutions (Snidal 1979: 563-564). They can provide selective incentives which can make members of a group choose cooperation over freeriding (Olson 1965), i.e. incentivise cooperation while disincentivising non-cooperation and freeriding. This is done by essentially introducing a level of excludability to the good.

There is a variety of ways to introduce excludability such as direct coercion, technical and legal exclusion (see Snidal 1979: 545). For example, any type of property law like copyright, or intellectual property rights restrict free access to artistic or scientific publications, turning them into private goods (e.g. books) or club goods (e.g. book club), of what otherwise would be CPRs or public goods (Schelling 1978: 33). A paywall for films on the internet is a good example for introducing excludability. If membership provides access to a pool of films, it turns these films into club goods, as they are excludable and their consumption non-rival.

Different ways of exclusion can have different degrees of effectiveness. To use the online film example, technical exclusion can be overcome by hacking one's way into a film club membership and legal exclusion by downloading films illegally. Similarly, legal exclusion does not guarantee complete excludability, as some actors might not be deterred by possible sanctions against breaking the law and freeride anyway.

Most importantly, the success of legal exclusion depends on a system of authority which can enforce it (Snidal 1979: 545). So effective enforcement of rules is crucial for excludability. But also a high degree of precision of those rules is important, to make sure that actors cannot just find loopholes or misinterpret the law to freeride. Finally, to achieve rules and decisions which actually exclude freeriders, decision making should be pooled as much as possible among actors, so that individual actors which have a higher interest in freeriding cannot veto decisions to impose legal excludability. Ideally authority is passed on to a decision-making body which depends as little as possible on individual actors which have incentives to undermine the production of public goods through freeriding and which enacts laws in the interest of the community to ensure the provision of public goods. Thus, it seems plausible to say that the stronger the institution the higher the likelihood of a more elevated level of excludability. In case of non-excludable goods such as public goods and CPRs, strong institutions are therefore necessary to guarantee the sufficient production of the good. The level of institutional strength therefore determines the level of excludability of a public good or CPR produced by an institution.

Weak institutions will produce public goods or CPRs on suboptimal levels because they cannot exclude freeriding. The stronger an institution is, the higher becomes its capacity to exclude freeriding behaviour and the closer the production of the public good or CPR comes to its optimum. By introducing excludability, strong institutions can manipulate a public good or CPR to the point that it assumes the features of a club good. This means that the second and third research questions are linked.

To assess the success of the reforms in EU banking and fiscal policy and the strength of institutions therefore also entails measuring how far the public goods or CPR character of a policy field could be manipulated to assume the traits of a club good. This will be tested throughout the empirical part of this dissertation, and it will provide answers to the third research question of how far institutions managed to mitigate public goods problems.

But how is the type of consumption linked to institutional dynamics? If an additional consumer of a good increases the good's utility, it will attract those who have hitherto been non-consumers. If the good is excludable at the same time, i.e. an excludable network good, this will make outsiders want to become insiders, i.e. join the club even more. The euro for example has traits of an excludable network good. The more states join the euro, the more valuable it becomes as a currency and the more it benefits its members (Kölliker 2001: 139-140).

Thus, if institutional strengthening can introduce a high level of excludability to a good which is non-rival, it can also create network effects in hitherto non-rival, non-complementary goods. This will provide outsiders with additional incentives to join that institution, leading to stronger centripetal effects. Network effects usually become pertinent only with respect to larger groups. The upshot is that strong institutions can manage to turn CPRs or public goods into club goods or excludable network goods. The dissertation will demonstrate this with the example of the single banking supervisor at the ECB.

Public goods theory and the concept of institutional strength are intimately linked. Strengthening of an institution goes hand in hand with creating more excludability and turning a public good or CPR into a club good or excludable network good. Additionally, public goods theory helps to explain why strong institutions are needed, and that they are needed particularly in case the relevant policy fields are dominated by public goods or CPRs.

In this dissertation, public goods theory will be used to conceptualise fiscal and financial stability as public goods, which will provide answers to the first research question. This will help to elucidate the shifting of incentives which enabled institutional reform and therefore help to address the fourth research question. But it will also lend itself as analytical lens through which to gauge the success of reform, addressing the third research question. Indeed, public goods theory can tell us how far an institution can mitigate problems of freeriding endemic in the public goods character of a policy field through increasing excludability and/or introducing network effects. That is, if an institution manages to turn a policy area with public good or CPR features into one with club good or excludable network good properties. The following empirical chapters will attempt to validate the theoretical claims made in this chapter and answer the aforementioned research questions by means of a comparative case study of the institutions of European fiscal and banking policy before and in the wake of the euro crisis.

3 Collective goods theory and European fiscal policy

This chapter will define fiscal stability and conceptualise it as a public good linked to elements of rivalry in the context of increased international economic interdependence. It shows how the EU provides a very particular setting of high interdependence which results in particularly low excludability of fiscal stability, making member state freeriding especially attractive. It introduces two ways of freeriding, growth and stability freeriding, which are linked to different economic models of EU member states dividing them up into creditor and debtor states with different interests and different preferences with respect to the institutional maintenance of fiscal stability.

The chapter then goes on to empirically analyse EU fiscal policy coordination and fiscal backstopping before and in suit of the sovereign debt crisis. In doing so it will show how the political dynamic of institutional reform was centred on the fault lines between the different types of freeriders and will examine how well institutional reforms could mitigate different incentives for freeriding by turning the public good character of fiscal stability more into a club or excludable network good. This will go hand in hand with an analysis of the evolution of institutional strength in European fiscal policy. This will include an examination if the case of fiscal policy in the EU confirms the hypothesis that institutions in policy fields with public goods characteristics are weak, unless there is a situation where the immediate benefits of further integration to member states become larger than those of continued freeriding.

3.1 Fiscal stability as important collective good

Fiscal stability can be defined as sustainability of state finances, i.e. the capacity to maintain solvency. It depends on the amount of debt and a state's ability to repay it, for which growth is also vital.

Fiscal stability is essential for a state to fulfil its core functions for its citizens, namely the provision of public services. Those differ slightly from state to state and usually comprise such services as the construction and maintenance of infrastructure, the provision of internal and external security, the judicial system, health care, and education. If state finances become unsustainable, there is a danger that a state is unable to provide these public services, which would compromise its

legitimacy and undermine public order and welfare. Fiscal stability is therefore of vital importance for the proper functioning of states.

3.2 Fiscal stability as a transnational collective good in a system of trading states

In a system of several states which entertain economic and financial exchange, fiscal stability becomes a transnational collective good. This good is always non-rival, as fiscal stability is intangible and additional consumers do not necessarily deplete it. It can however have different degrees of excludability. This is because fiscal policies of one state can generate externalities for the public finances of other states and therefore generate opportunities for freeriding on other countries' fiscal policies. If a state defaults, this can cause a domestic financial and/or economic crisis, which is likely to limit supply to and demand for goods and services from other states, negatively affecting their economies as well. A state which pursues an unsustainable fiscal policy, while at the same time profiting from positive or neutral externalities from other states is therefore freeriding on fiscal stability provided by others. In case a state is fiscally stable, it is more likely to create more demand and supply also for other states' economies, opening the opportunity for freeriding on growth created by others. This can influence the economies of other states with effects on tax income, thus also impacting their public finances. The strength of such externalities and the opportunities for freeriding, as well as the degree of excludability to them depends on the level of economic and financial interdependence, which is usually linked to the level of freedom of trade and the degree of international mobility of capital.

3.3 Fiscal stability in the context of rising globalisation: from club good to public good

From the 1930s to the 1970s, there was very little capital mobility and limited trade, so that economic interdependence was relatively low. Excludability was strengthened by fixed exchange rates within the Bretton Woods system, precluding fiscal policies having externalities on other states through exchange rate movements. Moreover, capital mobility was kept at a minimum,

which, in combination with fixed exchange rates enabled states to pursue an autonomous monetary policy. This provided an extra lever to stabilise state finances, as central banks could act as lender of last resort and counter negative externalities (Bordo 1993). As a result, the excludability of fiscal stability was high, turning it into something akin to a club good. This reduced freeriding, resulting in a period of relative international fiscal stability.

The removal of barriers to capital mobility after the collapse of the Bretton Woods monetary system in 1971 ushered into a period of financial mobility, as well as intensified trade and higher economic interdependence (Frieden 1991, Frieden and Rogowski 1996). This decreased the excludability of fiscal policies and therefore fiscal stability, turning it into more of a public good for states. Profiting of public expenditure in other countries, i.e. freeriding on the spending of others states became much easier. But also the effects of fiscal instability became much less excludable. Overspending states would increasingly become a hazard to the public finances of other states, too.

This was decisively exacerbated by the rise of global banks and finance and the internationalisation of public debt markets, which made fiscal stability increasingly intertwined with the stability of the financial system. Public finances could become more susceptible to debt crises in other countries, particularly in the third world and in emerging economies, where rising interest rates on public debt in one country could engender similar deteriorations in lending conditions in other countries. In a world of free-floating exchange rates, this was exacerbated by currency devaluations, which let states with dollar denominated debt slither into insolvency more easily and left them at the mercy of their creditors[3]. Under such conditions, the effectiveness of central banks as lenders of last resort was dramatically reduced. However, devaluation of a state's currency also provided the opportunity to regain competitiveness and raise demand for its goods. At the same time, developed economies would often profit from a status of safe havens, leading to low interest rates for public debt and usually a much higher level of fiscal stability. The Latin American, Asian and Russian sovereign debt crises of the 1980s and 1990s are examples for the non-excludability of debt crises.

[3] To repay their loans they would get money of the International Monetary Fund (IMF) under the condition of implementing structural adjustment and austerity programs.

Good: / Level:	**Fiscal stability**
Low financial and economic interdependence	Club good
High financial and economic interdependence	Public good
Common currency and common market	Public good with particularly low excludability

Figure 2: Collective good features of fiscal stability in different contexts of economic and financial interdependence.

3.4 Fiscal stability as a public good in the context of EMU and the need for fiscal policy coordination

3.4.1 The creation of the single market and the Economic and Monetary Union

In the European Economic Community, economic interdependence was already particularly high due to the customs union. This was further intensified by the introduction of the single market through the treaty of Maastricht in 1993. To curb exchange rate movements and exchange rate risk, European currencies were first kept in a band through the currency snake in 1972, and in 1979 the Exchange Rate Mechanism (ERM) was introduced to reduce exchange rate variability, along with the European Currency Unit (ECU) as common accounting tool (Oatley 1997).

Finally, a full monetary union was introduced in 1999. It removed differences in nominal exchange rates between members of the Eurozone. Members were also deprived of their capacity to pursue their own monetary policy, which was pooled under the auspices of the European Central Bank (ECB). This left fiscal policy as the only main tool of member states to directly guide economic policy and react to economic shocks. Altogether, this exceptionally high level of economic interdependence massively decreased the excludability of fiscal stability within the EU and even more so within the euro area.

3.4.2 The necessity of fiscal sustainability and growth in the EMU

Within the EMU and the single market, the maintenance of fiscal sustainability of every member state became important for the overall stability of the bloc and the stability of the common currency (Darvas et al 2018: 2-3).

The EU Treaty (European Union 2008) acknowledges that member states' economic and, by implication, fiscal policies are regarded as a 'matter of common concern' (Article 121, TFEU). Domestic fiscal policies can have positive or negative consequences for the financial stability of the entire Economic and Monetary Union, transforming domestic fiscal policy outcomes into a transnational collective good. Former Commission President José Manuel Barroso was testifying to this interdependence when he used the metaphor of 'sinking or swimming together' with respect to the euro (Rommerskirchen 2019: 26). Indeed, interdependence is strongest within the euro area, as its members' stability and economic well-being depend on the stability of the euro and they are bound together by a common central bank. But due to the single market, all EU states are highly interdependent.

While this kind of interdependence can significantly increase the efficiency of markets, it also harbours threats to fiscal stability, which can come from too much as well as too little public spending.

3.4.2.1 Threats to fiscal stability through too much spending

The ECB and other central banks as well as some academics have argued that member states which spend too much can undermine monetary policy by spurring inflation (Wyplosz 2006; EMI 2006). But this concern proved to be unfounded during the euro crisis and others have argued that the inflationary impact of fiscal policy tends to apply less in low-inflation advanced economies (Catao and Terrones 2005). What is more dangerous for the stability of the euro are sovereign debt crises with threats of defaults and bailout calls. The risk for those had risen since the 1980s due to the financialisation of sovereign debt markets which had made public debt more susceptible to speculation (Gabor and Ban 2012). Furthermore, Eichengreen (1993) predicted and Caporale and Girardi (2013) showed that government bond yields of eurozone countries are strongly linked to each other. Therefore, deterioration in the fiscal position of a given country can spill over to the borrowing costs of other indebted member states. This eventually happened during the sovereign

debt crisis, which proved to be highly contagious in the eurozone periphery, while creating stark imbalances between debtor and creditor states, which pushed the euro to the brink. Therefore it is vital to ensure fiscal sustainability in all member states to ensure fiscal stability.

3.4.2.2 Threats to fiscal stability through too little spending

At the same time, too little public spending can be detrimental to growth and create macro-economic imbalances. Especially considering aging populations and steadily rising welfare bills, growth is necessary for fiscal stability and economic well-being of individual countries as well as the EU as a whole. As member states are highly interdependent, spending in one country can leak or spill over into others, so that fiscal relaxation in one country may benefit its trading partners by raising the demand for export goods and services. Giuliodori and Beetsma (2004) for example show how fiscal expansions in Germany, France and Italy lead to significant increases in imports from a number of European countries. An increase in public spending by 1 percent of GDP in Germany can lead to a more than 0.4 percent normalised increase in GDP for Austria, Belgium, and the Netherlands after two years and a 0.06 percent increase in GDP for the more distant Greece (Beetsma et al. 2006). Low government expenditures on the other hand, not only fail to stimulate the economy domestically but in the entire EU.

This high degree of interdependence raises the need for coordination of domestic fiscal policies to secure the provision of the collective goods of stability and growth. In this context, coordination can be defined as ‘a significant modification of national policies in recognition of international economic interdependence’ (Wallich 1984: 85).

3.4.3 Fiscal stability in the EU as public good with strong incentives for freeriding

But despite a common interest in coordination of fiscal policy, there are serious obstacles to collective action, i.e., effective coordination, located in the incentive structure of the collective good at hand. Fiscal stability within a group of different states such as in the context of the EU can be categorised as a public good (Rommerskirchen 2019). That is, the good is non-rival but also non-excludable. This means that there are strong incentives to profit from the good, i.e. a stable common currency, without contributing to it, as freeriders cannot be excluded from benefiting from the euro.

This can come in form of debtor states spending more than they can afford and thus undermining the overall stability of the eurozone. But it can also arrive when frugal states with enough fiscal leeway invest too little and thus compromise overall growth in the eurozone. In both cases, states profit from socially harmful behaviour and have therefore no interest in effective coordination backed up by strong rules which would enforce a fiscal policy which is in the interest of the whole group.

The larger the group of states sharing a public good, the larger the so-called group latency, increasing incentives for freeriding (Olson 1965). The euro area and the EU with 19 and 27 member states respectively can be defined as latent groups (Rommerskirchen 2019), sizeable enough to engender strong incentives to freeride on the production of the good fiscal stability.

3.4.3.1 Freeriding with more tangible benefits than collective action

Sure, the stability of the euro is in everyone's interest, as financial and economic well-being of individual member states also depends on it. The benefits of the euro such as lower borrowing rates, no need for currency exchanges, a stable currency, and increased trust are clear, as are the great costs of exiting the euro for a member state and the entire euro area. However, while the benefits of the euro can quickly be taken for granted, freeriding usually does not have immediate negative effects on the stability of the currency, especially since the number of states in the euro area is so large (high degree of group latency). The euro and EU member states will endure too much or too little spending of individual states up to a certain degree. Thus, the costs of irresponsible behaviour for the community are not immediately tangible.

On the other hand, contributing to the production of fiscal stability can at times be immediately painful, while not showing direct and tangible benefits for individual member states. Spending too little and especially too much (depending on the context) can have immediate rewards. This can be understood as a time inconsistency problem, whereby the long-term benefits of the collective good are forgone by states tending to avoid short-term sacrifices for quick rewards. This problem of inferior attribution of value to benefits that can be expected in the distant future at the expense of those which can be anticipated in the immediate future is also more generally known in the collective goods literature (e.g., Ostrom 1990: 48-49; Olson 1965).

3.4.3.2 Incentives for stability freeriding

Freeriding in the form of yielding to the temptation of high debts and deficit spending, can be much more attractive to member state governments in their quests to get re-elected than coordinating fiscal policy with other EU states and sticking to a prudent policy.

First of all there are large incentives for spending too much, which can be termed stability freeriding (Rommerskirchen 2019). Fiscal restraint entails limiting public spending and investment and/or the raising of taxes, which can have detrimental effects on growth, employment and welfare services, at least in the short term. Cuts and austerity measures usually have immediate effects and high public salience and can lead to social hardship, political protests and opposition. There are often large constituencies opposed to such measures making it hard for any indebted government to follow through with fiscal consolidation. If cuts are made, concerns over re-election can favour diminishing investment over welfare payment, which in the long run weakens the fiscal stance of a state (Eyraud et al. 2017). At the same time, there are incentives to incur more debt for expansionary policies to stimulate employment and improve social welfare to gain voters (Schelkle 2005). Some scholars warned about such stability freeriding before the introduction of the euro (Imman and Rubinfeld 1992; Portes 1993).

3.4.3.3 Incentives for growth freeriding

But there can also be incentives for what can be called growth freeriding (Rommerskirchen 2019). Member states with low spending can thereby profit from the demand created by public spending in other states without having to spend and possibly infer high costs of budget deficits themselves (Beetsma et al. 2006). States with an export-growth model and a high degree of economic openness such as the Benelux, the Nordics and Germany have been accused of this kind of growth freeriding (e.g., Stiglitz 2016, Priewe 2018)[4]. This can create macro-economic imbalances whereby some states with a more domestic growth model depend increasingly on debt to keep up demand and pay for imports, while others can consolidate their finances and get structurally dependent on export surpluses without stimulating domestic demand, at least as long as external demand can absorb such export surpluses. Such imbalances can become structurally entrenched. This can stifle

[4] although in 2020 this policy was reversed by massive public spending of these states, in large excess of what other member states did in response to the Corona recession (see Darvas 2020).

growth in already fiscally weak states and lead to ultimately unsustainable debt cycles in countries with high public spending, threatening the common currency.

3.4.3.4 Non-excludability of freeriders

The incentives for both stability freeriding and growth freeriding are decisively exacerbated by the fact that it is practically impossible to exclude freeriding states from the benefits of a stable common currency, without significant harm for every member of the club. It would be highly harmful and legally impossible to eject growth freeriders from the euro. Stability freeriders could technically be left to default and crash out of the monetary union, but since this would likely create contagion and massive insecurity, bailing them out is most likely to be less costly for everyone. This creates the phenomenon of moral hazard, whereby 'insurance' against default can make a threat of default and a call for a bailout altogether more likely, as it encourages risk taking (Rommerskirchen 2019). As a consequence, risk taking or freeriding becomes so popular, that the public good is provided at suboptimal levels, if at all (Olson 1965).

3.4.3.5 Fiscal coordination is linked to problems of rivalry

Fiscal stability is not a rival good and therefore a common pool resource per se, as it does not constitute a measurable and limited pool. It is not really possible for one member to consume fiscal stability and thereby reduce overall stability, unless that member breaks the rules at the same time, making this a problem of excludability rather than rivalry. Nevertheless, fiscal coordination can also engender problems of rivalry, which are usually found in CPRs (Eyraud et al. 2017). To limit public expenditure and/or raise taxes to ensure fiscal sustainability, often make already indebted states and their economies less competitive, at least in the short term. Primarily, this affects those states negatively that already have large debt and need to perform more cuts or tax increases to avoid stability freeriding, and further increases incentives for doing just that. To increase spending can in fact be very attractive for fiscally weak states, as it can attract limited demand, which is a rival and non-excludable good. On the other hand, growth freeriding can also make states more competitive, as reliance on low investment and wages can help cut costs and increase export surpluses, while at the same time making other countries more dependent on imports and debt.

3.4.4 How to exclude freeriding and secure fiscal stability in the eurozone and the EU?

To sustainably secure fiscal stability, it is necessary to make sure that those who undermine the production of the good fiscal stability by spending too much or too little are excluded from enjoying the benefits of the good by increasing the costs of freeriding. Thus, the goal should be to introduce excludability into the production process of fiscal stability and therefore providing it with the features of a club good.

While a complete exclusion is not possible in a currency union, it is possible to legally exclude freeriding behaviour. This means that spending too much or too little is made illegal and that infringers will be punished. This would then set incentives to refrain from behaviour that undermines the production of the common good fiscal stability. This way to safeguard fiscal stability works largely ex-ante, i.e. it prevents fiscal crises from happening in the first place by reducing risk. Rules can prevent large divergences between countries' debt and deficit levels and macro-economic imbalances before a fiscal crisis threatens the common currency.

Other tools that can have a preventive quality are common bonds, or a common budget. They can ensure similar borrowing levels and therefore increase trust in financial markets that even weaker economies will be able to repay their debt. These tools work through redistribution of resources (common budget) or credibility (common bonds). They can counter growth freeriding, by letting fiscally strong states, often with an export-growth model and a high degree of economic openness invest more in fiscally weak states and thereby alleviate macroeconomic imbalances. Such redistributive tools, however, usually do not help to exclude stability freeriding. On the contrary, they can increase moral hazard (see below).

Fiscal stability can also be secured ex-post, which mainly works through risk-sharing by redistribution. Such tools come in when there is a debt crisis in one or several member states and preventive measures have failed to avert it. They are designed to manage public debt crises in a way that prevents defaults, usually by providing rescue funding. In emergency cases of imminent default, a common fiscal backstop or bailout fund seems to be the most effective tool, while in less urgent cases, common bonds and the introduction of a common budget could also help to defuse a sovereign debt crisis and safeguard fiscal stability ex-post.

Rules such as debt, deficit or trade surplus limitations are risk-reduction instruments, which legally exclude freeriding, while common bonds, bailout funds and a common budget rely on diluting risk

through redistribution. The latter may work against - i.e. exclude - growth freeriding by increasing spending in creditor countries and thereby alleviate current account imbalances, but they do not hold incentives against stability freeriding.

Common bonds, bailout funds or a common budget represent interventions to countervail market forces to assert fiscal stability within a currency union. Fiscal rules, on the other hand, are market-making, i.e. adjusting states to market requirements and increasing competitiveness (Seikel 2018).

3.4.5 Common fiscal policies create different incentives for different types of states

3.4.5.1 Incentives for freeriding depend on the debt profile of a state

Effects of fiscal coordination in the EU differ strongly among different member states, depending on whether they find themselves in the game as debtor/deficit or as creditor/surplus countries. For states relying on debt-making to create demand, stability freeriding can be more attractive than having to suffer from cuts and austerity, which would be hard to sell to their constituencies and make them relatively less competitive than their international competitors. Hence, rivalry for demand has much more negative effects for states with such demand-led growth models than for creditor states who do not need to raise taxes and cut public investment to avoid stability freeriding. Creditor states are more likely to growth free-ride, especially when their economies are open and export oriented. Fiscal interdependence is therefore often asymmetric (Keohane and Nye 1989), depending on the public debt profile and type of national economy.

3.4.5.2 Different varieties of capitalism create preferences for different common fiscal policies

Indeed, many scholars see the type of national economy as decisive in explaining how states fare under a common currency based on an independent central bank.

Some have argued that coordinated market economies based on export led growth models in the EU's north are more suitable for success in a monetary union than mixed market economies founded on demand-led growth models in the south, which are more difficult to operate successfully without the sovereign capacity to devalue (Hall 2014). Germany, the Benelux, the Nordics and Austria are usually seen in the first camp (Streek 1992, Hall and Soskice 2001, Hall

2014) while Greece, Spain, Portugal, and Italy in the second and France in between but closer to the latter group (Glatzer 1999, Hall and Gingerich 2009, Iversen and Soskice 2014). As devaluation is no longer possible inside the eurozone, demand-led economies would compensate through a more liberal fiscal policy, while their export-led peers would depend increasingly on a positive current account balance rather than domestic consumption without the need to incur large debt, while using the surplus capital to lend (Hall 2014). Such structural differences among political economies entrenched a dichotomy of debtor and creditor states, which had different interests when it comes to the institutional setup of fiscal coordination.

For debtor states, such fiscal systems would be more desirable, by which dangerous levels of debt, lack of creditworthiness or looming default would be remedied by burden sharing. A backstop (e.g. a bailout fund), a common eurozone budget or Eurobonds are examples for this, which were however not seriously considered during the creation of the euro.

In fact, all of these are ridden with common pool problems (Von Hagen 2012). A bailout fund (without conditionality) would encourage stability freeriding, as states incurring too much debt and defaulting would be sure to get bailed out. A common budget would equally represent a limited common pool, leading to redistribution of resources towards those states in a weak fiscal situation, taking away incentives to improve their fiscal position through painful restraint. Similarly, a common bond issuance like Eurobonds would create a rival common pool of creditworthiness without the possibility to exclude freeriders. Debtor states could profit from the sound fiscal credentials of creditor states through reduced borrowing rates, while having no incentives to improve their own fiscal sustainability and reduce excessive borrowing. Thus, there would be strong incentives for freeriding on the good credit rating of creditor states through continued fiscal profligacy, while creditor states would be threatened by aggregate higher bond spreads. All these systems would not easily allow the exclusion of freeriding on creditor states funds or creditworthiness and would provide freeriders with a competitive advantage.

This would not be in the interest of creditor states, who tend to favour a system of risk reduction through fiscal restraint to preclude debt crises from happening in the first place. At the same time, these states tend to be against rules asserting macroeconomic coordination of current account balances and labour market policies, i.e. rules against growth freeriding.

3.5 European fiscal policy before the crisis

3.5.1 The creation of the Stability and Growth Pact: incentive structures and outcomes

These fault lines came to the fore as soon as fiscal coordination was debated in the run-up to the creation of the euro. Germany as the most powerful fiscally conservative creditor state proposed a stability pact, which was to guarantee low inflation and prevent stability freeriding by excluding it by law. France as the leader of the opposing camp of debtor states, argued for a comprehensive economic policy coordination, which would not only ensure stability, but also promote economic growth and employment. The Germans insisted on automatic sanctions for member states infringing on stability rules, while the French and their allies advocated a much more lenient approach (Heipertz and Verdun 2010). Redistributive, risk-sharing mechanisms which could secure fiscal stability ex-post, were not seriously considered.

The result was a compromise tilted in Germany's favour: a framework of fiscal restraint albeit without automatic sanctions. Although it went by the name of Stability and Growth Pact (SGP), the set of rules operationalised in the regulations 1466/97 and 1467/97, did not include any substantial elements to stimulate growth. The SGP was conceived in the legal framework of the Maastricht treaty and introduced as part of the Amsterdam treaty in 1997. Its goal was to prevent the emergence of excessive deficits and debts and support the build-up of fiscal buffers in member states through the encouragement of counter cyclical fiscal policy. This was to ensure that fiscal sustainability problems in individual member states would not endanger the fiscal stability of the entire eurozone and the viability of the common currency. To provide this collective good of European fiscal stability, the SGP stipulated a 60 percent debt ceiling and an annual deficit limit of 3 percent (Heipertz and Verdun 2010). These rules were supposed to legally exclude the accrual of higher deficits and debt loads, i.e. stability freeriding.

This was combined with the no bail-out clause in Art. 125 of the TFEU (European Union 2008). It specifies that neither the EU nor any member state can be liable for the debt commitments of other member states and that the ECB is prohibited from purchasing sovereign bonds on primary markets. Fiscal policy was further curbed by the prohibition of monetary financing (Article 123 of the TFEU), the prohibition of privileged access to financial institutions (Article 124 of the TEU), and a prohibition of inflationary bailouts by the ECB. This was to increase the excludability of stability freeriders from fiscal stability in case of a public debt crisis and thereby provide incentives

to stick to the SGP. Thus, EU level mechanisms to secure fiscal stability ex-post were legally prohibited, so that the entire system relied on the ex-ante, preventive mechanism of the SGP. In practice this meant that in case of a debt crisis, member states would have to negotiate any coordination or resource sharing in the Council as a forum, without any pooling of decision making, and no designated rules and enforcement mechanism in place.

It was clear that in case of a looming member state default, sticking to the no-bailout clause and allowing sovereign default would incur high costs on the community. Furthermore, Art. 122 of the TFEU watered down the clause by explicitly permitting temporary financial assistance.

Because of this, Art. 125 had credibility problems from the start. Many believed that the community would break it and bail out struggling member states, as later happened for the first time with Greece. This also meant that the disciplining value of the clause was doubtful from the beginning on (Rommerskirchen 2019). Sovereign bonds were deemed risk-free by European banking regulation until Basel III started to be implemented in suit of the 2008 financial crisis and the ECB's collateral policy treated bonds issued by all euro area sovereigns similarly. This contributed to the narrowing of spreads between euro area sovereign bonds, proving that markets failed to price sovereign risk appropriately. There is anecdotal evidence that in the financial industry the view was quite common, that the no-bailout principle would not be strictly enforced (Pisani-Ferry 2012: 5). But the absence of a bailout mechanism meant that in case of a crisis, financial support for a member state threatened by default would have to be organised ad-hoc through negotiations in the Council or the Eurogroup. Thus, fiscal rescue funding was institutionally extremely weak, without any pooling of decision making, and no designated rules and enforcement mechanism in place. This weakness would be unable to counter incentives for stability and growth freeriding in case of a crisis and produce fiscal stability ex-post as no excludability through rules was introduced. Instead, it would leave disproportionate negotiating power in the hands of rich creditor states with stronger interests in countering stability than growth freeriding.

In the absence of a credible no-bailout clause, it mainly depended on the SGP to prevent member states from freeriding and undermining the production of fiscal stability. Despite its name, the focus of the SGP was on ensuring stability, while almost nothing was done to counter growth freeriding or to coordinate macro-economic policy. Such policies were clearly not in the interest of export-oriented creditor states, such as Germany (Heipertz and Verdun 2010). Thus, coordination centred around common debt and deficit rules, so that the main issue became the

question of how to make sure that rules were obeyed. This yielded a system of fiscal surveillance and rule enforcement, envisaging the financial punishment of offenders, i.e. an incentive system based on sticks rather than carrots.

But as the public good features in the policy field would suggest, the enforcement of a system with strong rules to limit spending was not really in the interest of debtor states and those with demand-led growth models. At the same time actual enforcement of fiscal rules through the application of financial penalties was not really in the interest of creditor states either. The payment of fines would further deteriorate the fiscal position of the infringing state and thus weaken the overall stability of the eurozone. Even if a state were to slither in the direction of default as a result of excessive spending, other eurozone member states would still find it more advantageous to bail it out to protect their creditors, avoid contagion and save the common currency, as happened for the first time with Greece in 2010. Thus, a setup of sticks as opposed to carrots in enforcing rules makes even creditor states wary of strict enforcement of rules, i.e. the exclusion of freeriders (Schelkle 2005). At the same time, many believed that deregulated private capital markets would create additional pressure on sovereign bond spreads to force member states into a sustainable fiscal policy (Costantini 2017).

This incentive configuration emanating from the public good features of fiscal stability in the eurozone meant that none of the euro area states (and to a lesser extent all EU states) had an interest to back up the SGP by a strong institutional setup, capable of enforcing rules. This was reflected in the institutional architecture that was eventually introduced.

3.5.2 The institutional weakness of the Stability and Growth Pact explained

Under the Stability and Growth Pact (SGP), the Commission was made responsible for surveillance of member states' fiscal performance and can initiate an excessive deficit procedure (EDP) (Article 104 TFEU) if a state is breaching the debt and/or deficit rules. In case of non-compliance with the EDP it could propose sanctions, while the final word on enforcement decisions depended on a qualitative majority in the Economic and Financial Affairs (ECOFIN) Council.

Overall, the SGP scored low on centralisation of decision making, precision and enforcement, making it a weak institution. Its rules and their application remained at the same time complex and vague. This made it harder for national policy makers to internalise and act according to them. On

the other hand, this left large room for interpretation by the Commission, whose decision making on whether states are breaking the rules lacked transparency (Darvas et al. 2018). Having said that, the Commission is de-facto a political actor embedded in the EU policy making environment dominated by member state governments. Especially because of the shared responsibility for enforcement of fiscal rules with the Council. Given the low interest for rule enforcement among member states, it can be hard for the Commission to propose an EDP or sanctions without losing face and the support of an opposing Council in the same or in other important policy fields (Christofzik et al. 2018). The complexity and lack of transparency of fiscal surveillance and the shared ownership of the SGP also causes a lack of legitimacy to citizens, which can and has been exploited by national policymakers who tend to attribute the responsibility for difficult and politically costly decisions of fiscal retrenchment to the Commission and the EU as a whole (Eyraud et al. 2017). This can decrease the political capital and room of manoeuvre of the Commission in their quest to effectively enforce the fiscal rules.

In 2005, the introduction of the concept of 'structural budgets' softened the Maastricht rules for states with downward swings of the economic cycle. The prescriptions for states in an EDP became relative to medium-term growth estimates for member states by the Commission (for a summary, see Morris et al. 2006). However, those have often proven to be subject to errors and their composition and methodology are complicated and lack transparency (Darvas et al. 2018).

The ECOFIN Council had to confirm sanctions proposed by the Commission by a qualified majority. The council gathers member state finance ministers responsible to their own countries' constituencies and with the mandate of advancing national rather than common interests. ECOFIN members may have incentives to be lenient and avoid actions that are politically costly for other members because they might find themselves in a position of fiscal distress in the future. Otmar Issing, former Board Member and chief economist of the ECB, described this implicit collusion situation as one in which potential sinners pass judgment on actual sinners (Irlenbusch and Sutter 2006: 418-419). This applies particularly to debtor states, and those with an import and consumption driven economy, which tend to represent a majority in the Council. This is because reputation costs decline with every unpunished breach of the SGP rules, making the sinners-judging-sinners-problem more acute (Eyraud et al. 2017). But incentives for harsh enforcement, further burdening strained SGP offenders are not strong for creditor states either, as they are interested in overall stability.

3.5.3 The Under-provision of fiscal stability by the SGP before the crisis

The institutional setup provided to oversee and enforce the SGP was not strong enough to effectively do the job and effectively exclude freeriders on fiscal stability. Before the crisis, the Commission avoided EDPs based on often erroneously estimated growth-estimates (Darvas et al. 2018). Furthermore, the Council regularly weakened Commission recommendations (Hallerberg 2014). When the Commission proposed sanctions against France and Germany over continuous breaking of the debt and deficit rules, the ECOFIN Council failed to reach the qualified majority required to enforce it, proving that the interest of member states for rule enforcement was low. This further undermined the credibility of the SGP, summed up by a British MEP: "Why should any country comply with it, when the two biggest euroland economies are flouting it and getting off scot-free" (Tran 2003). Subsequently, the SGP was unable to prevent pro-cyclical and over-expansive fiscal policies in most member states and the build-up of fiscal buffers turned out to be suboptimal (Eyraud et al. 2017), so that some states like Greece later proved to be unable to accommodate a larger shock. The institutional weakness and subsequent low credibility of the SGP also undermined the trust markets had in member state finances (Schelkle 2005), which would eventually lead them to calculate with much more risk once the crisis started.

At the same time, pre-crisis policy for dealing with growth freeriding and macro-economic imbalances, especially in member state current accounts, can be described as one of benign neglect, driven by a belief in the disciplining effects of membership of the single currency on wage and price setters in national economies. In other words, it was thought that economic mechanisms were in place to ensure that external imbalances would smoothly self-correct and that there was little need for coordinative policy to assist the process. But the disciplining effects of euro membership proved far less powerful than anticipated with changes in competitiveness and external imbalances proving much more persistent than originally envisaged. The end result was that structural shocks and cyclical forces put economies on a path of external debt accumulation that were left largely unmanaged, creating a dangerous vulnerability to a change in economic circumstances. Macroeconomic imbalances emerged in euro area countries with relatively low per capita incomes, notably in Portugal and Greece where there were current account deficits of between 8 percent to 10 percent of GDP and public and private sector deficits of roughly 4 percent to 5 percent of GDP before the crisis (Hume 2015).

Thus, fiscal coordination before the crisis was weak in all three dimensions, centralisation of decision making, precision and enforcement. This weakness can be seen as a consequence of the

public good characteristics of fiscal stability, and the CPR nature of international demand which made freeriding more attractive than cooperation for member states. This confirms the hypothesis that institutions created in policy fields with public goods and/or CPRs will be weak, unless there is a situation where the immediate benefits of more integration are higher for member states than those of freeriding. The resulting weak institutional character of the SGP was unable to mitigate incentives for freeriding and turn fiscal stability into more of a club good or excludable network good by introducing excludability and complementarity of consumption. Furthermore, the SGP completely failed to address the issue of growth freeriding. Incentives for powerful creditor states not to limit this hazardous behaviour were too strong, while many believed that eurozone economies would converge more or less automatically under the euro.

However, entry into the monetary union was not enough to erase the structural differences among Europe's political economies and macro-economic imbalances became even larger. At the same time, increased debt and the absence of fiscal buffers in some southern countries made the eurozone susceptible to shocks.

3.6 European fiscal policy during the crisis:

3.6.1 The eurozone sovereign debt crisis and the EU fiscal policy reforms to tackle it

Such a shock came with the global financial crisis in 2008, which quickly spread in the European financial system. Member states went to bailout some of their struggling banks and many introduced costly stimulus packages and incurred large amounts of debt to finance it. Subsequently, the financial markets started to doubt the debt sustainability of some states which were already highly indebted. Greece became the first country engulfed by the sovereign debt crisis (Featherstone 2011; Jones 2013; Zahariadis 2012). In late 2009, the new Greek government under George Papandreou revealed that the public deficit was 12.7 percent, not 6 percent as estimated by the previous government. It became clear that the country had doctored its accounting, and the financial markets dramatically increased the risk premiums on Greek sovereign bonds and by 2010, the main credit rating agencies downgraded them to junk status (Papoulatos and Quaglia 2013). This made it increasingly hard for the government in Athens to refinance their debt. By spring 2010, Greece was pushed to the brink of default, while the mistrust

of the markets spread first to Ireland then to Portugal, Italy and Spain, where sovereign bond spreads started to increase drastically, too. Fear spread that Greece or others among the most affected countries could default or leave the eurozone, re-introduce national currencies and devalue with devastating contagion consequences for the euro and the EU.

It became clear that European fiscal coordination had failed to prevent excessive debt and the emergence of macro-economic imbalances and to ensure the sustainability of public finances in some debtor states. Successive Greek governments had been engaging in excessive borrowing, constituting a clear case of stability freeriding. The impeding default of Greece, which would have incalculable consequences for European creditors as well as the entire eurozone, kick-started a push for reform in order to save the euro and prevent similar crises in the future. This can be explained by the fact that the acute crisis situation increased the costs of continued low-level cooperation and freeriding dramatically, while the prospective immediate benefits of closer integration increased significantly resulting in stronger centripetal effects.

At first, emergency measures to manage the crisis were taken. They were to prevent defaults and a possible collapse of the common currency. To prevent a Greek default, bilateral loans were provided first and subsequently 110 billion euro from the newly founded rescue funds European Financial Stability Facility (EFSF) and the European Financial Stabilisation Mechanism (EFSM), as well as the International Monetary Fund (IMF) were dispensed in May 2010, linked to a rigorous three-year conditionality programme stipulating austerity policies. All this was done by circumventing the no-bailout clause, which had become unworkable.

While the Greek crisis was far from over, the next victim of the sovereign debt crisis was Ireland. There the problems did not originate in stability freeriding by excessive debt accumulation. Problems started when the government in Dublin attempted to bail out its collapsing banking sector, which had been hard by the burst of the domestic housing bubble resulting from the financial crisis (Woll 2014; Whelan 2011). The Irish banking crisis had become a sovereign debt crisis and the government had to accept conditional financial support from the two EU rescue funds and the IMF in November 2010. The rescue package comprised of 67.5 billion euro and included not only support for government expenditure but also for the Irish banking system.

With Greece and Ireland in crisis, Portugal proved to be the next weak link engulfed by contagion. Here a surge in sovereign debt had originally been caused by bank bailouts prompted by excessive private borrowing (Gros 2012). In May 2011, an aid programme was set up for Portugal. It included 78 billion euro by the EFSM, ESFS and IMF and was conditional to austerity measures.

In Italy, interest rates on sovereign bonds also shot up starting in 2010, making it increasingly hard for the country to service its debt. Doubts about the country's debt sustainability started to emerge as Rome had accumulated debt worth more than 120 percent of GDP while growth rates had been chronically low. With an economy many times larger than Greece, a bailout would have been impossible to shoulder by the existing rescue funds (Howarth and Quaglia 2016). By late 2011, contagion had spread to Spain, where public debt surged after the government attempted to bailout the country's crisis-ridden banks (Gavilan et al. 2011).

With the threat of a Spanish default and Italian bond spreads rising to unsustainable levels, the situation had become so critical that more decisive measures were taken. After policy makers had recognised that the Greek public debt burden had become unsustainable, a debt restructuring was agreed with private creditors in March 2012. In October 2012 the European Stability Mechanism (ESM) with a maximum lending capacity of 500 billion euro was established to provide a permanent rescue fund for struggling sovereigns. Arguably even more decisive was the action of the ECB. After already stretching its mandate with two rounds of long-term refinancing operations, ECB president Mario Draghi promised to "do whatever it takes to preserve the euro" by opening the possibility of Outright Monetary Transactions (OMT) in July 2012. This played a crucial role in bringing down bond spreads and stabilising the EMU (see Tooze 2018: 447; Sandbu 2015: 157-159).

3.6.2 Incentive distribution informing EU institutional choice in fiscal policy during the euro crisis

This considerable reform effort in European fiscal policy was possible because despite distributive conflict, creditor and debtor states shared one overriding common objective: the preservation of fiscal stability and the euro (Schimmelfennig 2015: 181-182; Jones et al. 2016). Merkel's remark 'if the euro fails, Europe fails' underlines this (BBC 2011). Yet, what kind of reforms to take and how to preserve the euro remained a matter of contention between debtor and creditors states. The stances of member states and perceived interests in the negotiations for these reforms were yet again primarily informed by their fiscal position. Bargaining on the fiscal policy reforms thus took place largely along the fault lines of debtors versus creditors and fiscal transfers versus fiscal discipline (Lehner and Wasserfallen 2019).

Debtor states pushed for a crisis solution focused on redistribution and increased spending financed by creditors, pushing for supranational solutions in this field. On the other hand, they preferred weak rules and intergovernmental solutions on fiscal restraint which would allow them to continue to stability freeride. Creditor states insisted on strengthening fiscal rules to increase the excludability of stability freeriding, pushing for more supranational control in this field. At the same time, they had no interest to raise excludability to growth freeriding and wanted to keep redistributive mechanisms largely intergovernmental and subject to conditionality to prevent debtors from stability freeriding (Schimmelfennig 2015: 189-190). Debtors were in favour of risk-sharing and market correction, while creditors preferred risk-reduction and market-making (Seikel 2018).

Interdependence between creditor and debtor states had become increasingly asymmetric during the crisis, as the latter depended on the former for their survival in the eurozone (Costantini 2017) and to be able to refinance their debt (Finke and Bailer 2019). This gave creditor states an important edge in the negotiations. Thus, creditor states largely asserted themselves and dominated the reform agenda. They assumed political leadership through the Council, marginalising the Commission (Seikel 2018: 694.

The final institutional outcomes represented a compromise albeit more in the favour of creditors (Wasserfallen et al. 2019). The focus lay on the reform of the SGP, the creation of a intergovernmental rescue fund with strong conditionality, while the introduction of Eurobonds or a fiscal union were vetoed by creditor states. In the end, excludability could not decisively be increased both with respect to stability and growth freeriding on fiscal stability. Elements of rivalry could hardly be mitigated and no elements of complentarity were introduced.

3.6.3 Reforms of fiscal coordination: six-pack, two-back, fiscal compact

Fiscal retrenchment and structural adjustment[5] were the primary medicine prescribed as a condition for bailouts by the so-called troika and mainly northern creditor states to tackle the problems in southern debtor states. The idea was that stability freeriding in the form of excessive public spending and too large sovereign exposure to private bank debt had been the main reason for the sovereign debt crisis with its bailouts of Greece, Ireland and Portugal. The ECB, Germany

[5] E.g. privatisations and liberalisation of labour markets.

and other northern creditor states regarded fiscal restraint therefore not only as necessary condition for the disbursement of aid and guarantees but also as solution for long term stability of the eurozone, through stricter fiscal policy coordination (Blyth 2013). Hence, they pushed for a reform of the SGP to prevent freeriding on fiscal stability and ensure the fiscal sustainability of member states in the future. This eventually resulted in a set of institutional reforms.

The existing debt and deficit restrictions of 60 percent and 3 percent respectively were not changed, but the reforms introduced new procedures to improve surveillance and enforcement in the hands of the supranational Commission. In October 2010, the Council agreed on 6 legislative acts (six-pack), which entered into force in December 2011. This heralded the introduction of the European Semester, which subjected yearly member state budgets to a review of the Commission before their presentation to national parliaments. Surveillance was further facilitated through the introduction of minimum requirements for national budget frameworks also to be monitored by the Commission. At the same time, the implementation of the excessive deficit procedure, designed to enforce compliance with fiscal rules, was specified and accelerated, and mechanisms to enforce proper budgetary surveillance were introduced. Furthermore, a new Macroeconomic Imbalances Procedure was to address the problem of macroeconomic imbalances and growth freeriding, which had been neglected in the earlier version of the SGP.

When the sovereign debt crisis intensified in late 2011, further legislation to enhance surveillance (two-pack) and enforcement (fiscal compact) was enacted. The former increased the frequency of budget scrutiny by the Commission, while the latter was an attempt to further strengthen the excessive deficit procedure by an inclusion of the balanced budget rule in national law monitored by national fiscal councils (European Commission 2019). It was modelled on the debt brake in Germany, which had been introduced by an amendment of the German Basic Law in 2009 (Tooze 2018: 291). Furthermore, ratification of the fiscal compact was made a prerequisite for states to be considered for emergency funding by the ESM (Schimmelfennig 2014).

3.6.3.1 Incentive structures informing decision making on reform in fiscal coordination

Northern states led by Germany mainly pushed for a strengthening of the existing SGP rules, namely the 3 percent deficit and 60 percent debt limits, to prevent stability freeriding, which they saw as the main problem threatening the euro. In line with these incentives, Germany propounded a more supranational solution with fully automatic sanctions and the suspension of voting rights

for countries in excessive deficit and a transcription of the balanced budget and debt break rules into the national law of member states.

A more supranational fiscal regime with more precise balanced budget and debt brake rules, as well as their stricter enforcement were not in the interest of debtor states, for whom it was extremely hard to sell a programme of cuts and austerity to their constituencies, which would also make them less competitive in the international rivalry for the CPR demand. Neither was it in their interest to centralise decision making power, as this would increase the likelihood that they could be outvoted. Some of the harsher measures proposed by Germany in the negotiations for the fiscal compact – fully automatic sanctions and the suspension of voting rights for countries in excessive deficit – did therefore not get approved in a compromise solution (Lehner and Wasserfallen 2019). The majority held by debtor states in the Council would preclude such more extreme reforms, at least through the standard community method of legislating.

Hence, more radical elements of the reforms such as the transcription of the balanced budget and debt break rules into national law in the fiscal compact, were pushed through primarily by Germany in the framework of an intergovernmental agreement. It was modelled on the debt brake in Germany, which had been introduced by an amendment of the German Basic Law in 2009 (Tooze 2018: 291). Furthermore, the ratification of the fiscal compact was made conditional for bailouts of debtor states through the equally intergovernmental ESM (Schimmelfennig 2014). In this case, only a package deal could help overcome centrifugal effects working on debtor states and yield reforms that strengthened the SGP rules, albeit only on paper.

As discussed above, a strong system of enforcement through sanctions was not necessarily in the interest of creditor states like Germany either, as the payment of penalties would bring debtors closer to the brink, further weakening overall fiscal stability. In fact, there are sources claiming that the harsher measures proposed by Germany which were eventually defeated in the negotiations were essentially understood as a bargaining chip on Germany's part to get what they really want (Lehner and Wasserfallen 2019).

Debtor states also campaigned for stricter rules to limit growth freeriding. This issue had largely been ignored in the pre-crisis version of the SGP, but experts had increasingly stressed the importance of macro-economic imbalances for the genesis of the crisis, such as in current accounts, labour market policies or real estate prices (Stiglitz 2015). Especially large current account surpluses in some northern creditor states were seen as harmful for the health of the EMU. Thus, debtor states managed to assert the introduction of rules introducing limits to current account

surpluses as part of the Macroeconomic Imbalances Procedure (MIP) in the framework of the six-pack. This marked an important step to recognise that growth freeriding had to be dealt with if fiscal stability was to be achieved in the eurozone. However, the rules were tilted in favour of creditor states with current account surpluses, permitting only up to 4 percent negative but up to 6 percent positive current account balance. It clearly was not in the interest of powerful creditor states like Germany to relinquish handsome export surpluses and be barred from growth freeriding (Hume 2015). The immediate benefits of continued growth freeriding were clearly larger for them than those of further integration.

3.6.3.2 The institutional weakness of the reformed Stability and Growth Pact explained

Considering the power dynamics among EU member states and limited immediate benefits of further integration of fiscal policy coordination in the eyes of most EU member states, the reforms of the SGP turned out to be compromises, which did not decisively increase its institutional strength. Altogether, institutional strength was greater with respect to policies addressing stability than those addressing growth.

3.6.3.2.1 Stability: more centralisation of decision making, but weak enforcement

The reforms of the SGP strengthened its weak institutional setup, that had been unable to overcome public good incentives for stability freeriding before the crisis. However, not decisively to effectively exclude stability freeriding. In fact, the reforms of the six-pack and two pack made European fiscal rules even more complex and left broad areas of discretion for both member states and the Commission. This was seized as an opportunity by an increasingly political Commission (especially under Juncker from 2014 onwards) to justify a lenient approach towards indebted member states (Christofzik et al. 2018; Schmidt 2015; Dehousse 2016). In early 2015, for example, it proposed that France, which had failed to meet its deficit target, be granted a two-year extension of the deadline to correct its excessive deficit and merely insisted on the need for comprehensive and ambitious structural reforms (European Commission 2015). Furthermore, the Commission tolerated creative window dressing of national budgets such as in the case of Italy in 2015, while it spared Spain and Portugal from a sanctions procedure in 2016, as it considered fines hard to convey to crisis-battered citizens of those countries (Valero 2016). Altogether, the Commission never proposed sanctions since the crisis, although 24 EU countries were made subject to an EDP

between 2008 and 2018, and many of those did not comply with the Commission's medium-term objectives or did not adhere to debt reduction targets (Darvas et. al 2018). The Commission's lenience was criticised by creditor state representatives such as Bundesbank President Jens Weidmann (2015):

'As a lesson of the crisis the rules were stiffened somewhat. But at the same time, the Commission was granted more leeway in interpreting the rules. So far, the Commission has made ample use of this additional leeway, thereby thwarting the original intention of the rule overhaul.'

This reluctance to enforce the rules by the Commission was certainly encouraged by the fact, that the new decision rules in the Council on sanctioning non-abiding member states could not change its bias against enforcement, based on a comfortable majority of debtor states in the Council. Sure, the European Semester concentrated power over fiscal monitoring in the Commission and decision making in the Council on the implementation of sanctions was changed to reverse qualified majority voting by the six-pack regulation 1173/2011. Under this new procedure, member states commit to supporting Commission proposals for an excessive deficit procedure or sanctions, unless a qualified majority of them (without the member state concerned) is opposed to such a decision and rejects the proposal within 10 days (Fabbrini 2013: 1020).[6]

On paper, this represented a considerable centralisation in decision making power, strengthening the autonomy of the Commission as a supranational actor at the cost of intergovernmental control (Bauer and Becker 2014a, 2014b; Seikel 2016). But it still left member states with the power to block excessive deficit procedures and the imposition of fines. Neither did it change incentives for member states to oppose strict sanctions, which have been explained above. The problem of political collusion and potential sinners passing judgment on actual sinners became arguably even more pronounced during the crisis, as there was still a majority of debtor states while the number of actual sinners went up sharply and financial instability made it more likely for other members to become one. This made the prospect for a confirmation of sanctions by the Council small, which in turn made them politically more risky for the Commission to propose.

Through the fiscal compact, the balanced budget and the debt break rule including an automatic correction mechanism was transposed into national law in all EU members except the Czech Republic and the UK. At first glance, this seems like a radical step towards more effective enforcement. Once such national laws were in place however, their observance is controlled by

[6] See Articles 4(2), 5(2) and 6(2) of Regulation 1173/2011 and Article 3(3) of Regulation 1174/2011 (Six Pack); see also Article 23(10) of Regulation 1303/2013.

national authorities who often had little interest in enforcing stricter budget rules (Hallerberg et al. 2012). Indeed, the new law was unable to prevent the breaches of fiscal discipline mentioned above.

3.6.3.2.2 Growth: intergovernmental decision making and weak enforcement

The aim of the new Macroeconomic Imbalances Procedure (MIP), based on the regulations 1176/2011 and 1174/2011, was to identify macroeconomic imbalances with adverse effect on stability and growth at an early stage and to enforce policy actions to correct them in a timely manner. It was to apply to all EU members and included an Annual Alert Mechanism (AAM) report that would use standardised metrics to detect imbalances in current accounts, competitiveness, housing, and credit markets. For those countries with apparent macroeconomic imbalances an In-Depth Review (IDR) would be triggered. Based on that review there would be the possibility of corrective measures, backed up with fines for eurozone members (European Commission 2019). However, the initiation of an excessive macroeconomic imbalances procedure proposed by the Commission, had to be confirmed by a simple majority in the Council (Hume 2015). The political dynamics among member states and power structure among debtor and creditor states, made enforcement unlikely. Unlike in the case of stability freeriding, it is usually creditors who stand to lose from strict rules and their enforcement by losing some of their advantages in international competition in a MIP. Hence, the strength of the negotiation positions of creditor states in the Council would make effective rule enforcement unlikely. Indeed, fines have so far never been enacted. This suggests that the incentive and power structure in the Council would preclude effective rule enforcement against growth freeriding, similarly to that of stability freeriding.

Consequently, the markedly intergovernmental institutional structure of the MIP turned out to be too weak to establish excludability to effectively counter growth freeriding. Due to the majority of states with a current account deficit, a larger pooling of decision making could be able to tilt the balance in favour of enforcement, though. Especially since, unlike with respect to excessive deficits, where sanctions can further endanger overall stability, there are no incentives for debtor states to vote against sanctions, except from political ones. Fiscally strong creditor states with export-led growth models are unlikely to become a risk for European fiscal stability because of financial sanctions.

3.6.3.3 The Under-provision of fiscal stability by the reformed SGP

All this suggests that the SGP was not strengthened sufficiently to effectively address the public good problems present in EU fiscal policy coordination. Despite the crisis and a high urgency to act, large areas of discretion and weak enforcement mechanisms against both stability and growth freeriding seem still to have been in the interest of member states. Even under crisis conditions there were no immediate benefits for member states of making the SGP considerably stronger, particularly for those in the south. So, the strong incentives to freeride, decisively aided by the non-excludability and problems of rivalry connected to the public good fiscal stability, were not sufficiently countered by the new institutional structure. The public good character of fiscal policy coordination was not turned into a club good or excludable network good character. As a result, the effectiveness and performance of the reformed SGP were low, as it was unable to fulfil its designated tasks.

While the weak debt and deficit rules could not instil respect and compliance by debtor states, they also did not create enough trust in the financial markets, resulting in more volatile sovereign debt spreads in southern eurozone states. Policy makers in these countries have stated that their fiscal policy was more influenced by market pressure than by the SGP rules. This outsourcing of incentive provision for restrictive fiscal policy against stability freeriding to the highly erratic and unpredictable financial markets has been particularly harmful for the fiscal stability of affected member states and thus for the overall stability of the EMU. Overall debt was not reduced as much as the SGP had aimed for, so that debt sustainability was not significantly reinforced (Rommerskirchen 2019).

The economic shock of the Covid-19 pandemic can be regarded as a stress test for the reformed system of fiscal coordination. Italian and other southern European bond spreads rose sharply right at the start of the pandemic, raising the spectre of another eurozone crisis. Markets could only be calmed down by the intervention of the ECB (Claeys 2020). This further corroborates that the reforms of fiscal policy coordination have failed in making the eurozone public finances more resilient.

3.6.4 The creation of rescue funds: EFSF, EFSM and ESM

3.6.4.1 Incentive and power structures informing the foundation of the rescue funds

The architects of the EMU never agreed on a European rescue fund and rejected the idea of a lender of last resort function for the ECB (Heipertz and Verdun 2010). This left the eurozone without an institutionalised, rule-based process to deal with the threats of member state defaults, so that policy makers had to rely on ad hoc negotiations with the Council as a forum without any pooling in decision making.

However, the emergency of the sovereign debt crisis, which led the euro to the brink of collapse demanded quick solutions. In this situation, the immediate benefits for integration clearly outweighed those of continued freeriding for member states. Again, the public good features of fiscal stability in the currency union informed the opposing interests of creditors and debtors. While debtor states were calling for financial support mechanisms, such as generous bailouts, Eurobonds, and a larger eurozone budget, creditor states feared that burden sharing mechanisms would institutionalise a redistribution of money from north to south and set further incentives for stability freeriding. Besides, they had to react to domestic public opinion hostile towards aid to periphery countries (Gocaj and Meunier 2013, Ban and Seabrooke 2017: 10).

With creditor states' bank exposures endangered and the euro at stake however, they had to act. Creditor states and above all Germany, realised that without some form of burden sharing, Greece and other crisis states would default which could have threatened the survival of the euro and therefore endangered their vital interests (Schimmelfennig 2015: 181-182; Jones et al. 2016). Creditor states had no interest in the destruction of the public good fiscal stability in the eurozone which would likely have spelled the end for the euro and would have badly affected their own economies. This led to a shift in incentives as the aggregate net benefits for member states of further integration turned positive. To calm the markets, rescue struggling eurozone periphery states and at the same time counteract incentives for stability freeriding, they attached strict conditions to bailout loans in the framework of rescue packages.

These comprised first loans on bilateral level, and then financial assistance of the newly established European Financial Stability Facility (EFSF) and the European Financial Stabilisation Mechanism (EFSM) in May 2010. It was hoped that these instruments would allow Greece to repay their outstanding debt and generally increase market confidence in sovereign bonds of eurozone debtor states and consequently relax their lending conditions.

3.6.4.2 The European Financial Stability Facility (EFSF)

The EFSF had a lending capacity of 400 billion euro based on guarantee commitments of 779.78 billion euros. It was given an intergovernmental structure with low centralisation of decision making rather than a supranational one with high centralisation under EU authority as proposed by the Commission and favoured by debtor states (Seikel 2018). It was a Special Purpose Vehicle (SPV) which would raise money by issuing bonds backed by eurozone member state guarantees on a pro-rata basis (Gocaj and Meunier 2013). Rescue programmes had to be agreed on unanimously by all eurozone member states, providing Germany and other creditors with a veto. Thus, the intergovernmental structure of the EFSF with low centralisation of decision making kept the control over disbursement ultimately in the hands of creditor states. On their initiative, financial assistance was made subject to strict conditions of fiscal retrenchment and structural adjustment encapsulated in so-called Memorandums of Understanding (MoUs), which the Commission would negotiate with countries applying for aid. The adherence to MoUs would be monitored by the Troika, which quickly got a reputation for harsh rule enforcement. Continued financial assistance was dependent on rule abidance, which made for a powerful enforcement mechanism. Thus, the EFSF combined a low level of centralisation of decision making with high precision of rules and strong enforcement.

3.6.4.3 The European Financial Stabilisation Mechanism

The Commission would control only the smallest part of the May 2010 Greek bailout: the EFSM. This 60 billion euro facility was funded by the EU's central budget, and therefore guaranteed by all member states, under Article 122.2 (Charlemagne 2010). The decision-making rules of the EFSM were designed according to the community method: the Council decided with qualified majority about the granting of financial assistance on a proposal of the Commission. Member states therefore did not have a particularly strong veto position. The task of negotiating the conditions for financial assistance with the receiving country was delegated to the ECB and Commission, which was also responsible for the administration of loans and for the monitoring of the compliance with the conditions (Seikel 2018: 698). The EFSM therefore scored much higher on centralisation of decision making, then the EFSF, while precision and enforcement were similarly strong. With only 60 billion euro, it was however much smaller than the EFSF and therefore its overall impact on the strength of EU fiscal rescue funds cannot be judged very high.

The EFSF and EFSM bailout funds provided loans and guarantees to Ireland, Portugal and Greece conditional to the signing of MoUs with strict conditions of fiscal retrenchment.

3.6.4.4 The European Stability Mechanism

3.6.4.4.1 The foundation of the ESM

During 2011 and 2012, when Spain's and Italy's public finances got under increasing pressure and the existing rescue funds proved too small to shoulder further bailouts, it became clear that a larger rescue vehicle was needed to safeguard fiscal stability during crises. Germany was strongly opposed to expanding the EFSF's powers but backed a Treaty change to set up a permanent rescue mechanism that would allow a method for orderly default (Barysch 2010; Castle 2011; Spiegel and Pignal 2011).

For the establishment of this permanent bailout fund, Germany pushed for an intergovernmental model akin to the EFSF rather than the more supranational EFSM model. Following a German initiative, the ESM was agreed on by the eurozone member states in July 2011 and set up in October 2012, following an ad hoc intergovernmental treaty (ESM 2012) signed on 2 February 2012 by the members of the eurozone (Wenz-Temming and Sonnicksen 2016: 9-10).

So far, the ESM has provided financial support to Spain (for the recapitalisation of its banking system) as well as to Cyprus and Greece. All three programmes have ended (the Spanish in December 2013, the Cypriot in March 2016 and the Greek in August 2018), but the three countries still have to repay their loans. The average maturity of ESM loans is much longer (from 12 to 43 years) than the length of the programme, which usually expands over three years (Dias and Zoppè 2019).

The ESM was strongly linked to the idea of fiscal discipline. Not only by its requirements for fiscal retrenchment and structural adjustment which it shared with the EFSF and the EFSM, but also by entrenching the idea of conditionality for financial assistance on a more fundamental constitutional and legal level. It made eligibility for funding conditional to the signature of the intergovernmental fiscal compact and its prescription of constitutionalised national debt breaks (Schimmelfennig 2014). Furthermore, for the introduction of the ESM, a new paragraph was added to the EU Treaty, Article 136 (3) TFEU. It states that 'the granting of any required financial assistance under the mechanism will be made subject to strict conditionality' (Seikel 2018: 699). Thus, the idea of excluding stability freeriding played a central role in the establishment of the ESM.

3.6.4.4.2 The functioning of the ESM

The main instrument of the ESM was to be the sovereign bailout loan, for states which had lost access to market financing. It also offered primary and secondary market purchases of bonds and securities of a troubled state. Additionally, it could disburse precautionary financial assistance in form of credit lines to support sound policies and prevent crises. The granting of such precautionary credit lines was not conditional to the launch of a full macro-adjustment programme, but to a lighter set of conditions enshrined in a MoU agreed with the Commission. Furthermore, the ESM was authorised to provide assistance to financial institutions in form of direct and indirect recapitalisation, and in 2018 member states agreed to turn the ESM into a backstop of the Single Resolution Fund (for more details see section 5.8.5).

The ESM was given a subscribed authorised capital totalling 704.8 billion euro (80.5 billion euro paid-in plus 624.3 billion euro callable capital), of which a maximum of 500 billion euro could be lent. This was made up of contributions of each ESM member based on the capital key of the ECB, which reflects the respective country's share in the total population and gross domestic product of the eurozone, and members receive ESM shares corresponding to their subscribed capital. By pooling financial resources member states could achieve substantial economies of scale and scope that would not be attainable in the absence of delegation. Ultimately, the ESM's financial firepower would be larger than the sum of its parts due to its superior credit rating that lowers the average borrowing costs (Tesche 2020: 117).

ESM financial assistance was made strictly conditional on the implementation of policy measures. Such measures were to be specified in a Memorandum of Understanding (MoU) negotiated by the European Commission on behalf of the ESM, the ECB, the IMF (where applicable) and the beneficiary member state. MoUs would usually prescribe fiscal consolidation through structural adjustment and austerity measures.

This had the potential of effectively excluding stability freeriding. States dependent on external support, simply had to steer a fiscally conservative course in order to receive and continue to receive financial support. Furthermore, the prospect of having to fall under conditionality and giving up control over national fiscal politics to a considerable extent could work as a powerful deterrent. It could set incentives to avoid a policy of unsustainable fiscal expansion and induce governments to reduce debt. At the same time, to guarantee fiscal stability in the eurozone, a large enough fund would be necessary to prevent defaults of eurozone member states and create confidence in sovereign debt markets to bring down yields.

3.6.4.4.3 The relative institutional strength of the ESM: intergovernmental decision making but high precision and strong enforcement

The institutional design of the ESM mimicked that of the EFSF (Gocaj and Meunier 2013: 251). Germany and other creditor states on whose money the fund largely depended, wanted to maintain control over the disbursement of aid. This was to make sure that financial assistance was only provided if they agreed that there was a real threat to the fiscal and fiscal stability of the eurozone. The result was a largely intergovernmental institution headed by the German Klaus Regling, with a low level of pooled decision making on the disbursement of aid, but with strict and precise rules and strong enforcement mechanisms for conditionality.

All major decisions in the ESM are taken by its Board of Governors (BoG), composed of the 19 euro area finance ministers, while the Commission and the ECB only send observers. The BoG chooses either to be chaired by the president of the Eurogroup or elect a chairperson from among its members (for two years, renewable). This meant that decision making was firmly in the hands of representatives of member state governments and not under supranational control. Nevertheless, ESM decision-making on capital raising, lending and conditionality relies on the advice from the Commission and the ECB (Howarth and Spendzharova 2019). Furthermore, national constitutional requirements require four eurozone member state governments to seek the approval of the national parliament on all ESM capital raising, lending, bond buying and on each modification to ESM loan packages: these are the creditor states Germany, the Netherlands, Finland, and Estonia (Höing 2015: 50-51).

Major decisions within the BoG were to be taken by unanimity, including on capital increases, granting of financial assistance and approval of MoUs. In case of emergencies, the BoG would also grant financial assistance with a qualified majority of 85 percent of the votes, which effectively confers a veto right to prevent further risk sharing upon each of the three largest member states, namely Germany, France and Italy (Henning 2017: 172). Pooling of decision-making power was therefore minimal, allowing creditor countries to keep a tight control over the disbursement of financial assistance. The voting rights of each ESM member in the BoG were made equal to the number of shares allocated to it in the capital stock of the ESM, which further bolstered the influence of the larger shareholders (Tesche 2020: 118).

This intergovernmental decision-making process was mirrored in the Board of Directors (BoD). It was made the executive body of the ESM, composed of 19 Directors appointed by the Governors, from among people of high competence in economic and financial matters. It would take decisions

such as the approval of individual loan disbursements as part of an ongoing programme or those which are delegated to it by the BoG. The BoD would take decisions according to qualified majority, while for decisions delegated by the BoG the voting method would be the same as the one adopted by the BoG. The voting rights of each ESM Member were the same as in the BoG (Dias and Zoppè 2019).

The design of the financial assistance programs as well as the design and monitoring of the policy conditions were in principle performed by the Troika composed of the Commission, the ECB, and wherever possible, the IMF. All three institutions have a track record of stipulating precise policy conditions, as well as monitoring and enforcement of compliance. While not having any specific mandate yet, the ESM is also deeply involved in setting the policy conditions attached to financial assistance, which was outlined in an MoU between the Commission and the ESM (European Commission and ESM 2018). There are regular monitoring missions to the respective programme countries by the Troika and ESM staff. To guarantee timely amortisation, the ESM has established an early warning system to detect loan repayment risks and allow for corrective actions (Dias and Zoppè 2019). Non-compliance with conditionality would threaten so called programme countries with a stop of financial support. This can be regarded as a very effective means to enforce compliance, as programme countries usually crucially depend on a continuation of financial support.

The ESM therefore has a weak level of centralisation of decision making but once it has decided on a programme, its conditionality rules tend to be precise and adherence to them is strictly monitored and enforced.

3.6.4.5 The ESM increases excludability to stability freeriding, but cannot provide fiscal stability for larger states

With low centralisation of decision making but high precision and enforcement, the ESM can be classified as an institution of medium strength, although its scope is limited due to its relatively small size. It significantly increased the excludability for stability freeriding in the eurozone and therefore increased the excludability of fiscal stability as a whole. It did so by diminishing moral hazard, by ensuring that bailouts would be connected to conditionality. This decreased incentives for stability freeriding.

In principle, the ESM had the potential to also work against growth freeriding. It provided struggling debtor states with much needed investment in form of loans at significantly better conditions than on the financial markets. Given the composition of the ESM's financial resources, this investment came mainly from creditor states. An ESM loan could therefore also work against creditor state growth freeriding. Instead of saving and depending on export revenues for growth and therefore growth freeriding, coordinated market economies in the North would invest their money in the mixed market economies founded on demand led growth models in the south. Thus, ESM loans could help reduce macroeconomic imbalances in current accounts and stimulate growth in debtor countries. Such benefits, however, were diminished by growth stifling austerity policies which were the conditions for the disbursement of financial assistance.

Furthermore, the need for unanimity in the BoG also set a very high threshold for the agreement to ESM aid. It meant that financial assistance would only be provided if Germany and other creditor states saw the necessity for intervention, which was only likely to be at a stage when European fiscal and financial stability was acutely threatened. According to Gocaj and Meunier (2013: 250), this was unlikely to convince investors. Certainly, the limited size of the ESM played a crucial role in this, too. With its 500 billion euro lending capacity, it would not be able to bailout a large euro economy like Italy which held debts of 134.5 percent of GDP worth around 2.5 trillion euro at the end of 2019 (European Commission 2020), let alone several countries at the same time. Thus, the ESM could not provide a large enough fiscal backstop to guarantee the fiscal stability of the eurozone (and in extension the EU) in case of a serious crisis. Therefore, it could not guarantee significantly better lending conditions on the financial markets for debtor states either. This was demonstrated by the soaring Italian sovereign bond spreads at the beginning of the Corona crisis in March 2020, which could only be subdued by the intervention of the ECB and the agreement on the larger EU recovery fund in July 2020.

Harsh conditionality also made it increasingly unattractive for debtor states to apply for aid. During the Covid-19 crisis, Italy rejected the offer of a 39 billion euro ESM loan, as prime minister Giuseppe Conte did not agree with the conditionality attached to it and many Italians found it stigmatising (Johnson et al. 2020; United News of India 2020). Instead, Italy pushed for the issuance of common Coronabonds. When those could not be attained due to the opposition of creditor states like the Netherlands and Germany, another rescue fund in form of the recovery fund Next Generation EU was established, comprising around 750 billion euro in loans and grants. It provided better conditions than what the ESM. The ESM and its particularly harsh way of

excluding stability freeriding had been circumvented, so that it could not play a role in safeguarding fiscal stability during the Covid-19 crisis.

3.7 Conclusion: excludability higher for stability than for growth freeriding - fiscal stability endangered

The focus of the EU fiscal policy reforms including the reorganisation of the SGP and the creation of the ESM was set on excluding stability freeriding. But not enough was done to address growth freeriding through large macroeconomic imbalances, such as in current accounts between creditor and debtor states.

Debtor states' economies were locked into dependence on domestic consumption because they could not devalue to improve their export competitiveness. And because export-oriented creditor states like Germany equally focused on budget consolidation and kept wages low. This let creditor states not spend enough on imports from debtor countries, while at the same time improving their export competitiveness. This contributed to a situation where debtor states were hooked on imports instead of stimulating their own economy through more demand for domestic goods.

Austerity measures of strict saving working against stability freeriding, reduced domestic consumption even more. This stifled growth crucial for the ability to reduce public debt, so that the prospect for the improvement of the creditworthiness of debtor states at the markets was meagre. This could be slightly improved by the rescue loans to preferential conditions under the EFSF, EFSM, and ESM and a partial haircut of Greek sovereign debt in early 2012. However, much more investment would have been necessary to remedy macroeconomic imbalances such as in current accounts to improve fiscal stability in debtor states and therefore stabilise the euro in a sustainable way. The interventions of the ECB, such as its promise to do whatever it takes to preserve the euro and employ Outright Monetary Transactions (OMT), as well as its bond buying programmes were decisive in improving lending conditions for debtor states and thus keeping debtor states solvent and stabilising the euro.

These institutional outcomes were determined by the interest distribution between growth freeriding creditor and stability freeriding debtor states, conditioned by the public goods traits of fiscal stability. The increased power of creditors during the crisis let to an institutional design

marked by relatively strong institutions countering stability freeriding and weak ones countering growth freeriding and enhancing growth.

Areas focused on redistribution, growth enhancing and excluding growth freeriding such as the ESM and the Macroeconomic Imbalances Procedure were equipped with largely intergovernmental institutional setups with a low concentration of decision-making power. Those areas focused on excluding stability freeriding, such as the reformed SGP and the conditionality provisions for ESM support were made institutionally stronger. In the strengthened SGP the supranational Commission was given significantly more discretion and decision making in the Council was pooled considerably, albeit not enough to effectively ensure enforcement. The MoUs stipulating fiscal retrenchment and structural adjustment in exchange for ESM support were precise and enforcement by the supranational troika effective.

However, without an institutional architecture providing for equal exclusion of stability and growth freeriding, fiscal stability in the EU is unlikely to be sustainable. This also negatively affects the legitimacy of EU fiscal policy (Lausberg 2022). However, the creation of the recovery fund Next Generation EU with a capacity of 750 billion euro issued by the Commission is a step in the right direction. Similar to the EFSM, it is a supranational, EU backed fund with larger firepower than the ESM as well as more growth-oriented investment conditionality. Similarly, a reform of the SGP which guarantees both the exclusion of stability and growth freeriding through stronger institutional structures would be desirable.

4 Public goods theory and European banking supervision

This chapter will define financial stability and the role banks play in it. It will provide answers to the first research question by conceptualising financial stability as a public good linked to elements of rivalry in the context of increased financial interdependence and the absence of international banking regulation and supervision. It will introduce financial stability as a good for banks and states and their role in it and presents banking supervision and regulation as goods in their own right. It will be shown how the EU provides a very particular setting of high financial interdependence of banks which results in particularly low excludability and high fragility of financial stability, making bank and member state freeriding especially attractive. Furthermore, it will be shown how the lack of excludability and rivalry for the common pool resources demand and supply of capital create a phenomenon called banking nationalism, by which states help their banks freeride on financial stability by lenient banking regulation and supervision to gain competitive advantages with respect to other states.

The chapter then goes on to an empirical analysis of EU banking regulation and supervision before and in suit of the financial and sovereign debt crises. This will include an analysis of changes in the regulatory and supervisory realms and how this influenced banking in the EU. The institutions of the CEBS, EBA, as well as the ECB common supervisor in the framework of the SSM will be introduced and examined on their strength and their ability to transform financial stability from a public good into a club good or excludable network good, thereby addressing the second and the third research questions. This will also provide answers to the fourth research question, namely how the public goods character of financial stability shaped institutional choice and determined institutional strength.

4.1 Theory: public goods theory and banking

4.1.1 The need for financial stability as important good

4.1.1.1 The crucial role of banks in the economy

Banks play a crucial role in the economy by administering the factor capital and turning savings into productive activity. On the most fundamental level, banks are meant to allocate capital in form of credit from savers to borrowers in an efficient manner. Thus, they form new capital and manage risks. Banking also arranges payments and facilitates internal and international trade, as a large part of trade is done on credit. Banks are also crucial transmitters of monetary policy (e.g. see Allen et al. 2015, Berger et al. 2015, Goddard and Wilson 2016). All these functions are crucial for making the overall economy more efficient and stimulate growth (Levine 2005).

Banks constitute vital capital providers for states and therefore play an important role in fiscal policy and political economy in general. The control over the banking system is therefore a central power resource for states (Ingham 1999, 2004; Zysman 1983), and the degree of state influence on the banking system is a crucial factor for the depth of the state's intervention capacity in the economy (Seikel 2013: 16-17).

Some of the functions of banks can also be taken on by financial markets and shadow banks such as private equity funds or hedge funds. But in Europe, banks still account for the bulk of financial services, as around 80 percent of financing is done by banks (Langfield and Pagano 2015). This is why this chapter (and the following one) will concentrate on banks and banking groups, and leave aside other financial firms, notably non-bank "fintech" (financial technology) firms, shadow banks, investment services firms, insurers, and financial market infrastructures.

4.1.1.2 The need for financial stability as an important good of common interest

For a sufficient provision of capital as essential production factor, it is vital for an economy that a critical portion of the functions of banks are not interrupted. A breakdown of capital formation in suit of a financial crisis usually has devastating effects on the real economy (e.g. see Ashcraft 2005). Therefore, it is essential for the economy as a whole that large banks (or a larger number of smaller banks) with significant amounts of critical operations remain stable, i.e. they can distribute enough capital to the economy. That means that they should be capable of withstanding

shocks, contagion effects and the unravelling of financial imbalances (ECB 2009). This can be summarised under the term financial stability, which constitutes an important collective good. Guaranteeing financial stability is therefore also important for a state's legitimacy (Lausberg 2022).

It is difficult to define what financial stability entails more concretely. While it becomes clear what went wrong after a financial crisis, it is not easy to define the conditions for financial stability ex ante. It essentially involves a trade-off between enhancing growth and efficiency on one side and reducing risk and financial instability on the other. How these trade-offs work and what constitutes the best balance between the two is not exactly understood (Schoenmaker 2013: 24).

It is clear, however, that financial stability is strongly linked to the issue of systemic risk. This represents the risk, that an event will trigger a loss of economic value or confidence in a substantial portion of the financial system (De Bandt and Hartmann 2000). Usually, three sources of systemic risk are cited, namely contagion effects, aggregate shocks exogenous to the financial system, and the emergence of financial imbalances, such as the formation of a credit bubble (ECB 2009). A financial crisis is systemic if many banks in a financial system fail together, or if a large bank's failure propagates contagion, causing the failure of many banks accounting for a significant share of banking assets or deposits (Acharya 2009). Thus, a shock that initially affects only a particular region or sector, or perhaps even a few institutions, can spread by contagion through interlinkages between banks and financial institutions to the rest of the financial sector and then infect the larger economy (Berger et al. 2015: 35). Guaranteeing financial stability is therefore about the reduction of systemic risk that can lead to such systemic crises. The ECB (2022c) defines financial stability as "a condition in which the *financial* system – which comprises *financial* intermediaries, markets and market infrastructures – is capable of withstanding shocks and the unravelling of *financial* imbalances."

From a policy point of view, financial stability can be achieved ex-ante and ex-post. The former involves *crisis prevention* and the latter, once a crisis is hitting comprises *crisis management* to limit its extent and negative consequences for the economy (Howard and Quaglia 2016).

Financial stability is of particular concern compared to stability in other sectors of the economy due to the so-called financial stability hypothesis. It suggests that finance is particularly prone to crises and that small shocks can have disproportionately large effects (e.g. Allen and Gale 2004; Lagunoff and Schreft 2001). This is because of the peculiarities of bank balance sheets which display a combination of maturity and liquidity mismatches, high leverage and the particular

opacity of banking assets and liabilities. This is compounded by the information and control intensity of financial contracts which rely on promises and expectations about future payments (Stiglitz 1993). Moreover, instability can spread much more quickly and easily within the financial system and spill over into the real economy due to the interconnectedness of financial markets (De Bandt et al. 2015: 670-672).

There is evidence that systemic risk tends to be higher in bank-based financial structures, which rely more on debt and bonds rather than equity. An increase in the size of the banking system relative to equity and private bond markets is associated with more systemic risk and lower economic growth (Langfield and Pagano 2015).

4.1.1.3 Financial stability as a public good with strong incentives for freeriding

Due to its importance for economic growth and stability, financial stability can be regarded as a good of common interest, the provision of which is important for the economic welfare of the population. To be precise, it is a public good, the consumption of which is non-excludable and non-rival (Schoenmaker 2009). It is non-rival, as an additional consumer will not mean that there will be less of financial stability for everyone else. It is non-excludable as it is difficult to exclude freeriders from profiting of financial stability.

For financial stability to be produced, banks should not destabilise the financial system, the stability of which is vital for the successful operation of all banks. But it is very difficult to exclude a bank which does not contribute to the production of financial stability from profiting from it.

If one bank engages in transactions that risk the stability of the system, however, it can still profit from the stability produced by other banks with sustainable operations. Thus, this bank can freeride on the public goods provision of others. Freeriding avoids the costs of contribution to the production of the public good, so there are incentives for rational, profit maximising banks to engage in it. Subsequently, the public good financial stability is produced on suboptimal levels.

These perverse incentives could be curbed by effectively enforced regulation. But it will be shown how in international and EU wide-competition, states have supported the freeriding activities of "their" banks, to reap benefits for their national economies. Driven by such incentives, a collective action problem arose which undermined global financial stability, leading to the financial crisis and exacerbating financial instability in the EU and the eurozone during the euro crisis.

4.1.2 Financial stability in one country

4.1.2.1 Financial stability as public good for banks

As financial institutions and particularly banks play a crucial role in the production of financial stability, it is necessary for them to avoid excessive risk, which can augment systemic risk. However, there are incentives for banks to act in a way that can undermine financial stability.

Banking as an industry is based on the calculated taking of risks. Banks can be more competitive on the financial markets if they provide loan services cheaper, taking lower risk premiums, which often involves a reduction of base capital and/or liquidity buffers. They can also become more profitable if they set aside less base capital and/or liquidity and borrow additional capital to lend or invest more. Thus, the less capital and liquidity is set aside, and the more leverage applied, the more profitable a bank can be. But this also means there will be less capital and liquidity to insure against credit events such as defaults, making the bank more likely to default on loans and destabilise other financial institutions. The three most important factors that determine a bank's profitability, but also its risk of default are therefore the level of capital, liquidity and leverage (Tooze 2018: 314).

There are incentives to incur risk to be more competitive and profitable, but not too much to risk default and possibly risk wider financial stability through contagion. Consequently, banks should normally steer a delicate course between profitability and stability. This can be compared to fiscal stability for which states need to navigate between stability and growth (see chapter 3.4.2).

There are also market based checks to incentivise a healthy balance of profitability and security, working for system stability. Banks considered to be steering too risky a course will have a hard time to get capital and liquidity on the money markets for decent rates and attract investors. This mechanism is labelled market discipline.[7] Furthermore, the risk of defaults and bankruptcy is a strong disincentive for banks to incur too much risk in its own right.

Of course, these checks based on the market and a banks' own judgement do not always work, as information is often limited, opaque and particularly complex in the context of banking (Stiglitz 1993). Due to such information asymmetries between banks and their counterparties, as well as cognitive failings there have been many cases where banks or markets have misjudged the real

[7] For a theoretical treatment of market discipline, see Decamps, Rochet, and Roger (2004), and for empirical analyses that support the risk-controlling role of market discipline, see Barth, Caprio, and Levine (2004), and Goyal (2005).

risks of lending or investments (Bliss 2015). Often enough, banks have been able to create trust despite being aware of the riskiness of their operations. Either way, banks have been able to freeride on financial stability produced by others, by undermining this stability to gain competitive advantages. These advantages constitute powerful incentives for freeriding.

Such incentives are usually not diminished by freeriding banks' own interest in the common interest of financial stability. This is because the banking industry is usually composed of a large latent group of banks, where a single bank freeriding or contributing through particular financial transactions does not make a big difference for financial stability. Thus, even if bank managers are convinced of the need for financial stability, they do not necessarily feel that they are endangering the common interest of financial stability by following their own interests (see Olson 1965).

The most decisive incentive for freeriding is however the lack of excludability of financial stability. It is practically impossible to exclude freeriding banks from the benefits of financial stability. Financial stability, which is vital for all banks, is therefore a public good which is non-excludable and non-rival. Incentives for freeriding are intensified by the fact that freeriding can increase the competitiveness of banks in the rivalry for the supply and demand of capital in the market for banking services. Demand for and supply of capital are non-excludable and rivalrous, making them common pool resources (CPRs). While financial stability is not itself rival, it is further undermined by problems of rivalry of the CPRs supply and demand for capital.

4.1.2.2 State intervention: turning financial stability into a club good through regulation, supervision, resolution

States have stepped in with banking policies to counter such collective action problems by introducing legal excludability to financial stability and thereby turning it into a club good. Due to the importance of financial stability and growth to national economies it is in their interest to prevent banks from freeriding on financial stability, while also guaranteeing efficient capital allocation (Epstein and Rhodes 2014). Governments have introduced policies and institutions first to prevent banking crises and if they do happen, policies and institutions to manage them in a way that minimises harm to the economy. For crisis prevention they mainly rely on banking regulation and banking supervision. Those make sure that banks do not freeride on financial stability, while also being able to provide enough credit for the economy. Thus, freeriders are punished if they infringe on banking regulations or supervisory prescriptions, so that freeriding is excluded by law.

For crisis management, many countries have created banking resolution regimes and deposit insurance funds. The former oversee orderly resolution avoiding contagion to other banks and the spread of financial crisis, while the latter are supposed to prevent bank runs and insure depositors against bank defaults. Well designed and functioning resolution regimes and deposit insurance can also help to prevent crises by creating more trust in the resilience in a financial system, while supervisors can also be of great help in crisis management (e.g. Donnelly 2015, 2016, Howard and Quaglia 2014, Spendzharova 2017). Banking resolution and deposit insurance will be discussed in more detail in chapter 5.

Financial regulation is to internalise negative externalities for financial stability, so as to provide banks with appropriate incentives to manage and limit their risks and authorities with the appropriate tools to reduce the impact of a failure on the wider financial system. Regulation, supervision and resolution can achieve this central aim by reducing the incidence of distress at individual banks and by intervening in an efficient manner if insolvencies or financial crises do occur (Schoenmaker 2013). This usually involves a banking supervisor ensuring that banks have sufficient liquidity to meet demand and sufficient solvency precautions in place, by fulfilling certain standards based on metrics such as asset quality, capital ratios, net stable funding ratios and leverage ratios or by interventions such as precautionary recapitalisation (Donnelly 2016).

National banking policies can be effective, as long as banking is largely limited to a national jurisdiction and there is no or not much cross-border capital mobility, which was largely the case before the collapse of the Bretton Woods monetary system in 1971. That way, financial stability as well as the policies that help to produce and safeguard it are largely excludable to outsiders and free-riders within. With a single national authority and national banking (little or no international capital mobility) the consumption of financial stability without contributing to its production by abiding by national rules can be prevented quite effectively, through effective banking regulation and supervision. Financial stability in this context is made legally excludable and non-rival, so that it constitutes a club good on the level of banks and states (with only the given nation state as member of the club).

As enablers of financial stability, banking policies like banking supervision and resolution become goods in their own right. Their cost, expertise and knowledge of the domestic banking system and markets, makes banking supervisors or resolution authorities as well as their services valuable goods. In the national context they are excludable and non-rival, i.e. club goods for states.

Furthermore, banking supervision and resolution as well as the assertion of banking regulations creates a form of standardisation which makes it easier for banks to be compared, and thus gain more credibility on financial markets. As is the case with other technical standards, this means that the utility of banking regulation, supervision, resolution increase the more banks adopt it. In this sense, consumption of banking supervision is complementary. This also makes banking supervision increasingly attractive for banks, the more banks fall under their remits. This can reduce banking lobby opposition to effective and credible national banking policies and smooth the way for the construction of strong institutions in banking regulation and supervision.

But two developments have complicated efforts to overcome collective action problems in the production of financial stability in European banking systems. First, the globalisation of financial markets and financial risk since the 1980s, and second, European integration and the introduction of the single currency in 1999.

Good: / Level:	Capital		Banking supervision		Financial stability	
	For banks	For states	For banks	For states	For banks	For states
Banking without supervision	Common pool resource	Common pool resource	NA	NA	Public good	Public good
Banking with supervision	Common pool resource	Club good	Excludable network good	Club good	Club good	Club good

Figure 3: Types of goods in national banking with and without banking supervision.

4.1.3 International financial stability

4.1.3.1 Financial stability as international public good for banks

4.1.3.1.1 Globalisation of capital mobility and financial risk

The globalisation of financial markets and financial risk since the 1980s was made possible by rapid advancements in communication technology, radical innovations in financial services and political moves towards market liberalization (Cerny 1993: 63–5; Frieden 1991; Frieden and Rogowski 1996). This involved the rise of international capital mobility and massively increasing interdependence among financial institutions (Frieden 1991; Goodman and Pauly 1993; Grabel

2003; Frieden 2006; Abdelal 2007). These developments were mainly driven by diversification of risks, higher profit margins and incentives to follow costumers abroad for new business opportunities (Committee on the Global Financial System 2010). It led to the creation of very large multinational banking organisations, which often became disproportionally large with respect to their original home country's economy. Many of these adopted the universal bank model, combining traditional commercial banking services with investment banking, asset management and other financial services (Morrison 2015). Furthermore, so-called shadow banks such as hedge funds, money market funds and structured investment vehicles emerged, which were often closely interconnected to banks, no less international, but much less regulated than them, adding further opacity and complexity to the global financial system (Pozsar et al. 2012). Thus, banks became dependent not only on the stability of national financial markets, but on much more complex global ones. This global spreading of risk made it much more difficult for market actors to correctly estimate risk (Genschel and Plümper 1997).

All of this brought major challenges to financial stability (Allen et al 2011). A bank failing in one country could now affect financial institutions thousands of kilometres away in different countries and compromise financial stability. Thus, excludability of national banking industries was broken up, turning financial stability for banks into an international public good.

4.1.3.1.2 Freeriding by banks on financial stability becomes easier

As risk became increasingly dispersed, so would the consequences of risky operations with high leverage and risk. This made it easier for banks to engage in high-risk activities and hold low capital bases without having to deal with negative effects. This is because of a large group latency (Olson 1965) with thousands of banks in Europe and even more worldwide. This effect was exacerbated by increasingly complicated financial products, which can disperse risk across many different financial actors across the world through securitisation. Such financial innovation significantly lowered transparency in the valuation of credit risk. This helped banks to mask credit risk and exacerbated problems of adverse selection and moral hazard (Mian and Sufi 2009; Keys et al. 2010; Dell'Ariccia et al. 2012). In short, freeriding on financial stability provided by others became a lot easier.

4.1.3.1.3 Incentives for freeriding on banking regulation and supervision: regulatory arbitrage

As the regulatory and technical barriers between national markets eroded, entry and exit costs for banks migrating between different regulatory and supervisory systems decreased considerably. In the absence of effective global regulation and supervision[8], this opened the door to regulatory arbitrage (Kane 2015: 512-513). It was made attractive by the great variation of existing regulatory and supervisory systems which were rooted in different historical, cultural, economic and political contexts across different countries (see Barth, Caprio and Levine 2006, 2012, 2013).

Borrowers and lenders gained significant leeway to reduce their net regulatory burden by moving business activity to jurisdictions where standards were lower and regulations less strict (Genschel and Plümper 1997). This facilitated aggressive and risky market positions by banks and thus increased incentives for banks to freeride on stability produced by others. In the context of global markets this developed its own competitive dynamic for capital supply and demand on the level of banks, which often came at the cost of financial stability.

4.1.3.2 Financial stability as international public good for states

4.1.3.2.1 Loss of excludability of national banking policies and financial stability

It also became increasingly difficult for nation states to maintain political authority over banks and guarantee financial stability within national boundaries through regulation, supervision and resolution (Frieden 1991; Frieden and Rogowski 1996). Through the internationalisation of banking and capital mobility, the excludability of banking polices decreased dramatically, as did the excludability of financial stability as a consequence.

Financial stability effectively became an international public good for states. Thus, its excludability on the level of states was reduced dramatically. Domestic banks and financial systems could be destabilised through transactions with institutions outside a country's jurisdiction or through international banks operating across several states (Schoenmaker 2013). No matter

[8] The Basel Committee on Banking Supervision, founded in 1974, set minimum regulatory standards to promote a level playing field for international banks, resulting in the 1988 Basel Capital Accord (Basel I), creating a single global risk-adjusted capital standard. Those, as well as broad supervisory standards, are merely recommendations, and states cannot be sanctioned for non-observance. Since 1999, the IMF performs detailed assessments as to what extent countries observe financial sector standards, such as the Basel standards. But participation of this Financial Sector Assessement Program remained voluntary before the financial crisis. The Financial Stability Forum (since 2009 Financial Stability Board), founded by the G7 in 1999, performed similar tasks, but also remained remained without any power of enforcement. See Schoenmaker (2013: 7-9).

how well supervised a country's banks were, they were still vulnerable to instability from outside, where banks might not have been regulated as well. Inversely, with national dependent on international financial stability, other states' banks would profit from the stability of banks in well supervised countries without having to invest much in own stricter supervision and regulation which would also often be detrimental to the competitiveness of banks. Thus, the lack of excludability of freeriders, created strong incentives for freeriding undermining the production of financial stability on the level of states.

To prevent vulnerability to international financial instability by maintaining or re-establishing physical excludability turned out to be not a viable option in most cases. Protecting banks from the vicissitudes of global financial markets by ring-fencing, i.e. shutting them off global financial markets would significantly increase financing costs and thereby disadvantage a national economy (Cerutti et al. 2010). Hence, states increasingly opened their banking sectors (Frieden and Rogowski 1996: 36, 43). This led to foreign bank ownership in some, usually economically weaker countries, rendering them dependent on banks largely regulated elsewhere (Epstein 2008; Martinez-Diaz 2009; Stein 2010; Etchemendy and Puente 2011). On the other hand, often in large countries, domestic banks expanded abroad, exposing them to risks incurred in other countries (Epstein and Rhodes 2014). The bottom line was that financial stability became an international public good that could be produced less and less by individual states alone (Schoenmaker 2013), while states would not be interested in cooperating effectively for its provision. The result was a serious collective action problem.

4.1.3.2.2 Banking supervision becomes competitive: banking nationalism

International capital mobility and banking also turned capital into an international good for states. Capital as important production factor is both limited and therefore rival and through its international mobility it became also non-excludable on the level of states. These common pool characteristics would intensify the competition of states for scarce capital (Kölliker 2006: 62). This created powerful incentives for states to help attract capital by a policy of banking nationalism, involving the promotion of domestic bank-ownership and the leveraging of national regulatory, supervisory and resolution policies (Méró and Piroska 2016: 221). While banking supervision itself could not become a rival good in the strict sense of rival consumption, the rivalry for the CPR capital together with the non-excludability of banking policies led to competitive banking nationalism.

Control over credit allocation is believed to contribute to states' economic development and competitiveness, insulation from external economic shocks, and control over monetary policy (Epstein and Rhodes 2014; Ingham 1999, 2004; Zysman 1983). Furthermore, banks can provide credit to sovereigns and generate significant tax income and employment for a national economy. The degree of state influence on the banking system therefore is an important determining factor for the depth of the state's intervention capacity in the economy (Seikel 2013: 16–7). State influence on banking regulation and supervision as well as bank ownership is therefore also a matter of sovereignty (Epstein 2014b: 782).

At the same time, domestic banks often entertain close links to businesses and politics, for example by holding their debt or bonds, enabling national governments to increase their control over national economies. This creates incentives for states to favour national banks over branches of foreign competitors active within a jurisdiction, which are less easy to control. Thus, larger states sought to create national financial champions which would be competitive on global financial markets. In the same vein, they tried to undermine foreign actors seen as champions of competing national interests in the context of cross-border economic competition. Furthermore, banking nationalism often turned out to be more potent than other forms of economic nationalism because of the often dense webs of relationships between banking sectors, central banks and finance ministries (Boot 1999; Barth et al. 2006: 149-150, Veron 2013). This kind of national banking sector protectionism has been particularly strong in the countries of Western Europe (Barth et al 2006: 149-50), some of which have a tradition of explicit government involvement (e.g. France and Italy), working against foreign control over domestic institutions (Boot 1999: 611).

This produced the conditions for a race to the bottom, in which more market integration begets more supervisory forbearance, regulatory laxity, ring-fencing, bailout guarantees and other methods of banking nationalism (Genschel and Plümper 1997, Baxter et al. 2004, Veron 2013).

Such nationalist policies were further supported by the vested interests of national banking supervisors. While it is generally opportune for supervisors to follow their political paymasters, a national approach to supervision is also more likely to make for interesting jobs in a more coordinated or hierarchical supervisory system (Schoenmaker 2013: 120).

For supervision to be effective in supervising cross-border banks, close cooperation between national banking supervisors is necessary. This is often hindered by close relationships of supervisors with their national flagship institutions (Boot and Thakor 1993). Especially in times of stress, national supervisors tend to guard bad news about "their banks" as long as possible to

protect them from a market backlash. This forbearing behaviour often comes at the cost of international financial stability (Baxter et al. 2004). Incentives for such behaviour are strengthened by supervisors concerned about their reputation, as bank failures are largely perceived as supervisory failures (DeYoung et al. 2011: 9).

Competition in banking policy also often involved liberalising banking legislation and lenient supervision, allowing banks to cut costs through reduced capital rates and enable more risky business, toleration of poor asset quality, cutting taxes and reduce control, which can help banks improve their margins. Furthermore, creating national champions would increase market concentration which would increase systemic risk, as these players could turn out too big to fail. This concentration of risk was exacerbated by the adoption of the universal banking model by many countries, giving banks an even more crucial position. It transformed some of the largest banks into even bigger multi-product, multi-market, financial services conglomerates which offer retail banking, investment banking, brokerage, insurance and wealth management services at the same time (Morrison 2015).

All these policies to enhance national financial sectors competitiveness with regard to the common pool resource of capital tend to undermine the production of international financial stability, and therefore can be categorised as actions of freeriding. Thus, the rivalry among states for the common pool resource capital negatively effects the provision of the public good of financial stability, which itself is not rival[9].

All this is in line with Schoenmaker's financial trilemma (Schoenmaker 2011, 2013). It stipulates that with international banking and national financial policies for supervision and resolution, a stable financial system cannot be achieved. This suggests that national financial policies are no longer adequate and that there needs to be international cooperation in banking regulation, supervision and resolution to ensure financial stability. As long as there is no effective international regulative system, states which undermine financial stability through lenient legislation will not be able to be excluded from a stable financial system.

Such strong incentives for freeriding, would make the construction of strong institutions, able to exclude freeriding behaviour unattractive to states. Considering the CPR elements involved in the

[9] It is not really possible for one member to consume financial stability and thereby reducing overall stability, unless that member breaks the rules at the same time, making this a problem of excludability rather than rivalry.

public good financial stability, this creates centrifugal effects, as the immediate benefits of freeriding tend to be higher than those of coordinating policies.

4.1.3.2.3 Freeriding with more tangible benefits than collective action

Sure, the stability of the financial system is in the interest of banks and states, as financial and economic well-being of them usually depends on it. However, while the benefits of financial stability can quickly be taken for granted, freeriding usually does not have immediate negative effects on the stability of the financial system. Just like for banks, a large group latency with a great number of states (Olson 1965) and the dispersion of risk through securitisation played a big role here.

The financial system can endure the accumulation of risk up to a certain degree and low levels of capital only become a problem in case of stress. Thus, the costs of irresponsible behaviour for the community are usually not immediately tangible. On the other hand, contributing to the production of financial stability through responsible and effective banking regulation and supervision can at times be costly in a more immediate way, as domestic banks with higher capital ratios might lose business to foreign institutions with lower ones. At the same time, this kind of responsible behaviour does not usually show any direct and tangible benefits for individual banks and states. This can be understood as a time inconsistency problem, whereby the long-term benefits of the good financial stability are forgone by states tending to avoid short-term sacrifices for quicker rewards.

4.1.3.3 Policy responses on an international level

Policy makers have been aware of these dilemmas but have been unable to achieve effective regulation and supervision of international banks. In 1974, the Basel Committee on Banking Supervision set minimum regulatory standards to promote a level playing field for international banks, resulting in the 1988 Basel Capital Accord (Basel I), creating a single global risk-adjusted capital standard. Those, as well as broad supervisory standards, are merely recommendations, and states cannot be sanctioned for non-observance. Since 1999, the IMF performs detailed assessments as to what extent countries observe financial sector standards, such as the Basel standards. But participation of this Financial Sector Assessement Program remained voluntary before the financial crisis. The Financial Stability Forum (since 2009 Financial Stability Board),

founded by the G7 in 1999, performed similar tasks, but also remained without any power of enforcement (Schoenmaker 2013: 7-9). Thus, no effective international regime of banking regulation and supervision has been established which could impose excludability to financial stability and prevent freeriding with all its potentially devastating effects.

Good: / Level:	Capital		Banking supervision		Financial stability	
	For banks	For states	For banks	For states	For banks	For states
International banking with national supervision	Common pool resource	Common pool resource	Public good	Public good	Public good	Public good
International banking in the EU with national supervision	Common pool resource	Common pool resource	Public good, very low excludability	Public good, very low excludability	Public good, very low excludability	Public good, very low excludability

Figure 4: Types of goods in international and EU banking with national banking supervision.

4.1.4 Financial stability in the European Union and the eurozone

Within the EU, production of financial stability is exceptionally intricate because of particularly high financial integration. This was the result mainly of the single market and the Economic and Monetary Union.

The introduction of the single market led to a comprehensive financial market integration and established a legal framework which bans financial barriers between member states. It creates a seamlessly integrated supranational financial market with the goal to decrease the cost of borrowing across the EU to the lowest denominator (see Guiso et al. 2004). The abolition of obstacles to freedom of movement for capital across borders in Europe was included as one of the missions of the European Community in the 1957 Treaty of Rome, alongside parallel freedoms for persons and services, and the elimination of customs duties and creation of a single market for goods. But until the late 1980s, Community policies to integrate Europe's financial markets had

remained comparatively timid, and financial systems had remained predominantly national. This changed with a directive mandating the abolition of capital controls in 1988, which was later enshrined in primary legislation by the Maastricht Treaty (Guiso et al. 2004).

The introduction of the single currency in 1999 further reinforced financial integration in the euro area. It eliminated exchange rate risk and ensured full transparency of prices and costs across eurozone countries. At the same time, it entailed a single monetary policy aiming at maintaining a stable and similar level of prices in the euro area. Payments across euro member states were further facilitated by a single euro payment area (SEPA) and the TARGET 2 system, allowing quick settlements between central banks and commercial banks across the eurozone and the EU. All this substantially increased financial integration in the EU and particularly cross-border banking within the euro area (Howard and Quaglia 2016a).

At the same time, policy instruments to defend financial stability in face of financial crises were weakened through the structure of the common currency (Epstein and Rhodes 2014). The foundation of the euro took away the function of lender of last resort from the national level. While monetary policy was transferred to the newly created European Central Bank (ECB), it did not receive a clear financial stability mandate like most other central banks and is prohibited from monetary financing of sovereign debt.

On top of that, governments in the eurozone remained individually responsible for the debt they have issued. The no-bailout clause in Art. 125 of the TFEU prohibited bailouts by other eurozone states or EU institutions. This also forbids the ECB to buy sovereign bonds of member states on primary markets. This arguably further reduces the ability of eurozone states to defend financial stability in their domestic banking systems. Fiscal bailouts of banks and subsequent sovereign debt increases cannot be financed by inflationary policies anymore, while the costs have to be shouldered by member state finances alone. Thus, eurozone states are particularly vulnerable to the cost of banking crises, especially when they are home to banks with significant cross-border activities, as many big banks in Western Europe have been (Schoenmaker 2013).

At the same time, banks in European countries traditionally hold a lot of public debt of their home country, often encouraged by national supervisors (Speyer 2012). Thus, sovereigns are dependent even more on the health of “their” banks, making a banking crisis more dangerous, while on the other hand, banks depend on stable public finances for their own stability (Bini Smaghi 2013; Gros 2013). This sovereign-bank interdependence increases the fragility of financial stability because adverse shocks to bank solvency tend to interact perversely with adverse shocks to sovereign

solvency. This “impossible trinity” of an absence of co-responsibility over public debt, the lack of monetary financing, and bank-sovereign interdependence makes financial stability particularly fragile in the eurozone (Pisani-Ferry 2012).

Combined with increased financial integration this made the financial trilemma especially acute in the eurozone (Howard and Quaglia 2016a). The possibilities of national political authority and supervision to guarantee financial stability are narrowed significantly, even more so than under the gold standard, because, under the latter regime, states had a specified exit option, unlike within the eurozone (Epstein and Rhodes 2014).

Thus, excludability was further reduced, facilitating freeriding. Parallelly, rivalry for demand and supply of capital increased due to higher financial integration in the EU and the eurozone. On top of that, the means of dealing with a crisis were significantly compromised through the euro. This made financial stability in the EU and particularly in the eurozone more fragile than elsewhere. The need for excludability to tackle collective action problems of financial stability were therefore particularly pressing.

4.2 European banking before the crisis: regulatory collage and national supervision

Despite this fragility, the incentives for a policy of banking nationalism rooted in the public good nature of the good financial stability determined member states’ stances on European banking policy before the crisis. Thus, the promise of furthering national interests through a policy of freeriding was favoured to the establishment of legal excludability to financial stability through strong European institutions. In the absence of a major financial crisis and hopes for a “great moderation” (Stock and Watson 2002), this led to only minimal European solutions to tackle the collective action problem in the production of financial stability.

4.2.1 Distribution of incentives, determining institutional outcomes

The architects of EMU – namely the central bank governors and expert members of the Committee for the study of economic and monetary union under the chairmanship of Commission President

Jacques Delors – advocated the transfer of banking supervision to the supranational level to complement monetary union (Committee for the Study of Economic and Monetary Union 1989). The Delors Committee's 'Report on economic and monetary union in the European Community' stated that the European System of Central Banks (ESCB) 'would participate in the coordination of banking supervision policies of supervisory authorities' (Committee for the Study of Economic and Monetary Union 1989: para. 32). However, the transfer of supervisory powers was postponed due to the opposition of a number of national governments (James 2012). Both Germany and France opposed any role for the new central bank in supervising banks, which remained in the hands of national authorities, as they deemed the right to control their own market to be of central importance (Mourlon-Druol 2014).

There clearly were some incentives for more cooperation to ensure the consistent application of uniform EU financial regulation and to create more convergence in supervisory practices, apart from financial stability concerns. The harmonisation of rules helped to ease transactions across the EU providing business opportunities especially for large banks (Grossman and Leblond 2011; Mügge 2010). And an increased level of financial stability through the supervision of common standards such as capital requirements was also in the interest of everyone. All the more since the establishment of common European financial regulation and supervisory standards would be an even more credible basis for assessing the soundness of international banks that could also be used by rating agencies. This had been the case with standardizing capital adequacy requirements in international banking through the Basel I accord. The 1988 Accord introduced an international capital measurements system and called for a minimum ratio of capital to risk-weighted assets of 8 percent to be implemented by the end of 1992 (BIS 2022a). In this vein, creating and sticking to uniform European rules had the potential to increase a bank's credibility and thereby make inter-bank lending or the raising of capital cheaper in case of rule compliance.

But to reap these kinds of benefits a highly integrated institutional setup with a common European supervisor which could credibly certify the health of a bank and enforce legal excludability through common rules would have been necessary. The lobby organisation of Europe's leading banks, the European Financial Services Roundtable (EFR), was in favour of a more consolidated, European approach to supervision (EFR 2009). Similarly, the IMF advocated a fully-fledged EU-level prudential supervisory regime operating along-side national regimes in the form of a European Banking Charter (Cihak and Decressin 2007).

But member states shied away from deeper integration. In fact, there was no pressure to act, as the banking systems in the EU seemed stable and there were no indications that this would change. Besides, there were doubts that a one-fits-all approach would account for the heterogeneity of national banking systems (Veron 2013). National authorities had different organisational traditions and administrative practices, which made transnational regulation and supervisory standards very contentious (Heims 2016: 890). Some stressed the value of national flexibility and regulatory competition between countries for achieving economic efficiency, making a single supervisor undesirable (Lanoo 2002). In the bigger picture of EU politics this preference for national solutions echoed the failure of a more federal vision in form of the European constitution in 2005 and its replacement by the Lisbon treaty in 2007 which seemed to herald a more nation-state-based vision of the EU (Tooze 2018: 191-192).

Altogether, member states were reluctant to break with their proven national systems of supervision. A model of regulatory competition and mere supervisory coordination for protecting or expanding domestic banks was therefore much more in their interests at the time than pooling or delegation of decision-making power to an external European supervisor with clear rules and strong enforcement mechanisms.

4.2.2 European banking regulation before the crisis: a regulatory collage

This was reflected in the corpus of banking regulation introduced at the European level. Far from introducing European legal excludability of freeriders, it was fraught with national exceptions and specificities, making enough room for quite independent national banking policies. Nevertheless, there was great progress in the creation of an integrated market and towards a common EU financial regulatory system. At Maastricht, capital controls were abolished, and the goal of a single financial market was declared. Henceforth, the general direction of financial sector regulation was determined almost exclusively on the EU level. The financial services action plan (FSAP) of 1999 heralded a further increase of regulatory integration in finance.

The European Commission developed a more assertive competition policy to prevent member states from erecting barriers against cross-border banking consolidation[10], or otherwise distort the European market, such as through the provision of state guarantees to selected banks. These steps

[10] such as asserting the freedom for banks to establish cross-border branches rather than just subsidiaries in other countries (Schoenmaker 2013:43)

brought Europe much closer to a united banking and financial market and created the perception of an unstoppable trend towards cross-border integration (Veron 2013).

4.2.2.1 National exceptions and loopholes

This might sound like great steps towards harmonisation. However, EU financial regulation was mainly based on directives which need to be transposed into national legislation by member states, rather than regulations which are directly and immediately applicable. These directives were usually only a few pages long and only provided general principles without technical details (Kudrna and Puntscher Riekmann 2018: 144). This left room to manoeuvre for national discretions in the process of national implementation across member states. The result were all too often less penalising domestic rules made suitable to individual national banking systems (Story and Walter 1997; Quaglia 2010a). This was in the interest of member states and left enough scope for continued freeriding on financial stability by letting domestic banks more easily off the hook. The Capital Requirements Directive I (CRD I), which was introduced in 2000 and recast in 2006, is a case in point. The directive which was supposed to harmonise the requirements of base capital for banks allowed ample use of national discretions in its transpositions in member state law. In sum, there was a large diversity of different national bank legislation despite the existence of a significant corpus of EU banking law.

4.2.2.2 Soft-touch regulation

EU banking legislation (e.g. the CRD) and securities markets law (e.g. the four Lamfalussy directives) were often based on a minimum common denominator, resulting from convoluted compromises and trade-offs during the negotiation process (Quaglia 2010a, b). So, directives often turned out to be rather lenient even before being transposed into national law. For example, the 2006 Banking Directive which specifically promoted cross-border banking services, paradoxically contained a clause (Art. 19) which allows national authorities to block mergers and acquisitions of banks to "ensure sound and prudent management of the credit institution" (Grossman and Leblond 2008: 5). The Economist (1999: 58) summed up this kind of national banking protectionism, writing that in "some countries inside the European Union, financial regulators strive diligently to

prevent foreigners from buying local banks". Thus, banking nationalism could continue under the surface of a common banking regulation.

4.2.2.3 Liberal international regulatory environment

This also had to do with the fact, that the international regulatory environment was rather liberal from the 1990s until the financial crisis, when optimism in the financial industry was widespread. The Basel II accord (2004), which was the basis for the revised Capital Requirements Directive (CRD I) allowed large banks to use their internal risk management models to calculate capital requirements (Schoenmaker 2013).

4.2.3 European Banking Supervision before the crisis

This patchwork of different national interpretations of EU directives, also made cooperation on banking supervision across member states more difficult, as noted for example by the Italian finance minister Tommaso Padoa-Schioppa (2007).

Banking supervision was almost exclusively carried out at the national level by national central banks or specialised banking supervisory authorities. Supervisory arrangements were extremely diverse (Barth, Caprio and Levine 2004). Nevertheless, the need for coordination of supervisory activities to better ensure financial stability across the EU was recognised. In 1999 the Banking Supervisory Committee of the European System of Central Banks was set up with a secretariat at the ECB, comprising banking supervisors of all EU member states. It assisted the ECB in drafting banking legislation and supported the euro system in the conduct of its tasks in the field of prudential supervision of credit institutions and financial stability.

In 2004, the Committee of European Banking Supervisors (CEBS) was established, following the recommendations of the Committee of Wise Men, chaired by Alexander Lamfalussy. It was to contribute to the more consistent implementation of EU directives across member states, and to increase the convergence of financial supervisory practices through an improvement of supervisory cooperation (European Union 2004). The CEBS was composed of senior representatives of bank supervisory authorities and central banks of all EU member states who would take decisions in institutionalized negotiations, issuing non-binding guidelines,

recommendations and standards with broad areas of discretion, leaving room for member states and their banks to bend the rules in their favour. The pursuit of national interests was even openly acknowledged by supervisors such as the German BaFin (Heims 2016: 890):

'In ... CEBS BaFin sings as part of the choir of European supervisors. However, when the accommodation of European harmonisation with German interests is concerned, BaFin sometimes sings an audible solo.'

There were no supranational surveillance or enforcement mechanisms which could have prevented national supervisory laxity, forbearance or the consolidation of national banking behemoths that could turn out too big to fail. The CEBS also actively supported the development of colleges of supervisors for cross-border banks within the EU. In 2007, CEBS issued guidelines on the operation of colleges of supervisors, which were however non-binding. These colleges also lacked a mandatory mediation process if supervisors could not agree (Alford 2010). Thus, the CEBS was unable to produce substantive convergence of supervision (McPhilemy 2014: 1480). In the early 2000s, there were more than 35 supervisory authorities responsible for prudential supervision in the EU, and a typical large transnational financial institution could have to report to more than 20 supervisors (Pearson 2003).

4.2.4 Persistence of public goods traits and institutional weakness of European Banking regulation and supervision before the crisis

As a result, European banking regulation and supervision was even weaker institutionally than European fiscal policy before the crisis. In fiscal coordination there was institutionalised decision making in the ECOFIN Council on the enforcement of rules, while there was neither a forum, nor a pooling of member states voices on enforcement at all in banking policy. At the same time, rules were vague. Thus, an effective enforcement of rules was not possible in banking supervision on the European level.

This weak institutional setup was not able to alleviate the collective action problems stemming from the public goods features in European Banking supervision. European guidelines were interpreted very liberally or even disregarded by self-interested member states. Banking policy remained a competitive arena to further national interest, weakening the effectiveness of policy aiming at crisis prevention.

This confirms the hypothesis that if institutions are built in policy areas with public goods or CPR traits, they will be weak unless the immediate benefits of integration are larger than those of freeriding. This was clearly not the case before the crisis.

4.2.5 Developments in European banking before the crisis

The result was a rampant form of banking nationalism, whereby national oversight of banks was leveraged to help own players to gain more international competitiveness and to create national financial champions rather than limiting risk (Epstein and Rhodes 2016).

The transformation towards a European financial market through the abolishment of capital controls, and legislation which encouraged cross-border activity led banks to position themselves for what most thought was an inevitable consolidation wave. With the encouragement of governments, banks sought size to achieve this, and found it mainly through domestic acquisitions, protecting high levels of domestic control, and financial leverage (Veron 2013). This development was certainly aided by the belief of bankers that a strong position in the home country is crucial for a successful expansion in foreign markets (Boot 1999).

In Italy and Spain, the eurozone's third and fourth largest economies, studies have documented how bank privatization proceeded in parallel with a drive to limit competition (Pérez 1997; De Cecco 2009). Politicians, together with local bankers, orchestrated domestic bank consolidation. At the same time, they supported international expansion of their banks to create financial institutions that were impervious to foreign takeover by virtue of their size (Guillén and Tschoegl 2008; Deeg 2012; Epstein and Rhodes 2014). The acquisition of the German HypoVereinsbank by UniCredit of Italy and the purchase of the Italian Banca Nazionale de Livorno by BNP Paribas of France are examples for that. The buying of the British bank Abbey National by the Spanish institution Santander Group can be seen in the same light. France engaged in using deviations from the one-share-one-vote principle to protect national ownership (Goyer and Valdivielso del Real 2014). Germany, meanwhile, was relying on ownership concentration and friendly acquisitions, such as the purchase of Dresdner Bank by Commerzbank just before the crisis in 2008 (De Grauwe and Ji 2013; Howarth and Quaglia 2014).

A single supervisor might have precluded these strategies. It might have stopped domestic consolidation which led to dangerously high levels of market concentration at least in some European member states. But national supervisors on the contrary, regarded the creation of large

national banking champions positively in most cases, as it made it more likely that domestic banks would act as acquirers rather than targets in future cross-border consolidations (Veron 2013; Epstein and Rhodes 2014).

At the same time banks in Western Europe expanded abroad. They purchased financial institutions in ex-communist Central and Eastern Europe after their privatisation, such as Austrian banks Erste and Raiffeisenbank. Cross-border bank consolidation also gathered pace inside Western Europe, particularly at the sub-regional level, such as in the Benelux and in Scandinavia (Veron 2013).

The share of foreign business of large European banks constituted 50% on average between 2000 and 2011 (Schoenmaker 2013: 54). In no fewer than twelve EU member states (all in Western Europe), there were banking sector internationalization[11] higher than in the United States - and in multiple cases, significantly so (Grossman and Woll 2014: 10). This is true even for relatively small European states, including Greece, Ireland, Austria and Portugal - countries that have historically maintained a critical mass of domestically controlled banks.

On the other hand, there were low levels of foreign bank ownership in the eurozone's largest economies. Due to purposeful banking sector protectionism, the West European banking sector was fragmented along national lines (Epstein and Rhodes 2014). This was supported by a fundamental belief that financial institutions should not be controlled by foreigners (Boot 1999: 610).

Many supervisors regarded it as justified that domestic banks should be given further leeway to leverage their capital base in order to pursue their acquisition strategies or other forms of expansion. Most European supervisors promoted the relaxed capital and leverage constraints, as well as internal risk assessments for banks encapsulated in the Basel II international capital accord during the early 2000s (Veron 2013). Ostensibly, it was in their interest to provide 'their banks' with advantages.

The general attitude appeared, at least implicitly, for supervisors to tolerate high levels of leverage as a necessary price to pay so that domestic banks would end up as winners in the pan-European race for prominence. The acceleration of cross-border bank mergers in the early 2000s, after the European Commission had started more assertively removing policy obstacles against inward acquisitions, surely reinforced this attitude. Thus, banking nationalism founded on the lack of

[11] Internationalization' can be gauged by the sum of external assets and liabilities as a percentage of GDP. Thus it is indicative not only of international activities but also of the size of the sector relative to the economy. See Figure 3 in Grossman and Woll (2014:10).

excludability of the public good financial stability and on the intricacies of the EU and eurozone context played a significant role in the great expansion of European banks' leverage in the 1990s and especially the 2000s (Veron 2013).

This competition made possible through the absence of effective excludability of freeriding states and banks on financial stability, also stunted the development of non-bank finance and therefore a diversification of the European financial system, which could have provided more resilience to shocks. At least some countries may have felt that a significant expansion of non-bank finance could negatively affect the competitive position of 'their' national banking champions. For example, several EU member states have maintained regulations that exclusively limit the provision of some financial services, such as leasing to credit institutions, to no obvious prudential avail, but with the effect of limiting the potential for growth of non-bank financial intermediaries. This lack of alternative finance instruments had negative effects on financial stability and growth, which should become painfully clear during the crisis (Langfield and Pagano 2015; Veron 2013).

4.3 European banking during the crisis: insufficient reform 2008 - 2012

4.3.1 The financial crisis and the beginnings of the sovereign debt crisis

Usually, three main factors are cited as causes for the global financial crisis which emanated from the US subprime crisis. Firstly, large international macroeconomic imbalances and secondly, a loose monetary policy (Obstfeld 2012), particularly in the US, which favoured the formation of bubbles (Cobham 2012, Mishkin 2011). The third factor, light-touch financial regulation and supervision (De Larosière et al. 2009, FSA 2009, Group of Thirty 2009) can be directly deduced from the freeriding dynamics among large banks due to the public good nature of financial stability and banking supervision and the common pool features of supply and demand of capital. Unaddressed collective action problems stemming from the public good nature of financial stability turned out particularly harmful for crisis management in the specific EMU environment. It proved fatal that no institutional structures had been built to prevent freeriding of member states in the form of banking nationalism. Despite their structural interdependence, European banking systems ended up fighting the financial crisis largely on national terms. This played an important role in the exacerbation and protraction of the crisis and its spill over into sovereign finances (Grossman and Woll 2014; Woll 2014).

When Lehman Brothers crashed in August 2008, banks across the EU were hit. But large institutions in the UK and Ireland, as well as the Netherlands, Germany and France were worst affected (Howard and Quaglia 2016a). They had invested more in toxic, asset backed securities and other heavily securitised financial products, mainly in the US. At a meeting in Paris in October 2008, heads of state and government of the euro area countries and the UK agreed to a joint approach for crisis management, consisting of a combination of enhanced liquidity support, state guarantees of bank liabilities, and public recapitalizations, mostly through hybrid instruments. This show of unity allowed markets to regain confidence for the time being. But there was no agreement on central steering of how to deal with banks, leaving the door open to banking nationalism (Veron 2013).

As a consequence, also banks in the southern periphery, which had initially fared rather well got increasingly under pressure by late 2009. In Greece and Italy this was mainly due to their banks' large holdings of sovereign debt, while in Spain the state had incurred high debt to shore up its struggling banks. Due to the architecture of the EMU those states were unable to devalue when they ran into debt problems after Greece revealed a much higher deficit than previously thought in late 2009. Public debt in Greece, Portugal and Italy spiralled and they passed their deteriorating credit ratings on to their banks. Northern banks with large investments in southern states and banks also began to worry and began to divest, increasing the problems of the banks in the eurozone periphery (Howarth and Quaglia 2016).

The "impossible trinity" of an absence of co-responsibility over public debt, the lack of monetary financing, and bank-sovereign interdependence in the eurozone proved its destructive potential (Pisani-Ferry 2012). The crisis also confirmed Schoenmaker's financial trilemma, clearly revealing the inadequacy of nationally based supervisory models in overseeing an integrated European financial market with cross-border banks (FSB 2008, Kudrna 2012, Pauly 2008).

4.3.2 The post-financial crisis reforms in European banking policy 2008 – 2011: Improved coordination but no supranationalisation

Nevertheless, member states could not agree on far-reaching reforms (Quaglia 2013) to effectively address these problems originating in the public good features of financial stability during the first phase of the crisis until 2012. The reforms enacted as a reaction to the financial crisis until 2011 demonstrate that point. While they did include some progress towards greater regulatory and

supervisory cooperation, member states shied away from providing EU institutions with independent decision-making powers to overcome national freeriding. EU financial regulatory and supervisory policies and institutions continued to evolve in a 'minimal' (Kudrna 2012: 284) or 'incremental' (Salines et al. 2012: 674) fashion.

Already in late 2008, the ECOFIN Council endorsed the introduction of a European dimension into the mandate of national supervisors and the introduction of qualified majority voting and "comply or explain" procedures in the CEBS (and the other Lamfalussy committees of supervisors). ECOFIN also agreed on the strengthening of the role of the colleges of supervisors to be extended to all cross-border financial groups (Howarth and Quaglia 2016).

Based on the De Larosière report, the Commission put forward a series of reforms of the micro- and macroprudential framework of financial supervision in the EU, which were agreed by the ECOFIN Council and the European Parliament in the autumn of 2010 and implemented in early 2011 (Hennessy 2014; Kudrna 2012). One of the main innovations was the decision by the European Council in 2009 to create a Single Rulebook in banking. This was to provide a unified regulatory framework for the EU financial sector that would complete the single market in financial services in all member states. It was to ensure uniform application of the new Basel III rules, which had been published by the Basel Committee on Banking Supervision in November 2010 and which stipulated stricter rules on capital, liquidity and leverage[12].

To support this, and to fulfil tasks of monitoring and information exchange, European Regulatory Authorities (ESAs) in finance were established on 1 January 2011. This included the European Systemic Risk Board (ESRB) to be in charge of monitoring macro-prudential risk. It also entailed the transformation of the CEBS and the other two Lamfalussy committees into independent authorities with legal personality, enhanced powers and budgets. Apart from the European Banking Authority (EBA), which succeeded the CEBS, these new European Supervisory Authorities (ESAs) also included European Insurance and Occupational Pensions Authority (EIOPA) and the European Securities and Markets Authority (ESMA).

[12] A good summary of the Basel III rules can be found here: https://www.bis.org/bcbs/basel3/b3_bank_sup_reforms.pdf

4.3.2.1 The EBA

The tasks of the EBA covered both European banking regulation and micro-prudential supervision with the declared goal of achieving financial stability and effectiveness of the financial system (EBA Regulation, Art. 1(5)). It was to build up and consolidate a common regulatory regime for the European Single Rulebook in banking based on the new international Basel III rules. This was to be done by specifying the more general Basel rules and EU directives or regulations (Level 1 legislation) by means of binding technical standards (Level 2 legislation), as well as guidelines and recommendations. Those would provide more precise prescriptions for the transcription of EU legislation into national law and therefore allow less regulatory divergences and hence less freeriding by national regulators. Furthermore, the EBA was to better coordinate the application of supervisory standards and to promote stronger cooperation among national supervisors. The EBA was also given the mandate to mediate between national supervisory authorities in case of disagreements on cross-border banks. Finally, the EBA was mandated to assess risks and vulnerabilities in the EU banking sector through regular risk assessment reports and pan-European stress tests together with the ESRB (EBA 2016).

The rule making arm of the EBA has been backed up by a medium strong institutional setup. The technical standards it issued were binding for all member states and could be enforced by the European Court of Justice. They were decided on in the Board of Supervisors (BoS), made up of EBA's chairperson and the heads of the 27 EU member states supervisors. They were required to 'act independently and objectively in the sole interest of the Union as a whole' (Article 42, EBA Regulation 1093/2010), but there is evidence that they do act according to national interests (Ferran 2016: 301).

On technical standards, decisions are taken by the representatives of the EU member states in the BoS based on qualified majority voting (EBA 2011)[13]. Although there were no supranational elements in decision making, this was a relatively high degree of centralisation through pooling, especially compared to the institutionalised negotiations in the CEBS. However, such decisions were not necessarily final, as they could be amended formally or informally by the Commission, which diluted the decision-making power in rule-making of the EBA but also added another

[13] As defined in Article 16(4) of the Treaty on European Union ('TEU') and Article 3 of the Protocol No 36 on transitional provisions, which shall include at least a simple majority of its members from competent authorities of Member States that are participating Member States as defined in point 1 of Article 2 of the Council Regulation (EU) No 1024/2013 ('participating Member States') and a simple majority of its members from competent authorities of Member States that are not participating Member States as defined in point 1 of Article 2 of the Council Regulation (EU) No 1024/2013 ('non-participating Member States').

supranational element (Ferran 2016: 295). This has sometimes led to limited precision of technical standards, opening the door for national divergences and member state freeriding as for example in the case of the BRRD's MREL provision (see chapter 5.8.2.2) (Quaglia and Spendzharova 2018). Altogether the rule-making power of the EBA has been relatively strong.

But the same could not be said about its supervisory power, which would however be crucial for the monitoring and enforcement of banking regulation. There were concerns in the ECOFIN Council on more far-reaching reforms providing the EBA with the powers over national supervisors and the possibility of supervising individual cross-border banks. Especially states like the UK, Germany and France with large financial centres and therefore a strong interest in promoting their banks, were wary about transferring substantive power to the EU level and favoured a limited reform approach. Only if member states in the Council declared an emergency and in case of disagreement among national authorities on cross-border financial institutions could the EBA make decisions directly applicable to individual institutions (Howarth and Quaglia 2016). This emergency state, however, has never been activated (Gelpern and Veron 2019: 44).

Furthermore, to establish consistent, efficient and effective supervisory practices the EBA could only rely on non-binding guidelines and recommendations. While the EBA made progress in developing guidelines for a common supervisory review and evaluation process (SREP) for all member states, it could not guarantee its harmonised implementation and enforcement. Not surprisingly, the EBA's overall contribution to supervisory convergence has been judged as quite limited, due to its lack of authority (European Court of Auditors 2014: 37).

In case of disputes between different national supervisory authorities, the EBA can mediate between them and also solve disputes with binding decisions (EBA Regulation, Art. 19). Furthermore, it is on paper authorised to intervene in certain circumstance to enforce the Single Rulebook in case of breaches by national supervisory authorities (EBA Regulation, Art. 17). However, in practice, it has never exercised these powers. Apart from a lack of clarity of the scope and triggers of such mediation in the EBA's founding legislation, the governance structure of the EBA, made up of national supervisory authorities 'does not favour decisions or proceeding against national authorities' (European Commission 2014: 7). This suggests, member states had no interest in strong enforcement, as they preferred to continue policies of banking nationalism and therefore freeriding due to incentives in the public good nature of financial stability. With medium centralisation of decision making and precision and low enforcement powers, the EBA was therefore a relatively weak institution (Dehousse 2016: 623).

4.3.2.2 The EBA - persistence of public goods traits and only slight institutional strengthening of banking regulation and no strengthening of supervision

While definitely an upgrade compared to the CEBS, the foundation of the EBA represented an incremental reform step which was unable to mitigate the public goods and common pool problems that the CEBS had proven unable to get under control. As member states remained largely in control over banking supervision, an effective exclusion of freeriders engaging in banking nationalism was not possible. The EBA did have some positive impact on the harmonisation of banking regulation. The introduction of Binding Technical Standards (BTS) contributed to the harmonisation of banking regulation and in gradually closing loopholes and national exceptions. However, this development towards a Single Rulebook of banking was a long-term process which did little to mitigate freeriding and confront nationalist supervisory practices in member states. Without effective common supervision, there was no guarantee that regulations would be enforced. This provides further evidence for the hypothesis that institutions in policy fields with public goods and CPR character will be weak unless the immediate benefits of strengthening will be larger than continued freeriding. Evidently most member states still saw more benefits in supporting their own banks than in giving up competences to build a more supranational setup for banking regulation and supervision.

4.3.3 Inadequacy of reforms: banking nationalism following the financial crisis (2008 – 2012)

These reforms could not prevent the freeriding on European financial stability through policies of banking nationalism and therefore freeriding on financial stability. Member states engaged in practices like bailouts of unviable banks just to keep them domestic, supervisory forbearance, regulatory laxity, prevention of external acquisitions, national ring-fencing, and costly ad hoc management in face of emerging sovereign debt problems.

4.3.3.1 Bailouts: keeping zombie banks alive to serve the national interest

At least in the first four years of the crisis, EU governments took on the enormous fiscal burden of bailing out their own banks. This began with the bailout of Germany's IKB in 2007. Financial

stability considerations evidently played a large part here. But states also appear to have acted to prevent their banks from being disadvantaged in their access to capital. This was driven by the perception that "their" creditors might suffer losses in case of failure, or by the wish to preclude foreign acquisitions of domestic banks (Donnelly 2011; Donnelly 2014a; Epstein 2014a). Consequently, states likely went further in terms of bailing out private creditors, including smaller banks whose systemic relevance was debatable, than would have been necessary from an exclusive stability perspective (Veron 2013). Such bailouts motivated by banking nationalism imposed enormous burdens on sovereign finances, while at least some of the ailing banks could have been wound down or sold to foreign interests at a much lower cost states' fiscal positions and the common currency's credibility and therefore financial stability (e.g. see Sandbu 2015, Woll 2014).

4.3.3.2 Supervisory Forbearance: allowing banks to freeride

In many EU member states (at least those which are home to significant banking groups' headquarters), national supervisory authorities were aware of banks' problems and chose not to disclose them to public or EU institutions. This kind of supervisory forbearance was often done in the hope that better future market conditions or other factors that may improve the bank's fortunes would lead to a reversal of losses and bring banks back to financial health, while negative market reactions to problems could be avoided. Such reasoning might have been partly motivated by financial stability concerns. But also, by concerns not to put domestic banking champions at a competitive disadvantage through negative information. Another motivation might have been to provide domestic banks with additional competitive edge over countries which were more transparent about their losses. This created the conditions for a race to the bottom, where competition among states led to fewer incentives to resolve the crisis by effective banking supervision. A good indicator for the extent of supervisory forbearance were the bank collapses that happened shortly after the publication of the results of pan-European stress tests in 2011, in which the same banks had been given a clean bill of health by the EBA (Veron 2013, Glöckler et al. 2017: 1147). The EBA proved unable to preclude forbearance by national supervisors, in which supervisors deliberately overlooked toxic assets and inadequate capital buffers (Donnelly 2014b: 26). This painfully demonstrated the inadequacy of the EBA in establishing legal excludability to prevent freeriding and safeguard financial stability.

4.3.3.3 Regulatory and supervisory laxity

Member states and their banking supervisors also had the tendency to water down regulatory requirements, including capital standards and disclosure requirements, to allow weak banks to avoid recapitalization or restructuring, at the cost of financial stability (see Veron 2013, Admati and Hellwig 2013).

4.3.3.4 Discouragement of external acquisitions

Despite strict EU rules in favour of openness of the European market for corporate control, there are clear indications that member states have favoured bank mergers and acquisitions by national buyers (or nationalisations) over purchases from other countries. This was the case in several instances when a domestic bank could no longer sustain its independence (the most noteworthy exception being the acquisition of Fortis Belgium by BNP Paribas). A telling incident was when the revelation of an embarrassing trading loss made Société Générale appear fragile in early 2008, and the French Prime Minister rushed to declare that Société Générale would in any case "remain a major French bank". This was widely understood as a signal that if the bank should be sold (a scenario which eventually did not materialize), the acquirer should be French (Veron 2013). This tendency towards national segmented financial systems may have reduced financial stability at country level (Schoenmaker 2013: 112). There is evidence that opposite to cross-border mergers, a merger of domestic banks augments the downside risk of the newly merged bank (Slijkerman 2007). It also tends to lead to inefficient solutions and less growth (Schoenmaker 2013: 111-113). Altogether, such nationalist behaviour in mergers and acquisitions policy as part of the competition for the common pool resource of capital supply helped to increase the fragmentation of the European banking system which turned out to be detrimental to financial stability.

4.3.3.5 National ring-fencing: freeriding on capital provision

Supervisory authorities in numerous EU member states exerted what the financial jargon refers to as "moral suasion" to nudge locally operating banks towards prioritizing the country in their internal capital and funding allocation decisions - even though such policies are typically not made public, as they would run the risk of being deemed in breach of those member states' commitments under the European treaties. The exception here is the imposition of capital controls in Cyprus,

which has been explicitly endorsed at the European level as an extraordinary measure. This has happened in countries experiencing current-account deficits, but also in countries in surplus. In such cases, and more generally in all policies that are referred to under the imprecise label of "financial repression," banking nationalism was less a driver than an enabler: the perception, and often the reality, was that such moral suasion was more effective when applied to a domestic bank than to the domestic banking arm of a foreign-based group. In other terms, the perception that governments could, and may have needed to leverage their influence over domestic banks for objectives deemed of national interest, even if the same objectives were incompatible with the wider European interest in financial stability, was a powerful motivator of banking nationalism (Veron 2013).

Such policies were driven by state competition for common pool resource of capital supply. It was synonymous with freeriding on efficient European capital production and distribution. In the crisis conditions of lower capital supply this was particularly harmful for financial stability.

4.3.3.6 Sovereign bailouts to spare own banks from suffering losses

The impact of banking nationalism was particularly visible when the perception was that the sovereign crisis was limited to comparatively small periphery countries, including Greece and Ireland. In the case of Greece, following the revelation of larger fiscal deficits than previously thought in late 2009, the concern was that a rapid restructuring would particularly impact banks in several EU member states that had built substantial cross-border exposures to Greek sovereign credit risk (Veron 2013). In 2010, German and French banks were exposed with 119 billion Dollar to Greek borrowers and with more than 900 billion Dollar to Greece, Portugal, Ireland and Spain. In fact, Germany and France held almost half of all European exposures to those countries (Fuhrmans and Moffett 2010). It appears likely that the concern for these exposures in Germany and France was a major reason for the absence of rapid restructuring action, which could have alleviated the Greek sovereign debt crisis. A bail-in of private-sector creditors came only after banks from most EU countries outside Greece had significantly reduced their exposure in March 2012. Martin Sandbu (2015) regards this belated involvement of private actors as a major shortcoming of the European crisis response.

The Irish crisis provides another example of the exacerbating influence of banking nationalism on the sovereign debt crisis. In November 2010, assistance was provided to Dublin on the condition

that all senior creditors be made whole, ostensibly against the wishes of the Irish government which desired to save its taxpayers' money by "burning the bondholders." Here again, banking nationalism is impossible to entirely disentangle from financial stability concerns. Nevertheless, it is likely that some member states were specifically motivated to prevent a tightening of interbank credit conditions that may have resulted from a more aggressive restructuring of Irish banks and could have put some of their domestic players at a competitive disadvantage (Veron 2013).

Such focus on protecting national banks certainly had a negative effect on sovereign finances. The lack of bank haircuts increased the burden on affected member states in the eurozone periphery. At the same time, the withdrawal of capital from periphery countries to the eurozone core exacerbated the sovereign-debt doom loop, as beleaguered sovereigns had to largely rely on domestic banks, the creditworthiness of which deteriorated by decreasing trust in solvency of their governments.

This was exacerbated by a focus on sovereign debt as alleged motor of the crisis, which was dubbed sovereign debt crisis (e.g. Sinn 2014). Rather than making their banks responsible for risky lending, northern member states laid the blame on governments in the crisis ridden eurozone periphery (Saraceno 2014; Schäfer 2015). Thus, freeriding on the public good financial stability through banking nationalism played a crucial role in the development of the sovereign debt vicious circle and may have also prolonged the sovereign debt crisis by setting a one-sided policy focus on sovereign debt which did not address the important aspects of the crisis such as banking nationalism.

4.4 European banking during the crisis: the foundation of the banking union

4.4.1 The sovereign debt crisis and the sovereign-bank doom loop

The undermining of financial stability by banks' freeriding through incurring too much risk and by states through banking nationalism played an important role in starting and escalating the sovereign debt crisis in the eurozone.

While the Greek debt crisis had its origin in the country's history of excessive borrowing (see chapter 3.8.1), the crisis in Ireland clearly originated in its oversized, under-regulated and highly

leveraged banking sector, which had invested heavily in risky American mortgage securities. After the government in Dublin attempted to bail out its collapsing banks, which comprised several times the Irish GDP, sovereign debt and deficit shot up drastically which brought the country to the brink of default (Woll 2014, Whelan 2011). Thus, the Irish banking crisis had turned into a sovereign debt crisis, demonstrating the destructiveness of the sovereign-bank doom loop. The subsequent 67.5 billion euro rescue package included not only support for government expenditure but also financial assistance for Irish banks.

In Portugal, the origin of surging public debt was also located to a large extent in the country's banking system. Unsustainable private debt led to government bailouts of banks, pushing up sovereign debt (Gros 2012). Again, a financial crisis was turned into a fiscal crisis.

Spain had kept relatively low debt and deficit ratios before the crisis, but its banking system was severely hit by the financial crisis. The regional Cajas - government owned savings banks - suffered heavy losses as mortgage holders and property developers were unable to service their loans when a bubble on the Spanish real estate market burst. The Spanish government attempted to bail out its banks, but proved unable to get the crisis under control, while interest rates on Spanish sovereign bonds surged (Royo 2013a, b, c; Gavilan, Jimeno and Rojas 2011). In December 2011, Madrid requested aid of about 39.5 billion euro to recapitalise its banks. Once more a banking crisis had turned into a sovereign debt crisis.

When the spread on Italian government bonds began to rise sharply in 2010, doubts about Italy's debt sustainability started to emerge as well. In both Italy and Spain, banks held large amounts of domestic sovereign debt, so that soaring sovereign bonds pulled down banks, too. In January 2012 the ECB launched the Long-Term Refinancing Operations (LTRO), issuing three-year loans to banks at low rates. Spanish and Italian banks profited most from these measures (Howarth and Quaglia 2016). They reinvested much of the ECB money in sovereign debt of their respective countries, which helped to bring down Italian and Spanish sovereign bond yields, but also aggravated the sovereign debt-bank doom loop.

A partial default of Greek sovereign debt in early 2012 hit banks in Cyprus which suffered a heavy haircut. In another example of the sovereign-bank doom loop, Cypriot banks pulled down the Cypriot government. As both suffered from downgrading by international rating agencies, they ended up losing access to international financial markets. In March 2013, Cyprus had to agree to an ESM package of 10 billion euro, which included a substantial bail-in for Cypriot banks (Howard and Quaglia 2016a).

The sovereign debt crisis also prompted a significant fragmentation of the EU single financial market. This manifested itself in a significant rise in the differentiation of inter-bank lending rates, lending rates among states and credit default swap premiums for sovereign and bank debt, as well as a decline of unsecured transactions in the eurozone (ECB 2012: 23). The cross-border merger and acquisition activity of banks, an important indicator of market integration, dropped markedly from 2008 onwards. So did the level of cross-border interbank loans, while the dispersion of bank interest rates to non-financial organisations rose considerably (ECB 2012: 29). All this also negatively affected the ECB's ability to operate an effective monetary policy (ECB 2012).

Moreover, cross-border bond and collateral holdings of monetary financial institutions decreased sharply. The euro area periphery was most affected by this retrenchment to domestic debt due to declining confidence in its sovereign and bank debt. Thus, already beleaguered domestic banks came to hold increasing amounts of downgraded sovereign debt. While governments' ability to resolve banks in an orderly manner diminished and public debt loads rose. The sovereign-bank doom loop in those countries created a downward spiral of increasing sovereign debt, rising yields and credit rating downgrades on sovereign debt, a retreat of foreign investors, and a rising holding of sovereign debt by struggling domestic banks (Howard and Quaglia 2016a).

4.4.2 Incentive structures informing the creation of the Single Supervisory mechanism

4.4.2.1 Conceptual change: states recognise the need for a banking union

All these problems came to a head in early 2012. Spain was pulled towards default by its failing banks, after it had rejected a rescue fund in return for a reform package. In June 2012, Spanish 10-year government bond yields surged to an all-time high beyond 7 percent. It was believed that with such high borrowing costs, Spain would soon need a fully-fledged ESM programme, which would exhaust the lending capacity of the ESM. Owing to contagion effects, Italian bond yields also jumped up dramatically to a clearly unsustainable 6 per cent (Glöckler et al. 2017: 1141). With the eurozone's third and fourth largest economies on the edge, the collapse of the common currency became an increasingly likely scenario.

On top of the threat to the euro, banks in Germany and other creditor states which were traditionally against deepening integration in banking policy and pooling resources were

particularly exposed to Spanish bank debt. According to the Bank for International Settlements (BIS 2011), German lenders had the highest risk exposure in Europe to Spain, which stood at around $242 billion at the end of 2010, of which $85 billion alone was exposure to banks. This shows that the costs of continued non-cooperation and freeriding rose dramatically even for those least prone to pool resources and share power in banking policy. This increased the prospective immediate benefits of closer integration, which resulted in stronger centripetal effects.

At the same time, a change in the recognition of the policy problem from a fiscal crisis to a banking crisis took place (De Rynck 2014: 16), as Spain's failing banks were at the centre of this latest spike of the crisis, and supervisory forbearance had played an important role in the debacle of the Spanish savings banks (Garicano 2012). Similarly, the sovereign debt-bank doom loop began to be regarded as the central problem of the crisis[14]. The strong negative network effects of a banking crisis within a common currency area and integrated financial markets without common supervision became painfully obvious.

Consequently, proposals for institutional solutions to increase excludability came to be discussed increasingly seriously. The ECB first championed the idea of a banking union bringing it onto the agenda of member states together with the European Council, which turned it into the focal point of the debate on anti-crisis measures (De Rynck 2014: 19; Epstein and Rhodes 2016: 4). Consequently, member states became receptive to banking union as a possible solution to stabilise euro-periphery national banking systems exposed directly to rising sovereign debt loads and the growing risk of default. Banking union became seen as a solution to the 'sovereign debt-bank doom loop', as well as a means to reverse the fragmentation of European financial markets (Gren et al. 2015). This prepared the ground for a leap of faith in the form of giving up national prerogatives over banking policy as member states came to believe that the benefits of such cooperation could outweigh the costs in the short as well as the long term.

The creation of a credible European supervisory mechanism was also seen by many – notably in Germany – as a necessary measure to solve a further collective action problem that would arise in case of a common direct bank recapitalisation of Spanish banks by eurozone states through the newly founded European Stability Mechanism (ESM) (Gren et al. 2015; Boone and Johnson 2011). ESM direct bank recapitalisation effectively constituted a common pool resource (CPR), with limited funds, inducing rivalry of consumption and no clear and seasoned mechanism to exclude freeriding banks, as ESM conditionality was rather specialised on sovereigns.

[14] See e.g. Véron (2016) for an analysis of the gradual recognition of the sovereign debt-bank doom-loop.

Furthermore, if the financial consequences for supervisory mistakes were no longer borne by member states but mutualised at the European level, national supervisors would have no incentive to conduct strict supervision in order to protect financial stability. Instead, this would have set further incentives for national supervisors to freeride on eurozone financial stability through forbearance in an attempt to prop up national banking sectors (Glöckler et al. 2017: 1142).

Just like in fiscal policy, creditor states led by Germany were pushing to introduce more rules to increase the excludability to freeriding as exchange for resource sharing. The German government therefore made its support for the refinancing of Spanish banks by the ESM conditional to the common supervision of these banks, as 'joint liability had to be accompanied by joint control' (Merkel 2012).

Finally in June 2012, the heads of state and government of EU member states agreed on a plan to create a common supervisory mechanism. It would be embedded in a banking union, also including a single resolution mechanism and deposit insurance regime. European Council president Van Rompuy presented banking union as a step to complete EMU and rectify a fundamental design flaw (Van Rompuy 2012).

Indeed, this step can be regarded as decisive or "punctuated change" in the institutional development of EU banking regulation and supervision. The radical and swift institutional breakthrough only came about as the result of a change in the perception of the crisis as a banking crisis and through a situational package deal that linked the SSM to a short-term crisis management measure, namely direct bank recapitalization via the ESM (Glöckler et al. 2017). This allowed the balance of incentives among member states to be shifted in favour of deeper cooperation, as for the first time, immediate benefits of further integration seemed to be higher than continued freeriding. This explanation of institutional change is in line with the hypothesis presented in the second chapter that institutions meant to produce public goods or CPRs will be weak unless the immediate benefits of more integration will be higher than those of freeriding.

4.4.2.2 Incentive structures informing the institutional design of the SSM

After the Commission had presented a proposal for banking union in late 2012, member states began bargaining on the details. While there was a general consensus that a single banking supervisor would contribute to breaking the sovereign-bank doom-loop and to saving the euro, there were differences in opinions how encompassing this supervisor should be and how far it

should intrude into national banking systems. In fact, member states' stances on the ultimate shape of the single supervisor depended on the structure, health and level of internationalisation of national banking systems, as well as country size and ownership of a national central bank (e.g. see Howard and Quaglia 2016b). Interests in banking policy born out of the public good character of financial stability and national banking supervision yielded different member state coalitions than the standard creditor versus debtor distribution present in fiscal policy.

A majority of member states led by France supported the Commission proposal for direct ECB supervision of all banks in the eurozone, whereas Germany together with Italy, Austria, Malta and Cyprus opposed this to protect the peculiarities of their national banking systems. While Germany, Italy and Austria rely on a large share of localised small savings banks and credit unions, Cyprus' and Malta's financial institutions were traditionally involved in more risky global operations said to involve investments of legally doubtful provenance. Both types of business models do not fit well into the standardised single European rule book, giving them a competitive disadvantage compared to large international banks which profit more from European-wide harmonisation of legislation (Howarth and Quaglia 2016; Deeg and Donnelly 2016).

The result was a compromise: the ECB would hold direct oversight over banks with assets above 30 billion euro, or which fulfil other specific criteria which make them significant.[15] Those would represent almost 85 percent of the euro area's total banking assets, while all smaller institutions, including small savings banks and credit unions, would remain under the oversight of national supervisors (Nouy 2015). Even those, however, were to be liable to the same rules and could fall under direct ECB supervision if deemed necessary (Schäfer 2016: 967).

In October 2013, the legal basis was laid through the SSM regulation, and the Single Supervisory Board at the ECB started operating in November 2014. Also in 2013, the Capital Requirements Regulation I (CRR I) and the Capital Requirements Directive IV (CRD IV) were enacted laying down prudential requirements for risk-weighted capital, liquidity, and leverage[16] as well as additional capital buffers for investment firms and banks. This was to make sure that banks would put aside enough capital and liquid assets and reduce risk through decreased leverage to weather future shocks. The CRR I and CRD IV were derived from Basel III and provided a new regulatory

[15] 1. Banks which have particular economic importance for their specific country or the EU economy as a whole 2. Banks of which the total value of their assets exceeds €5 billion and the ratio of their cross-border assets/liabilities in more than one other participating Member State to their total assets/liabilities is above 20% 3. Banks which have requested or received funding from the European Stability Mechanism or the European financial Stability Facility. For more details see: https://www.bankingsupervision.europa.eu/banking/list/criteria/html/index.en.html

[16] Leverage is the relationship between a bank's capital base and its total assets.

basis for banks in the EU (European Council 2021). However, it was the creation of a strong common supervisor that provided the conditions for their effective and comprehensive implementation through effective supranational enforcement.

4.4.3 High institutional strength of reformed European banking supervision

The new institutional setup of the Single Supervisory Mechanism centred around the single Supervisory Board at the ECB turned out to be remarkably strong. It involved highly centralised decision making, precise rules and high enforceability, which would be capable to introduce elements of an excludable network good in European banking supervision.

Indeed, the decision-making process in European banking supervision was upgraded from intergovernmental negotiations to a setting where supranational and national non-governmental representatives take institutionalised majority decisions. The Supervisory Board of the ECB proposes draft supervisory decisions to the ECB Governing Council which count as accepted if the General Council does not object to them. Both decision making bodies consist of the representatives of currently 22 national supervisory authorities[17] and central banks, as well as four and six supranational voting members respectively. This added a strong supranational element, and an important centralisation of decision-making power compared to the EBA. Decisions are taken by simple majority voting. In the Governing Council, a quorum of two thirds - or less in case fewer members are present and the president approves - is sufficient for a vote to go ahead, so decisions can be taken without individual member states taking part. On top of that, there is time pressure in favour of supervisory decisions delivered by the Supervisory Board to the General Council. If national opponents of such a decision cannot organize a majority within 10 days, a decision counts as accepted (European Union 2013).

Furthermore, representatives of national supervisory authorities and central banks are by law independent from their governments and have a mandate to pursue the common European good. Unlike elected officials who are primarily concerned about the electoral costs of their actions, unelected representatives of national central bank and supervisory authorities in the Supervisory Board are directly responsible for financial stability in the eurozone. While they are not insulated

[17] Initially, in 2014, there were only 19.

completely from their respective member state economy either, they have particularly strong incentives to coordinate their work effectively (Quaglia and Spendzharova 2018).

Finally, the prudential rules in banking created by the EBA mostly represent precise specifications of EU directives, while the additional prudential requirements instituted by the ECB in special cases also entail clear instructions for action, leaving relatively little room for discretion for banks, certainly in comparison to the vagueness and changing nature of fiscal coordination rules.

The ECB also has strong means to monitor banks' compliance with technical standards and ECB supervisory decisions - the ECB's independent Investigatory Unit. Available instruments of enforcement are similarly strong. In case of rule infringement, the ECB has pecuniary enforcement measures at its disposal. The ECB may impose penalties of up to 10 percent of a bank's total annual turnover in the preceding business year, or twice the amount of profits gained or losses avoided as a result of the breach, where those can be determined (ECB 2022a). Moreover, the ECB can instruct the national competent authorities to adopt national enforcement measures on banks. In case of continuing non-compliance with EU prudential requirements, the ECB can impose further penalties (European Union 2013). Sanctions have been imposed in 18 cases as of December 2022 (ECB 2022b).

While non-compliance would seem to be more likely among small banks still outside direct ECB supervision, supervisory practices are being harmonised with the help of the Supervisory Review and Evaluation Process (SREP) (ECB 2018). At least regarding the banks of so-called systemic significance under direct ECB supervision, rules have so far been effectively enforced as suggested by the fact that during the last few years, banks' capitalization levels have starkly increased (European Commission 2017: 4) and the ratio of nonperforming loans held by significant banks had been reduced from 8 percent in 2014 to 3.4 percent by the end of 2019 (ECB 2019; Lehmann 2021).

All this amounts to a high degree of institutional strength now characterising European banking supervision. This institutional strength is inextricably linked to the ability to exclude outsiders and free-riders from the benefits of financial stability and the introduction of positive network effects. Thus, institutional reforms largely addressed the common pool problems present in the policy field, effectively turning banking stability in the Eurozone into an excludable network good.

4.4.4 The transformation of public goods traits through the single supervisor

The foundation of a strong SSM completely changed European banking supervision from a coordination model to a hierarchical model centred around the ECB, which promised to address the collective action problems stemming from the public good problems of financial stability and the common pool problems of coordinated European banking supervision.

As it transferred the supervision of Europe's largest banks from the national to the European level, the SSM was the first big step towards a significant alleviation of Schoenmaker's financial trilemma and Pisani-Ferry's impossible trinity.

This is because it could help transform financial stability in the eurozone from a public good to a club good by increasing legal excludability. And because it could turn European banking supervision from a good with public good properties and a destructive competitive dynamic into something akin to an excludable network good through excludability of outsiders and by making it increasingly attractive with a rising number of participants.

4.4.4.1 Banking supervision turning from a good with public good traits to one with properties of an excludable network good for banks and states

As banking supervision in the eurozone became essentially europeanised and national supervisors lost much of their power, the meaning of being part of European banking supervision increased considerably, creating a significant division of insiders and outsiders. Outsiders were excluded from the benefits and liabilities of ECB supervision.

The ECB supervisor would have less incentives for supervisory forbearance or laxity, as it was not linked to any particular member state. Banking supervision would be taken out of the arena of member state competition. It would provide more credibility to banks than national supervisors, which had been proven to be too lenient towards national champions. Thus, European banking supervision had the potential of becoming a seal of quality, increasing the credibility for banks under its remit which passed its asset quality reviews.

This heightened credibility was vindicated by the results of the first asset quality reviews performed by the ECB supervisor as part of the comprehensive assessment of EU banks in 2014. 25 banks did not pass the review. This stood in stark contrast to the stress tests of the same banks by national supervisors under the auspices of the more intergovernmental EBA in the same year,

which attested almost all of them a white vest (ECB 2014). A few years earlier in 2010 and 2011, similar stress tests by the EBA and national supervisors had given a clean bill of health to banks which collapsed shortly afterwards, compromising the credibility of the EBA (Glöckler et al. 2017: 1147).

Thus, single European supervision and the better assertion of the emerging single European rulebook of banking created a form of standardisation which made it easier for banks to be compared, and thus gain more credibility on financial markets and among rating agencies. It also saved time and resources for banks, especially for European cross-border institutions (Culpepper and Tesche 2020, Grossman and Leblond 2011). They only had to provide data to one supervisor and according to one and the same standard in all banking union member states they were operating in. As is the case with other technical standards, this meant that the utility of the single supervisor and its regulatory framework increased the more states and banks adopted it. In this sense, consumption of ECB banking supervision can be categorised as complementary for large cross-border banks. The more countries' banks would fall under the remit of the single supervisor, the more attractive it would become to outsiders. Especially large banks would therefore lobby for a strong single supervisor, while smaller, more national banks would be rather against it.

This logic of complementary consumption also applied to states, as much as they were interested in the competitiveness of their large banks. Similarly, complementary consumption of European banking supervision by member states also played a role with respect to their interest in financial stability. The more states joined, the better for European financial stability and therefore the higher the utility of European banking supervision in this sense.

It was certainly painful, especially for large states like Germany to give up control over its biggest banks, as it precluded opportunities in gaining advantages through freeriding. But even in this aspect, complementary consumption of banking supervision played a role. The more other states had to give up their opportunities of freeriding as well, the lower the relative disadvantage for an individual state in their disability to freeride. Also in this sense the utility of European banking supervision would increase with the number of members.

Good: / Level:	Capital		Banking supervision		Financial stability	
	For banks	For states	For banks	For states	For banks	For states
European banking with coordinated banking supervision	Common pool resource	Common pool resource	Public good with very low excludability	Public good with very low excludability	Public good	Public good
European banking with Single Supervisor at the ECB	Common pool resource	Common pool resource	Excludable network good	Excludable network good	Club good	Club good

Figure 5: Types of goods in EU banking with national banking coordination and with single ECB supervision.

4.4.4.2 Financial stability turning from a public good into a club good for states and banks

The single supervisor disincentivised freeriding by imposing legal excludability and by breaking the downward dynamics of competition to European financial regulation and supervision (in the pursuit of supply of and demand for capital). This made European financial stability more akin to a club good than a public good.

Before, the observance of common standards was hard to verify, as they were supervised by national supervisory authorities which often allowed the pursuit of banking nationalism. But the supranational ECB supervisor had less incentives to protect trespassing banks and was motivated to more reliably assert common rules. Through effective legal exclusion of free-riders by deterring them through punishment, bending or breaking rules on capital ratios or risk profiles would no longer be attractive for banks. As the costs of freeriding would rise, both in monetary and reputational costs it would no longer provide competitive advantages over others. At the same time, states had much less means of freeriding with banking supervision outside national control. This would also break the vicious circle of regulatory competition in pursuit of the common pool resources of supply and demand of capital.

4.4.4.3 4.3.3. Centripetal effects of the single supervisor: enlargement of the banking union

Indeed, these excludable network good characteristics of the single European banking supervisor also had centripetal effects to non-eurozone EU countries and their banks to different degrees. In fact, as explained in Chapter 2, excludable network goods hold the strongest centripetal effects out of all goods, which will make non-participants want to join a cooperative scheme (Kölliker 2001). In theory, benefits of joining should become quickly larger than benefits of staying out under such conditions. Especially, since centripetal effects should have been strengthened by the fact that with 19 out of 28 EU member states, the banking union included a majority of member states, so that the ratio of participants was higher than that of outsiders from the get-go. As explained in Chapter 2, this would suggest an increase in centripetal effects.

Especially for large banks operating in non-eurozone EU states, joining the banking union therefore proved to be very attractive. In 2017, Nordea, a big internationally operating Swedish bank moved their headquarters from Stockholm to Helsinki, in order to fall under the remit of the single supervisory and resolution mechanisms. In line with the idea of the SSM as an institution with the traits of an excludable network good, the official reason given by Nordea was that it wanted to be part of the regulatory and supervisory framework of the banking union ostensibly to cut red tape and facilitate comparisons with its peers in the wider banking union setting. Commentators have also suggested that another important reason was to gain access to the ESM as a fiscal backstop large enough to see it through any future crisis (Schoenmaker 2017). While large countries can still afford to resolve big banks on their own, small and medium-sized countries have difficulties providing a credible fiscal backstop to any international banks they host (see chapter 5). Furthermore, to provide a credible fiscal backstop for large banks in individual states often involves raising taxes and regulation for banks, which diminishes their attractiveness as a banking location. A study commissioned by the Swedish government came to the conclusion that joining the banking union would decrease financing costs for its banks at least in the short run and open additional business opportunities in other banking union countries (Swedish government inquiries 2019).

As a result, large banks have some leverage – whether structurally, or whether by actively pushing their host countries to join the banking union: either join or we will leave. This can translate into centripetal forces also for states, as governments are interested in cheaper capital for their economies and state finances.

In fact, banking union membership can lead to lower costs of capital for banks but also host countries outside the banking union with strong reliance on banks headquartered inside. This is mainly because their supervisors tightened restrictions on intra-banking group cross-border transfers limiting the ability of multinational banking groups to re-allocate capital and liquid assets from subsidiaries with an excess to those in need of capital and/or liquidity. Hence, stand-alone subsidiaries as many of them exist especially in East Central European non-eurozone EU members, tend to have higher capital and liquidity bases, which translates into a higher cost of capital for the host country. Banking union membership can therefore lead to lower costs of capital for host countries with strong reliance on banks headquartered inside the banking union (IMF 2015).

There are also important reasons relating to financial stability for outsiders to join the banking union, stemming from the public goods nature of financial stability. Those countries in the EU but outside the eurozone and the banking union have banking systems that are very closely integrated with those in the eurozone. They are part of the same single financial market and share the same overarching regulatory regime administered by the EBA. Without common supervision there remain incentives for freeriding rendering financial stability more fragile. Supervisors in non-banking union countries can undermine financial stability more easily through supervisory forbearance, regulatory laxity, harmful bailouts and the like. Furthermore, potential coordination failures between supervisors in crisis situations can be particularly harmful in such a highly integrated banking market (Höttl and Schoenmaker 2016). Supervisory cooperation and burden sharing between host and home countries will be contentious in case of banks operating both inside and outside banking union, making crisis solution more difficult and time consuming (see chapter 5). From a financial stability point of view there are therefore strong arguments to join the banking union for non-euro area countries (Höttl and Schoenmaker 2016). Network effects from an already large and functioning banking union lend further weight to that case.

This applies particularly to those countries with too low state capacities to provide a tolerable level of financial stability on their own. This concerns mainly the East-Central European EU members outside the banking union. Their banking systems display low internationalisation of locally headquartered banks and are mostly dominated by subsidiaries of large banks headquartered inside the banking union. On the one hand this can set incentives for governments to prefer more independent national supervision and regulation as means to protect domestic banks and exert control over foreign-owned banks in order to ‘steer credit flows in a direction that is most compatible with their national mandate and policy priorities’ (Spendzharova 2014: 960). On the other hand, a coordination failure between the ECB supervisor and their home supervisors can be

particularly costly for such countries, especially since they are relatively small and cannot provide a strong backstop (Darvas and Wolff 2013).

Ultimately, financial stability concerns arguably played the decisive role for Croatia and Bulgaria to join the banking union in October 2020. Weak governance and lower state capacity articulated in higher corruption, lower regulatory quality and rule of law issues were cited as important reasons which made it harder to provide financial stability alone in these countries (Ferran 2014: 13, 15, 23; Howarth and Quaglia 2013: 115; Mero and Piroska 2016). Both Croatia and Bulgaria scored low in the EU in banking sector stability, and both had experienced national banking sector problems before deciding to join.

This suggests that even the remaining East Central European non-eurozone EU members, Poland, Czech Republic and Hungary might join the banking union once financial stability decreases significantly in the event of a crisis that affects their banking sectors. So far, those countries have not done so, because governments there are leveraging banking nationalism to their own benefit and their banking sectors have enjoyed relative stability. In fact, they have also suffered less from the global financial crisis and the sovereign debt crisis (Mero and Piroska 2016).

A factor strengthening the case of banking nationalism against banking union membership for non-eurozone EU countries is their disadvantage in the institutional structure of the SSM. Non-eurozone EU members cannot get a seat in the ECB's General Council and are therefore still excluded from some of the benefits of banking union membership which only come with membership in the euro club. This considerably reduces their influence on the decision making of the single supervisor, and they are effectively 'obliged to abide by decisions in which they do not partake' (Schimmelfennig 2016: 491). Thus, joining banking union goes hand in hand with an even larger loss of national control than for eurozone members of the banking union (Darvas and Wolff 2013).

Another, factor cited as motivation for staying out of the banking union is the ownership of a central bank. Pisani-Ferry's impossible trinity does not apply to non-euro countries, as they can use monetary financing to better deal with a banking crisis. This makes financial stability somewhat less fragile in those countries and therefore weakens centripetal forces towards banking union membership. The bigger the country the more pertinent this factor becomes. Larger countries can leverage monetary financing more effectively to help with bank bailouts in case of defaults, making access to a banking union backstop connected to conditionality less attractive.

Thus, while banking union membership is attractive to large cross-border banks in practically all EU countries, on balance this is not yet the case for all their host states. In other words, complementary consumption of the SSM banking supervision through large cross-border banks, does not always translate into strong network effects for large states.

This certainly helps to explain the reluctance of the UK to join the banking union when it was still an EU member, as well as the wait-and-see attitude of Denmark and Sweden. However, none of the outs have categorically excluded the possibility of joining sometime in the future. Their absence is likely only temporary, considering the strong incentives rooted in the network effects of the single supervisor and the public goods nature of financial stability. In case they do not decide to join earlier, a banking crisis in those countries might help to convince policy makers that joining will provide higher levels of financial stability than staying out.

4.5 Conclusion: excludable network good features and successful preservation of financial stability

The new SSM turned out to be a strong at least pertaining to the largest banks under its remit. Decision making had strong supranational elements, while rules were precise and enforcement strict.

This has marked a large step in the direction of turning financial stability in the eurozone into a club good and banking supervision in the eurozone into an excludable network good for states and large banks. For significant national and cross-border banks and those with assets exceeding 30 billion euro it notably increased the excludability for freeriding on banking regulation and supervision in the eurozone. Regulatory arbitrage is only possible by switching to countries outside the banking union, which is often much more costly as most large banks headquartered in the eurozone have the bulk of their business there. Thus, the introduction of the single supervisor strongly increased the excludability of freeriding on banking supervision in general. The excludability of financial stability for large banks in the eurozone was equally augmented significantly. Low capital and liquidity buffers as well as high leverage would not only be outlawed in the entire EU and EEA by new harmonised legislation of the Single Rulebook in banking such as the CRD IV and CRR. It would also be strictly enforced, and non-compliance punished by the ECB supervisor.

Because of its economies of scale, this new system was also attractive for large banks, as it increased their credibility on the markets and reduced costs in time and resources for compliance (Culpepper and Tesche 2020). Increasing its attractiveness with additional members, the single supervisor also turned banking supervision in the eurozone into a network good, which outsiders wanted to join. These centripetal network effects also applied to states whose large banks would lobby for them to join the banking union. The joining of the banking union by the non-eurozone states Croatia and Bulgaria, as well as strong lobbies pushing for joining in other states testifies to this.

Furthermore, by taking away control of large banks from national supervisors, states were deprived of pursuing an independent banking policy to pursue their own economic interests, often at the expense of European financial stability. Thus, the ECB supervisor represents an effective tool to exclude state freeriding on banking supervision and financial stability through banking nationalism, a phenomenon which had played such a destructive role before.

Having said that, there are still limitations. The harmonisation of banking regulation in the EU and EEA through the Single Rulebook in banking is still a work in progress. For example, the CRD IV and CRR have left room for national specifics in over 160 national options and discretions which the ECB is still in the process of harmonising (Kudrna and Puntscher Riekmann 2018). Similarly, the ECB supervisor is still in the process of building up its capacities to fulfil the enormous task of directly supervising 115 large banks[18] and thousands more indirectly.

Another technical aspect which is missing in banking regulation and supervision so far are restraints on the structure of banks. Banks which are too-big-to fail are hard to resolve without posing particularly severe risk to financial stability. Setting and enforcing rules on resolvable bank structures should therefore be part of a preventive approach to preserving financial stability. But a draft directive imposing restraints on the structure of financial institutions to make them both more resilient and resolvable that was tabled in January 2014 following the publication of the Liikanen Report has languished so far (Mayes 2020: 11; Quaglia and Spendzharova 2017).

Furthermore, while banking regulation covers all of the EU and the EAA, the single supervisor's remit is limited to the eurozone as well as Bulgaria and Croatia (the latter joining the euro in January 2023). Outside, excludability of financial stability and banking supervision is lower. As European banks are often strongly interconnected with banks outside the banking union such as in East Central Europe or in Switzerland and the UK, this can have negative effects on financial

[18] As of 22.04.2022

stability within the eurozone. There are memoranda of understanding between the ECB and relevant national supervisors to cooperate on supervisory matters, but there is no pooled decision making involved. To complete the banking union, it is therefore advisable to extend it to cover all EU and EEA countries (Mayes 2020: 10-11).

Another deficiency of the SSM so far is its limitation to banks with assets exceeding 30 billion, which have considerable cross-border activities or national significance. Especially in countries like Germany, smaller and mid-sized banks such as the Sparkassen play a crucial role in the economy and together play an important role for financial stability in these countries. It has been especially such banks and particularly Germany where loopholes in banking regulation are still present (Veron 2020b). This undermines the idea of a single financial market as a level playing field and preserves opportunities for freeriding on banking supervision and financial stability by states and banks.

Altogether, however, the ECB supervisor is covering 82 percent of banking volume in Europe, including all systemically significant institutions. These are most important for financial stability in the eurozone, so that altogether the reforms in banking supervision have been very successful in furthering financial stability in the eurozone. This became clear when despite the economic shock of the Corona virus crisis (which did not originate in the financial system like the last crisis) European banks have remained largely stable due to sufficient capital buffers (Veron 2020a). This has also enhanced the legitimacy of the EU in the field of banking supervision (Lausberg 2022). The success in European banking policy stands in stark contrast with European fiscal policy. As sovereign bond spreads of debtor states such as Italy quickly reached unsustainable levels at the outbreak of the crisis. Fiscal stability could only be preserved through the interventions of the ECB and by further reforms such as the new Recovery and Resilience Facility.

Because European banking regulation and banking supervision has been successful in crisis prevention so far, the reformed European banking resolution and deposit insurance has not had much of a chance to get tested yet. The next chapter will analyse both from a public goods perspective and evaluate their institutional strength which will provide insights into how they would likely perform during a crisis.

5 Collective Goods theory and European Banking Resolution

This chapter will introduce the concepts of long-term and short-term financial stability and shows how banking supervision is primarily designed to protect the former while banking resolution is mainly supposed to maintain the latter. It then shows how different resolution tools work to provide financial stability and presents their political economy with respect to banks, states, investors and depositors. Deposit insurance is introduced as a specific tool of banking resolution. These tools are classified according to their effects on the public goods traits of financial stability, and it is shown how different tools involve trade-offs between higher excludability in long-term versus short-term stability.

The chapter goes on to explain how increasing financial interdependence and especially the particular context of the EU and the euro turn short and long-term financial stability as well as banking resolution into public goods with strong incentives for both banks and states to freeride. It also shows how this spurs banking nationalism creating incentives for states to choose public bailouts over creditor-financed resolutions like bail-ins, which poses great problems for financial stability. All this will provide answers to the first research question.

After this theoretical part, European banking resolution before and after the financial and sovereign debt crises is analysed empirically. The institution of the CEBS and its role in banking resolution, as well as the Capital Requirements Regulation (CRR), the Bank Recovery and Resolution Directive (BRRD), the Single Resolution Board (SRB), the Single Resolution Fund (SRF), the fiscal backstop located at the ESM, the development of European deposit insurance policy, as well as emergency liquidity assistance and European state aid and insolvency law are analysed on their institutional strength, their public good traits and their success in mitigating public goods problems of freeriding. This will provide answers to the second and third research questions. Furthermore, the analysis of the institutional evolution of European banking resolution will also provide answers on the fourth research question, namely how the public goods character of financial stability shaped institutional choice and determined institutional strength.

5.1 The importance of banking resolution for financial stability

5.1.1 Banking supervision as tool to secure financial stability in the long-term

As shown in the previous chapter, banks have incentives to freeride on financial stability provided by others. In their competition for scarce supply and demand of capital, which are common pool resources, they have incentives to put short-term profits before long-term financial stability, by incurring excessive risks, which can augment systemic risk. Since financial stability is a non-excludable good, they can enjoy it without contributing to its production, causing financial stability to be produced on suboptimal levels.

States have introduced banking regulation and supervision to counter such freeriding behaviour and thus ensure financial stability in the long run by preventing bank defaults and financial crises. By introducing legal excludability to financial stability, they make sure that freeriders who do not stick to the rules are punished. Thereby they take away incentives from banks to freeride and turn them into incentives for behaviour which should prevent financial crises and guarantee financial stability in the long run, such as the build-up of capital and liquidity buffers, as well as the limitation of leverage. The main task of banking supervision can therefore be described as preventing long-term freeriding.

5.1.2 Banking resolution to secure financial stability mainly during crises

A bank failure occurs when a bank is unable to meet its obligations to its depositors or other creditors because it has become insolvent or too illiquid to meet its liabilities (FDIC 2022). If a large bank fails or is likely to fail despite regulation and supervision, banking resolution comes in as instrument to preserve as much as possible of the critical functions and deposits of a bank, and resolve it in a way that causes least harm to financial stability (e.g. see: FSB 2011; European Commission 2022).

This is to prevent that the failure of a bank imposes liquidity or solvency problems on its counterparties, i.e. those a bank has liabilities with. Otherwise, troubled counterparties can spread contagion through interlinkages with other financial institutions and/or markets to the wider

financial sector[19]. Furthermore, if a troubled bank withdraws from lending, other financial institutions can rapidly be destabilised through their reliance on interbank markets for short term funding (Goddard and Wilson 2016: 125). The destabilisation of the financial system can subsequently lead to a credit crunch and an economic crisis (Berg and Bjerre-Nielsen 2020). Banking resolution is therefore primarily meant to protect financial stability in the short-term, in face of a concrete crisis situation.

5.1.3 Short-term freeriding: incentives for freeriding during bank crises

When a bank runs into trouble, the challenge of effective resolution is exacerbated by a set of incentives for freeriding on financial stability.

Financial market participants find themselves in a competition for the common pool resources (CPRs) of supply and demand of capital. Therefore, they have an incentive to divest (e.g. withdraw investments, withdraw money from accounts, interrupt short-term capital provision on interbank market) short-term, i.e. as quickly as possible from a bank they deem threatened by failure to save their capital before a distressed bank is insolvent. Similarly, it is individually rational for depositors to get hold of their money quickly to preclude losses. This may cause a bank run, which can precipitate the failure of the embattled bank and make many other investors and depositors end up with total losses and create contagion to other financial institutions. This reflex to put own interests before the stability of other market participants is therefore a form of freeriding on financial stability. It can even precipitate default in cases where a bank only has temporary liquidity problems and where a default or bankruptcy is avoidable. Such uncontrolled defaults can cause liquidity problems in other financial institutions, which can cause panic among investors and depositors. Even a struggling bank's own management can withdraw money from it and further destabilise it.

Thus, individual incentives of banks, their managers and other investors and depositors lead to a prisoner's dilemma type of collective action problem. Individually rationally acting counterparties and depositors can cause financial stability to collapse while trying to save their own capital. In the terms of public goods theory, a failing bank holds a common pool with limited amount of capital (rival consumption) that can be withdrawn (non-excludable). In a crisis situation investors

[19] Contagion can occur for example as a consequence of direct linkages between banks (Allen and Gale 2000), broader network externalities (Freixas et al. 2000) and volatility in asset prices (Allen et al. 2015).

have strong incentives to deplete the common pool resource capital in the capital pool of a troubled bank and thus endanger the public good financial stability.

As opposed to freeriding by taking on too much risk in normal conditions which rather endangers financial stability in the long run, this kind of freeriding through divestment in crisis times happens short-term. This distinction will henceforth be specified by the terms of short-term freeriding and long-term freeriding in this dissertation.

5.1.4 Features of effective resolution regimes

Banking resolution regimes should have a number of features that can preclude this kind of devastating short-term freeriding through panic selling and money withdrawal.

5.1.4.1 Preparatory or preventive measures

Ideally, effective banking resolution entails the restructuring of a bank before a collapse actually occurs, leaving behind a smaller, but healthier and viable institution. Resolution can therefore overlap with supervision, which is responsible for ensuring that banks avoid behaviour leading to failure, or issuing an early warning for corrective action if a bank gets into trouble. A specific overlap may be a demand for banks to increase their capital or liquidity buffers to better withstand the collapse of other banks (Donnelly 2016: 5).

On the other hand, banking resolution regimes can also strengthen discipline among banks before a crisis occurs and therefore enhance the effectiveness of banking supervision. This happens if banking resolution rules and institutions can credibly convey that freeriding through incurring excessive risk will have strongly negative consequences for a bank in case it gets into trouble. This means that ideally banking resolution institutions are geared towards not sparing freeriders from the consequences of their actions by generous bailouts.

5.1.4.2 Early intervention

The existence of a resolution authority that can quickly take control of a bank that is failing or likely to fail, is another essential feature of an effective banking resolution regime (Schillig 2014).

Assigned as a receiver, it has the power to exchange the management of the bank, override shareholder rights and suspend the trade of securities issued by the troubled institution (Bafin 2019). The quicker this happens, the less there are opportunities for short-term freeriding by withdrawals of money in form of investments or deposits which can spread contagion and destabilise the financial system. Similarly, the resolution authority ideally acts as quickly as possible in its subsequent choice of resolution strategy, to decrease the time of uncertainty and the potential for a panic among counterparties or markets. A long process like standard bankruptcy proceedings as they are common in other industries, can have fatal effects for a bank and its counterparties and subsequently financial stability (Berg and Bjerre-Nielsen 2020).[20]

5.1.4.3 Clear and enforceable resolution rules

Ideally resolution proceeds according to automated processes guided by clear and enforceable resolution rules and pre-prepared resolution plans. This can introduce a degree of predictability, increasing the credibility of commitments, which can attenuate possible investor panic and decrease incentives to withdraw and thereby freeride. They can establish a hierarchy of claims among counterparties to make distributional effects of a bank's failure clearer from the outset. This can attenuate some uncertainty, but not all of it, as every bank failure has features of its own and a resolution authority cannot foresee all eventualities. It can also provide a clearer picture of winners and losers from the outset, which can create incentives for early withdrawal for prospective losers.

[20] Having a process that takes days let alone months is not workable, as the case of Northern Rock in August/September 2007 vividly illustrates. If the Bank of England had reacted immediately in August 2007 and provided collateralised loans on the occasion of the first request, this would have given confidence to the market and Northern Rock might have been able to sort out its own problems without recourse to any state aid. As it was, nationalisation was required and the taxpayer ended up making losses. But even the process of resolution, once it was agreed, was marred because the announcement of the decision was delayed for a few days and, in the interim, there was a serious bank run from which Northern Rock could not recover (Mayes and Wood 2008).

5.2 The different tools of banking resolution and their effects on financial stability

Banking resolution involves the highly political process of managing the distribution of costs of bank failures. Actors involved in these distributive questions are usually private actors – banks, their shareholders, bondholders, depositors – and the state, i.e. taxpayers.

The question of who gets compensated and who has to pay, i.e. the political economy of banking resolution, depends on which resolution tool is applied. To protect financial stability in case of failing banks, resolution authorities usually dispose of a set of resolution tools. They all have different effects and hold different incentives for banks and states. They therefore display different degrees of excludability and rivalry and can be classified as having traits of the different types of collective goods.

The following resolution tools are largely those that are outlined by the Financial Stability Board (FSB) in the 'Key Attributes of Effective Resolution Regimes for Financial Institutions' (FSB 2011). They have become the global empirical and theoretical benchmark for banking resolution regimes after the financial crisis.

5.2.1 Letting banks go bankrupt: standard bankruptcy proceedings

The standard way to deal with failing banks has been bankruptcy proceedings. Just like any other company which could not service its financial liabilities anymore, a bank would be wound up in a usually drawn-out process. With the rise of large commercial banks, this approach posed serious risks to financial stability as long periods of uncertainty could lead to systemic crises and freeriding by panic selling or rapid withdrawal of funds or deposits. In suit of the great depression, which was triggered by a financial crisis kicked off by uncontrolled bank failures, the US was the first country to introduce a specialised agency to deal with the failure of banks in 1934, the Federal Deposit Insurance Company (FDIC). It insured depositors and took on the role of a resolution authority. In the following decades, other countries followed suit.

In virtually all jurisdictions, specialised bankruptcy proceedings are still used for smaller, systemically non-significant banks. For banks they usually represent the least advantageous resolution path, as a failing bank usually ceases to exist and counterparties will only be

compensated with whatever money is left. On the other hand, letting market forces decide the fate of a bank provides strong incentives to avoid failure by all means. This mechanism called market discipline relies on counterparties of banks to monitor a bank before or during business and influence banks' risk profile by making investment or divestment dependent on it (Bliss and Flannery 2002).[21] Standard bankruptcy proceedings as type of resolution can therefore hold strong incentives against long-term freeriding through overly risky operations by way of market discipline. It can therefore increase excludability to long-term freeriding. However, it hardly attenuates incentives for short-term freeriding through panic selling and withdrawals of funds once a bank is in trouble. As most counterparties would take great losses in case of bankruptcy, they might be better off freeriding by selling as quickly as possible, thus precipitating bankruptcies even in cases where it could be avoided. For states, bankruptcy proceedings usually do not involve any costs, as long as financial stability is not endangered.

5.2.2 Creditor financed bank restructuring

Another set of tools of resolution is the creditor financed restructuring of a troubled bank's assets. This can include recapitalisations, but also the separation of assets, transfer of business, changes in management and bail-ins. All these technical tools involve some degree of creditor liability for the losses of a failing bank. They all have somewhat different distributive effects and hold slightly different incentives for or against freeriding. Generally, creditor financed restructurings tend to increase the excludability of long-term freeriding, while diminishing that of short-term freeriding. These effects are weaker than in the case of bankruptcy proceedings, though.

5.2.2.1 Recapitalisations

In case of recapitalisation, creditors', investors' and bondholders' conditions are worse off than in its absence, but they do not usually lose all their money. Common instruments of recapitalisation are turning loans into equity, for example using convertible bonds[22], extending payment schedules, reduction of interest rates, downgrading or dilution of shares and others. These measures usually

[21] For a theoretical treatment of market discipline, see Decamps, Rochet, and Roger (2004), and for empirical analyses that support the risk-controlling role of market discipline, see Barth, Caprio, and Levine (2004), and Goyal (2005).
[22] They usually have a specific strike price that, once breached, can convert the bond into equity or stock.

restrict liquidity of counterparties, which can have knock-on effects within the financial system. But these tend to be much less devastating than those caused by straight-out defaults.

5.2.2.2 Separation of assets

A separation of assets removes toxic assets like non-performing loans or exposures via other financial instruments that have a negligible market value from a failing bank. These may be transferred to a so-called bad bank, i.e. a bank that only holds those toxic assets. Such an institution is often established with state support, in order to isolate toxic assets from healthy ones and forestall contagion. The bad bank eventually winds down and sells off the toxic assets it holds. On the troubled bank's financial records, this replaces a fictional display of healthy income and wealth with a realistic assessment, which may approach zero.

This can lead to a significantly smaller, but healthier bank, which can regain credibility on the markets. The loss of toxic assets may also entail that the bank will not be able to service some of their liabilities, so that this write-down can come hand in hand with a bail-in. Like recapitalisations this can have knock-on effects for other banks in the system.

5.2.2.3 Transfer of business

A transfer of business sells what is left of the bank to another bank, normally after an asset separation. A public entity known as a bridge bank may hold on to the remaining viable assets until a buyer can be found. A failing bank is effectively broken up in this scenario.

5.2.2.4 Bail-ins

A bail-in provides relief to a financial institution on the brink of failure by requiring the cancellation of debt owed to creditors and depositors (Young 2020).

Through making creditors liable, bail-ins impose market discipline and provide high excludability against banks' long-term freeriding through risky operations. Senior creditors who are expected to be capable of assessing the risks they are taking such as bondholders, large depositors, investment funds or other banks can be made liable for the costs of resolution. They will lose some or all of

their investments, deposits or bonds, when a failing bank is resolved. But it usually allows the remaining claims, in particular insured deposits and potentially a substantial part of uninsured deposits, to remain available. Bail-ins are often combined with recapitalisations, asset separations, and transfers of business. Despite incurring losses on creditors, bail-ins are therefore much less disruptive than a bankruptcy, where the courts may lock up all uninsured claims for many years (Berg and Bjerre-Nielsen 2020).

5.2.2.4.1 Public good traits of creditor financed recapitalisations

5.2.2.4.1.1 High excludability for long-term freeriders

Bail-ins and other restructuring tools can increase the excludability of the common pool resources of supply and demand of capital as well as financial stability to long-term freeriders. This is done not by direct legal excludability, but rather indirectly by setting incentives to avoid failure in the future, which is often the result of taking on too much risk, i.e. freeriding. The prospect of significant costs on counterparties and a bank in case it should get into trouble functions as a strong incentive for sustainable risk profiles. By having restructuring legislation in place, incentives are set for banks to avoid failure, while investors and creditors have incentives to properly scrutinise the bank before entrusting their money to it. As a consequence, investors will be more careful in evaluating the business model, risk profile and operations of a bank before investing. Thy will also be keener to monitor the banks that they have invested in and push these banks not to steer an excessively risky course, knowing that they will not be bailed out (Berg and Bjerre-Nielsen 2020). Furthermore, creditors and investors will be more vigilant before giving money to a bank and have greater incentives to sit on boards of directors and insist on more transparent reporting and regular controls (Mayes 2013). This makes those banks which run excessive risks less likely to gain investors, depositors, or lenders. This means that free-riders are not excluded by law like through regulation and supervision but by other market participants. Restructurings like bail-ins are therefore reinforcing market incentives which can be weakened by expectations of bailouts. It also provides banks with an incentive to find cheaper and more congenial private sector solutions through capital injections, mergers and acquisitions earlier in the process of decline (Mayes 2020: 131).

Finally, the write-down of parts of a bank makes the possibility of the creation of zombie banks less likely. Those are kept alive artificially, usually through public money and therefore freeride on financial stability. Such institutions can become a burden on financial stability and growth for

a long time and also endanger fiscal stability. They are perpetuating uncertainty as problems are not solved but their solution merely postponed (e.g. see Sandbu 2017).

5.2.2.4.1.2 Low excludability for short-term freeriders - dangers to financial stability

On the other hand, if bail-ins are actually applied, high losses of counterparties can pass on financial problems within the financial system and undermine financial stability (Avgouleas and Goodhart 2015; Chan and Van Wijnbergen 2015). The risk of such a development is higher, when the banking system is already under stress than when a bank is failing because of idiosyncratic risk (Berg and Bjerre-Nielsen 2020). This is most pertinent with banks that are "too big to fail" or too interconnected to fail (Herring 2008), while questions of contagion have to be considered with respect to all systemically significant banks. The size of capital buffers of counterparties plays a vital role in how devastating contagion can be, which depends on the effectiveness of banking supervision.

The existence of bail-in legislation can also hold incentives for short-term freeriding. It can encourage counterparties to divest from a bank that they deem to be in trouble before it is placed under a resolution authority to avoid losses. This can plunge a bank into turmoil which is not (or not yet) actually in immediate danger of failure. Essentially, bail-ins trade-off long-term against short-term financial stability.

5.2.2.4.1.3 Political feasibility: Strong political incentives against bail-ins

Some scholars have pointed out, that the losses through a bail-in could be higher than through a bailout (Karamichailidou and Mayes 2015). That is because bail-in losses are immediate and under crisis pressure, when values tend to be artificially low. In a bail-out on the other hand, losses are spread over future tax payments and since a bank will continue operating, it might recover some of the value that was lost during the crisis. Also, while losses are spread thinly over a large number of people (taxpayers) and over a long time in case of a bailout, a bail in exacts much more concentrated losses both on households and over time. This can make bail-ins politically much less agreeable for governments, as there is more likely to be strong stakeholder groups lobbying against it. Immediate losses will be politically much more difficult to bear so there will be a strong incentive to bail out (Karamichailidou and Mayes 2015). Altogether, bail-ins tend to trade-off long-term against short-term financial stability.

5.2.3 Financial assistance: Third parties take on liabilities

5.2.3.1 Central bank as lender of last resort

Central banks can provide emergency liquidity to failing banks, usually against collateral, for example by buying bonds of struggling banks (Calomiris 2015). This can be done under market conditions or with discounts to the benefit of the troubled institution.

5.2.3.2 State aid: public guarantees, bailouts and fiscal backstop

If saving a bank is in the public interest and no other means can be found to do so, state aid can be an option of orderly banking resolution. This can include public guarantees or bailouts, i.e. capital injections to failing banks. In fact, public bailouts through tax-payer money have been, in practice, the most relevant funding source for managing the failure of large, systemic banks to date (Restoy 2021).

In this model, taxpayers are made liable to recapitalise a failing bank. This can take the pressure off the financial system and when done quickly, prevent contagion to other financial institutions, safeguarding financial stability. If regulations stipulating bailouts are in place, or news about bailouts is released, this can also stop investors from rapidly withdrawing their funds or panic selling their shares or bonds and help prevent a bank run. Bailouts in some European countries after the crash of Lehman brothers are a case in point.

The capacity of a state to bailout is often dubbed fiscal backstop. It works either directly by recapitalising ailing banks, or indirectly as backstop for the central bank and/or a resolution and deposit insurance fund. In the case of a systemic crisis, the standing of a banking system depends on the strength and credibility of the fiscal backstop (Goodhart 1998). Larger countries that can offer a larger backstop are often at an advantage to smaller countries. While bail-ins or liquidations are feasible for small and mid-sized banks, backstops is primarily needed for large banks (Schoenmaker 2017).

5.2.3.3 Public good traits of state aid and central bank liquidity

5.2.3.3.1 Low excludability for long-term freeriders

State aid or emergency liquidity from central banks hold the danger of creating moral hazard, i.e. generating incentives for long-term freeriding for banks by lessening market discipline.[23] Banks are not made liable for their losses, which might have come about through overly risky risk profiles, i.e. through freeriding on financial stability. Thus, market incentives against freeriding are significantly attenuated by public bailouts and guarantees, as free-riders are not punished by the market, i.e. excluded by resolution regulation that allows for bail-ins and restructurings. Failing banks are not excluded from their access to capital as they are propped up by bailout funds or aided by state guarantees. This starkly reduces the excludability of capital and financial stability for large banks, creating strong incentives for them to long-term freeride on capital and financial stability provided by others. This can in fact make banking crises more likely, and financial stability more fragile, especially in case of lax supervision. If there is effective supervision in place, prescribing capital buffers and risk limits, this problem can be mitigated through legal excludability, while incentives to bend the rules due to moral hazard of bailouts are still in place. Altogether, state aid and particularly bailouts tend to trade-off short-term against long-term financial stability.

5.2.3.3.2 State aid encouraging freeriding on fiscal stability: the bank-sovereign doom loop

While setting incentives for long-term freeriding and thus facilitating financial crises, state aid can also contribute to the emergence of fiscal or sovereign debt crises. Especially beleaguered banks which are too big or too interconnected to fail can incur huge costs on public finances through bailouts or guarantees, which in turn can increase public debt, triggering a sovereign debt-bank doom loop. This can lead to doubts among creditors as to the sustainability of that debt, push up interest rates on sovereign bonds and lead to a debt crisis. This happened in the Latin American debt crisis in 1970s and 1980s, the Asian crisis in the 1990s, and of course in the recent eurozone crisis. Banking resolution through state aid can therefore come at the cost of financial as well as fiscal stability.

[23] For a summary on moral hazard and bailouts see Farhi and Tirole 2012.

5.2.3.3.3 Political bias for state aid

Policymakers tend to discount the long-run consequences of state aid like bank bailouts or guarantees, namely increased incentives for long-term freeriding (moral hazard). Instead they tend to bail out banks due to the short-term benefits of bank bailouts, such as preserving financial stability in the short-run as well as the short-run political benefits of bank bailouts, such as avoiding blame for allowing too much bank risk-taking (DeYoung et al. 2011).

5.2.3.4 Private financial assistance: resolution and deposit insurance funds

5.2.3.4.1 Bank financed resolution funds

Bank financed resolution funds are usually financed by bank contributions ex-ante. These contributions are sometimes risk weighted.

If they are big enough to bailout large banks, private sector aid can largely avoid contagion to public finances, mitigate incentives for rapid withdrawals of funds (short-term freeriding) and therefore help to secure financial stability in a banking crisis.

They can also hold somewhat higher levels of excludability of capital and long-term financial stability than state aid. This is because of a higher level of financial liability of banks since bailouts are financed by the banking industry. Risk weighted contributions of individual banks can increase the liability of those banks which take on higher risk. This can disincentivise long-term freeriding by banks.

As there is a large number of banks in a banking system, risk is however diluted a lot. This high group latency naturally increases incentives for freeriding, as the own share of a bank in the fund used for its bailout can be very small. Excludability through liability is therefore still very low, albeit somewhat higher than in case of a public bailout.

5.2.3.4.2 Bank financed deposit insurance funds

Deposit insurance funds make sure that depositors are reimbursed (usually up to a certain limit), even if other parts of a bank are written off or bailed in. On the one hand, this is to protect depositors for whom it is much more difficult to fight for their money in case of a bank failure than for larger institutional creditors. On the other hand, deposit insurance is supposed to prevent

depositor panics and bank runs, i.e. short-term freeriding on the part of depositors. Depositors have an incentive to withdraw their money from a bank they suspect is failing, or likely to fail, before they might lose some or all of their money. Such behaviour can be motivated by adverse information about a bank among depositors and coordination failures, even in case of a solvent and liquid bank (Diamond and Dybvig 1983). Such bank runs can undermine effective resolution, cause uncontrolled defaults and generate powerful contagion pulling other banks towards collapse and cause a systemic crisis. To preclude such a scenario, deposit insurance schemes insure depositors against bank default distress and increase overall trust in the resilience of the financial system (Gros and Schoenmaker 2014, Donnelly 2016). Therefore, in most national contexts, banking resolution regimes are complemented by deposit insurance schemes. In fact, historically they predate banking resolution schemes.

On the other hand, Barth, Caprio, and Levine (2004) have shown that high levels of deposit insurance can impede the effectiveness of market discipline and increase the likelihood of a banking crisis through moral hazard, i.e. long-term freeriding. This is because if depositors can be sure to be reimbursed, they have an incentive to deposit their money with banks which provide higher returns, which often happen to be those which take on more risk and are therefore more likely to fail.

Ultimately it depends on the specific resolution regulation in place and on the resolution authority in charge how private and public liability are balanced in each resolution case. To arrive at an optimal resolution, every case will likely contain a different degree of bail-ins and bailouts, as well as private and public liability.

5.3 Banking resolution in one country

When the first banking resolution regime was established in the US in form of the FDIC in 1934, there was virtually no international capital mobility and banks operated almost exclusively in a national context.

	financial stability during crisis/outside crisis
Without banking resolution institutions	Public good
With banking resolution institutions	Club good

Figure 6: Effects of banking resolution on financial stability for states.

5.3.1 National banking resolution and financial stability as club goods for states

Just like banking supervision as enabler of financial stability, banking resolution and deposit insurance are collective goods in their own right. Despite possible disagreements on the design, specific rules and mix of tools employed, banks and states usually consider an effective banking resolution scheme to be furthering financial stability. In the national context they are excludable and non-rival, i.e. club goods for states.

With little or no international capital mobility and a national banking system, resolution and consequently financial stability during crises are excludable to outsiders. Neither banks of foreign provenance nor other states can profit from domestic banking resolution schemes and ensuing enhanced financial stability. It is not necessary to resolve large foreign banks with operations within the remit of the resolution authority, which would entail much higher costs. This also means that other states cannot freeride on a state's provision of resolution services.

5.3.2 National banking resolution as excludable network good for banks

The introduction of national banking resolution policies can increase the excludability of financial stability to banks. Only banks under the remit of a banking resolution scheme can profit directly from its stability enhancing effects. At the same time, a banking resolution authority can exclude banks which have been long-term freeriding by breaking banking regulations from supposedly favourable resolution options, such as bailouts, as long as the bank is not too big or complex to fail.

Just like banking regulation and supervision, bank resolution schemes can also generate network effects for banks in a national context. The more banks become members of a resolution scheme,

the less likely they will find themselves in a situation where their bank is failing disorderly or as counterparties of one that does. Thus, in case of a crisis they are generally better insured the more banks participate in a banking resolution scheme. The drawing up of resolution plans for banks by resolution authorities and a clear codification of what happens in case of banks becoming unviable can increase predictability. Therefore, banks under the remit of a well-designed resolution authority can gain more credibility at the markets and become more competitive, making a resolution regime a desirable good for banks. This is particularly the case for resolution schemes which are backed up by a sufficiently large backstop. However, there is variation in public goods features when it comes to different resolution tools.

5.3.2.1 Restructuring tools and bail-ins: excludable network goods

Restructurings of all kinds tend to be excludable network goods just like national banking resolution overall. These tools do not have problems with a lack of excludability. Banks are usually not longing to get restructured, or broken up, so that there is usually no need to forcibly exclude them from such measures in the first place. Neither are they rival, as there are no external resources involved that can be drained. But restructurings do have elements of complementarity. The more failing banks are restructured, the better for financial stability and therefore for all banks.

5.3.2.2 Financial assistance: private goods directly, public goods indirectly

While generally being under the remit of a banking resolution authority can be seen as constituting an excludable network good for banks, financial assistance like bailout funds tend to figure as private goods for most of them. Banks can be *directly* excluded from them if a government or a private resolution fund does not want to bailout a particular bank, for example in case this bank has been infringing financial regulation, i.e. freeriding, or if it does not fulfil necessary legal requirements. But the more banks are fully or partially bailed out, the less there is for others. Hence consumption is rival. This will make banks try harder to convince that they are eligible for bailouts than others, making them more inclined to cheat with misleading information and thereby freeride. They can however be excluded in case their cheating is discovered.

Financial assistance like bailouts also create externalities from which all banks can profit *indirectly*. If a failing bank is bailed out, its creditors (i.e. often other banks) are paid out instead

of having to suffer from default. Thus, those creditors are relieved of the negative consequences of their bad investment decisions. The benefits to short-term financial stability of a bailout, for example through preventing liquidity shortages in the inter-bank market, are equally non-excludable. Indirectly, bailouts therefore also have elements of a public good for banks.

5.3.2.3 Financial assistance: common pool resources for large systemically important banks

Excludability in a direct sense can be reduced in case a failing bank is systemically important or too big and interconnected to fail. In such a situation, a government or resolution authority has little choice but to directly bail out the bank. For systemically important banks, bailout funds can thus gain the traits of a common pool resource, as they cannot effectively be excluded without risking the collapse of the banking system, i.e. the destruction of financial stability. Consequently, financial assistance which has turned into a CPR also reduces excludability to financial stability turning it into a public good.

A bailout with CPR features for large banks can create moral hazard problems for those undermining financial stability. As long as banks are too big and interconnected to fail, they can expect to be bailed out, no matter whether they take too much risk and freeride on financial stability. To guarantee financial stability, it should therefore be guaranteed that financial assistance remain excludable for all. This can be achieved by limiting the size of banks or by making sure that large banks are regulated and supervised effectively enough for them not to fail.

5.3.2.4 Financial stability as a club good for banks

As long as they retain excludability, the effects of banking resolution can be regarded as increasing excludability to financial stability in crisis situations as well. As shown, direct excludability is usually high, while indirect excludability through positive or negative externalities tends to be low. Freeriding can still occur, largely with respect to the bailout tool by banks which are too-big-to fail, and by investors who are not made liable for their investments in the failing bank and are not excluded from positive externalities.

Good: / Level:	**Banking resolution in general**	**Financial assistance**	**Restructurings (e.g. bailins)**	**Financial stability**
For states	Club Good	Club good	Club good	Club Good
For banks	Club Good	Private Good; CPR for TBTF banks; indirectly public good	Club good; indirectly public good	Club Good; indirectly public good

Figure 7: Banking resolution in one country.

5.4 Banking resolution in the context of international capital mobility

5.4.1 Financial stability as public good for banks

As laid out in chapter 3, international capital mobility and global spreading of risk rose steeply in the 1980s. This was often led by regionally or globally expanding banks, which had important and sometimes systemically significant operations in several jurisdictions. This brought major challenges to financial stability (Allen et al 2011). A bank or a branch of a bank failing in one country could now affect financial institutions in different countries and compromise financial stability. Thus, the excludability of national banking industries was broken up, turning financial stability for banks into an international public good.

5.4.1.1 Short-term freeriding through withdrawals became easier

It facilitated freeriding by banks on financial stability through excessive risk taking and created opportunities for regulatory arbitrage. It also massively increased the possibilities of capital flight in face of crises, i.e. short-term freeriding. Even with banking resolution authorities in place, international capital mobility provides more opportunities for banks to more easily withdraw from an institution and invest elsewhere. This can intensify investor and depositor panic and increase the likelihood of uncontrolled bank failures. This kind of crisis freeriding could happen concerning withdrawals from healthy institutions as well as banks in trouble but not under resolution authority yet. Furthermore, banks would be able to rid themselves of risky investments more easily and

therefore dodge responsibility for bad investments when a crisis hits by shifting funds into save havens. In the absence of effective international regulation, supervision and resolution, such freeriding banks were hard to exclude from financial stability in general and during crises in particular. This non-excludability of free-riders would help to make banking crises much more sudden, more devastating and more far-reaching than without capital mobility. The Asian financial crisis in 1997 for example, painfully demonstrated this dynamic (Basel Committee on Banking Supervision 1999).

5.4.1.2 Banking resolution as public good for banks: regulatory arbitrage

Just like with general banking regulation and supervision, banks could profit from regulatory arbitrage. To profit from the best resolution conditions, banks could move to jurisdictions that best suited their interests. Banks moved to places that offer a credible and effective resolution process and a large enough backstop for bailouts, while bail-ins are much less attractive. There are incentives for large banks to seek rich countries as headquarters as those can usually provide a larger backstop (Boot and Thakor 2015:64).

5.4.2 Banking resolution and financial stability as public good for states

As it became increasingly difficult for states to maintain political authority over international banks and guarantee financial stability within national boundaries through effective supervision, it also became harder to effectively resolve international banks and maintain financial stability in face of a crisis.

Through the internationalisation of banking and capital mobility, the excludability of national banking resolution policies decreased, as did the excludability of financial stability in crisis situations. The resolution (or lack thereof) of a bank in one country can impact banks and financial stability in other countries through positive and/or negative externalities.

Positive externalities of banking resolution

Orderly resolution of an international bank in one country often has positive effects on financial stability in other countries, too. It can stop the passing on of financial instability by preventing defaults of international counterparties or indirectly by preventing contagion, for example through

reputation risk or drops in asset prices. Countries can freeride on effective banking resolution and therefore on financial stability produced in another state in what could be termed "beggar thy neighbour" freeriding.

Negative externalities of banking resolution

On the other hand, states can freeride on financial stability through banking resolution which only takes into account national banks while not addressing threats to international financial stability (Boot and Thakor 2015: 64). The orderly resolution of a bank in one country, say through a bail-in, can cause losses at financial institutions in other countries, which, in case they are large enough to threaten those institutions, can endanger financial stability in that country and possibly regional and international financial stability. This constitutes freeriding on international financial stability, as a state which allows this, profits from international financial stability, while not contributing enough to its production. By opting for a way of resolution that might save national financial stability for the time being, save national funds and/or favour the national banking industry, states can send contagion to other countries and undermine international financial stability. This interdependence is even more acute in the case of cross-border banks. One country resolving a branch or subsidiary of a bank in a certain way (bailing out, restructuring, bailing-in) can have strong positive or negative effects on different branches or subsidiaries of the same bank in other countries.

Not helping to bailout the foreign branch or subsidiary of a domestic bank, through ring-fencing for example, can threaten financial stability in that other country, which might not be capable of an orderly resolution through a bailout for example. Incentives for such national banking resolution policies are unmitigated in a context of international banking, making it impossible to exclude those states who harm others and those who profit from others but do not contribute themselves.

Just like banking supervision, national banking resolution as well as financial stability in crisis situations (short-term financial stability) is no longer excludable. It is not a club good, but a public good in a world of transnational finance. The maintenance of financial stability during financial crises therefore requires selective incentives (Olson 1965) through corresponding regulation and ideally a single resolution authority. Information sharing and cooperation in resolution of different states whose banks are interdependent, or which are home or host to the same internationally operating banks is essential for short-term financial stability (see Schoenmaker 2013), while non-cooperation amounts to freeriding.

The larger the difference in national resolution rules and regimes, the lower the probability of successful cooperation and the greater the scope for coordination failures. For example, there can be differences in legislation determining whether and under which conditions banks are liquidated in standard bankruptcy proceedings or resolved by a receiver. The same applies to the question of what is considered a failure and therefore a trigger for bankruptcy or resolution. Other sources of variations can be the structure of the resolution process, how fast this process is executed, and which resolution tools are employed in which cases. Large divergences in these issues can have a profound influence on the allocation of losses among different countries during a crisis and therefore endanger financial stability (Boot and Thakor 2015: 64, Schoenmaker 2013: 69-70).

Another way of freeriding on financial stability and on banking resolution schemes of others is regulatory competition. By providing more favourable resolution conditions, such as larger cover of deposit insurance for example, states can attract capital, which is withdrawn from less favourable jurisdictions where this can undermine financial stability. This can also undermine international financial stability, if banks collapsing due to bank runs in one country also affect financial actors in other countries. All these forms of freeriding have in common that they are based on banking nationalism and a lack of international coordination.

5.4.2.1 Disincentives to share information and cooperate during a crisis

However, information sharing and cooperation is usually not in the interest of national resolution and supervisory authorities, leading to a collective action problem. Even when information sharing agreements are in place, they are likely to fray in times of stress (Schoenmaker 2013: 15). Bad news tends to be guarded as long as possible even when a bank's condition degrades, to protect domestic banks' position on the global markets and its creditors and prevent a panic of investors or depositors and/or a liquidity crisis (Baxter et al. 2004: 79). National authorities might also fear that sharing sensitive information might prompt others to take action, compromising their discretion in dealing with "their" troubled bank. Authorities will therefore often forbear as long as there is a chance that their bank will self-recover. This often leads to a situation where losses of a troubled institution become so large until there can be no reasonable doubt that the bank is insolvent. Often this is too late for a cost-saving, cooperative international solution, which limits spillovers into other countries (see Herring 2007, Schoenmaker 2013).

In their competition with other states for the common pool resource capital, national supervisors and resolution authorities are thus likely to freeride on financial stability, trying to save their own institutions by keeping back information and foregoing cooperation, while at the same time harming international financial stability. Schoenmaker (2013: 16) presents the example of the Japanese supervisory authorities withholding from their US colleagues the information on 1.2 billion Dollar losses in unauthorised trades between 1985-1996 in the New York City office of the Japanese Daiwa Bank for several months after learning about it. There are many other examples of home authorities being reluctant to share information in a timely manner with host country authorities, such as the case of Lehman Brothers which will be presented in more depth below (Schoenmaker 2013: 72-76).

All this aligns with Schoenmaker's (2013) financial trilemma, whereby international banking, financial stability and national supervision and resolution cannot co-exist. In the situation of international banking and national supervision and resolution, financial stability cannot be guaranteed. The public good nature of banking supervision and resolution as well as financial stability helps to explain this finding. In fact, the financial trilemma is only so devastating for financial stability, because it does not allow for the exclusion of free-riders, which is conditioned by the public goods features of financial stability and banking policies in an international context.

5.4.2.2 Different tools' public good profiles and effects on financial stability

These observations tend to be slightly different according to the various resolution tools employed. If no resolution but standard bankruptcy proceedings are employed on a large failing international bank, this tends to be the most harmful solution for short-term international financial stability, as it usually leads to the largest losses and allows the least degree of control over externalities of banking crises. This is exacerbated in international banking by diverging insolvency regimes, which can lead to coordination problems and contagion.

5.4.2.2.1 Restructuring tools and bail-ins as public goods for states

Restructurings and bail-ins are non-rival as restructuring as a good cannot be depleted. In a direct sense, they are excludable, i.e. a club good, as a state and its resolution authority can only effect the restructuring of banks under its legislation. But it can have strong externalities which are, by definition, non-excludable, turning them into public goods in an indirect sense. Unlike in a setting

of national banking, these externalities cannot be excluded from other states and their banks, turning restructurings into international indirect public goods (or "bads").

Bail-ins can be positive for all, as they reduce costs to the state, encourage private sector solutions, reduce moral hazard, i.e. disincentivise long-term freeriding outside crisis situations and tend to preclude the emergence of artificially propped up zombie banks. But in case of too large bail-in volumes and if done without coordination they can cause financial distress. Coordination is key for successful bail-ins maintaining international financial stability.

A state and its banking regulator and resolution authority might deem it beneficial for financial stability to bail-in banks, without caring about potential negative effects on large international banks or branches of such in other countries. Bail-ins can undermine international financial stability if they wipe out investments or loans of international banks. This can happen knowingly, because a state or its resolution authority cares primarily about the stability of its own banks. But it can also arrive due to a lack of information exchange and coordination (intentional and unintentional freeriding). Thus, by restructuring a state can resolve its banks at the cost of international financial stability. This can be recognised as freeriding on the financial stability of others and ultimately on international financial stability. To prevent unintentional freeriding, information sharing and coordination mechanisms can suffice. Intentional freeriding can only be prevented by establishing mandatory cooperation.

5.4.2.2.2 Financial assistance

While financial assistance like bailouts or guarantees are still directly excludable, as they can be employed at the discretion of a state or bailout fund, their indirect excludability further decreases in the context of international banking. Positive externalities do not stop at borders, so that other banks and their home countries can profit from bailouts. A bailout of a bank in one country can also have positive effects on its branches or subsidiaries in other countries and their counterparties. Thus, a bailout can also help to prevent bank failures in other countries, making bailouts indirectly a public good in the context of international banking. Other states can freeride on such bailouts. They can profit from others state's bailouts of international banks while not contributing themselves. An example is the US bailout of the American financial institution AIG in 2008, which also significantly benefited financial institutions in foreign countries. The Congressional Oversight Panel (2010) estimates that approximately $62 billion of government funds received by AIG went

to foreign institutions (predominantly European banks) because of AIG's large international business (Schoenmaker 2013: 76-79).

Because of freeriding on positive externalities of bailouts, and the risk of higher costs as other states do not contribute, states will try to make bailouts more excludable, and not subsidise banks in other states. This is more easily achieved with a subsidiary structure rather than a branch structure of banks, so that home banks are ringfenced against losses elsewhere.

5.4.2.2.2.1 National bailouts: states do not incorporate foreign externalities

Positive externalities can prevent the spread of instability to other countries. But positive externalities from a national bank bailout are usually not enough to guarantee financial stability in other countries when whole branches or subsidiaries of an international bank are threatened by failure there. Direct bailouts are still a private good, and states tend to use them to save "their" banks, to strengthen them in their competition for the CPRs demand and supply of capital. They usually do not spend scarce resources to bailout banks and their subsidiaries or branches in other countries. Thus, national governments typically do not incorporate cross-border externalities of the failure of an international bank with operations in their jurisdiction (Schoenmaker 2013, Boot and Thakor 2015: 64), at least as long as this can be avoided while saving a domestic bank. As they are accountable to their national parliament, governments usually only care about the domestic effects of a bank failure, and do not help out other states if those cannot shoulder the costs on their own even if that means that overall financial stability will not be safeguarded.

Schoenmaker (2013) shows a home country will not bailout entire international banks (or their foreign branches or subsidiaries), despite the fact that this would be the best solution for everyone in terms of financial stability, if overall the costs for bailouts for the home country are higher than the benefits. The costs could be reduced by cooperation with other countries, which stand to suffer as well from a failure. But as countries cannot count on others to contribute to achieve this better solution without any binding agreements, they risk having higher costs than benefits and subsequently opt for not bailing out. This undermines international financial stability and makes all states involved worse off. Thus, the threat of freeriding on the positive externalities of a coordinated bailout makes states only bail out their own banks or sometimes subsidiaries of other banks within their jurisdiction, thereby freeriding on international financial stability, by not contributing enough for international financial stability. This can lead to a breakdown of the public good financial stability during crises.

Some states simply do not have sufficient fiscal capacity to bailout branches or subsidiaries of international banks in their countries (Hüttl and Schoenmaker 2016). A national approach to bank resolution therefore risks the failure of systemically important banks in other countries with dire consequences for overall financial stability.

As there is no international resolution authority, freeriding states cannot be excluded from financial stability for not contributing enough by punishments, inducing them to contribute their share. This incentive structure in favour of freeriding on international financial stability is aided by the fact that banking crises are rare events, i.e. one-shot games with high financial stakes. So, a cooperative solution is less attractive to governments, as they do not have to fear to be in a similar situation as those countries that they decide not to support, anytime soon (Schoenmaker 2017).

The failure of Lehman Brothers is a case in point. The US Fed (Lehman's home country institution) only provided resolution (bridge financing and merger with Barclays Capital) for the US arm of Lehman Brothers, but not for the foreign subsidiaries of the bank in 49 other countries. Those were sometimes too big to be bailed out by host-country governments, leading to their crash and subsequently to devastating contagion around the globe (Schoenmaker 2013: 72-76).

5.4.2.2.2.2 Banks too big to be bailed out by their states alone

Some smaller or medium-sized countries allow their banks to become not only too-big-to-fail, but also too big to be bailed out by their own government's resources. Banks in Iceland, for example, reached a size of 10 times of the Icelandic economy before the 2008 financial crisis (Schoenmaker 2013: 82-85). This is usually motivated by banking nationalism, i.e. the idea to push national champions to come out top in international competition and therefore strengthen the national economy. To preserve financial stability in such cases requires other countries to contribute to the rescue of such banks although they cannot be blamed for their failure. In such cases, the banks' home country is the one that is freeriding.

As explained in 5.3.2.3, bailouts can turn into CPRs for banks which are too big to fail. Because of their crucial character for financial stability, it is practically impossible to exclude them from bailouts without endangering financial stability.

5.4.2.2.2.3 Banking nationalism incentivising bailouts

The lack of sufficient financial assistance can undermine financial stability during a crisis, especially in countries that do not have sufficient resources and an outsized banking system.

But bailouts can also undermine financial stability in the long run through moral hazard (see 5.2.3.3). In a context of international banking and heightened competition for the CPR capital, this problem is exacerbated. As states are in a state of economic competition they often would like to prop up "their" banks and prevent their failure or sale to foreign players. Therefore, they are more easily inclined to engage in bailouts of their own banks, instead of letting them be liable for their losses and countering moral hazard incentives. This can go as far as bailing out banks which would rather be resolved, and which pose continuing risks to financial stability as so-called zombie banks. Banking nationalism in the context of a competition for the CPR capital also incline states to bailout more generously to keep banks from moving away and attract other banks and their capital. Not only does this encourage banks to take on more risk and undermine financial stability as they know they will not be held liable. It also sets incentives for creating even bigger players, which are harder to resolve in case of a crisis.

In the absence of international rules and institutions, states excessively bailing out national champions cannot be excluded from the benefits of international financial stability, so that this kind of long-term freeriding cannot be countered. Altogether national banking resolution in an international banking system holds public goods features that make the sufficient production of international financial stability during crises hard to achieve.

	Banking resolution in general	**Government/industry Bailouts**	**Bail-ins, restructuring**	**Financial stability**
For states	Public Good	Directly private, indirect public good	Public good	Public Good
For banks	Public Good	Directly private Good; CPR for TBTF banks; indirectly public good	Public good	Public good

Figure 8: Banking resolution in the context of international banking.

5.5 Banking resolution in the EU:

As seen in chapter 4, policy instruments to defend financial stability in the face of financial crises were weakened through the structure of the common currency, while financial interdependence increased even more than elsewhere due to removal of financial barriers within the common financial market and the introduction of the Economic and Monetary Union. This was exacerbated by the fact, that European banks were the most international compared to their Asian and American peers before the crisis, with an emphasis on regional European business (Schoenmaker 2013). The foundation of the euro took away the function of lender of last resort from the national level. While monetary policy was transferred to the newly created European Central Bank (ECB), it did not receive a clear financial stability mandate like most other central banks. It was prohibited from engaging in monetary financing of sovereign debt and was not authorised to act as a lender of last resort providing emergency liquidity to banks. Furthermore, the strong interdependence of banks and sovereigns in many European states increased the fragility of financial stability because adverse shocks to bank solvency tend to interact perversely with adverse shocks to sovereign solvency and vice versa (Bini Smaghi 2013; Gros 2013).

The "impossible trinity" of an absence of co-responsibility over public debt, the lack of monetary financing, and bank-sovereign interdependence made financial stability particularly fragile in the Eurozone (Pisani-Ferry 2012). Combined with a lack of a common European backstop for banks and increased financial integration this made the financial trilemma especially acute within the EU (Schoenmaker 2013).

This exacerbated issues of collective action. Information sharing and cooperation were even more urgent considering the high level of interconnection among European banks, but incentives for it were low due to the public goods dynamics discussed above. As a result, the vulnerability to complicated cross-border bank failures was high in the EU and particularly in the eurozone.

Furthermore, state aid in form of bailouts or guarantees could more easily lead to fiscal crises than in other contexts. The no bailout clause and the ban of monetary financing for states would occasion the high costs of bailouts to be felt far more quickly and endanger the fiscal stability of individually affected member states and thus the stability of the euro as a whole. The leeway of states, and especially of smaller and already fiscally strained states, to bailout banks without engendering a fiscal crisis was more limited than elsewhere.

5.6 Banking resolution in the EU before the crisis: a regulatory collage and national control over resolution and insolvency

The rise of international banking and the introduction of the euro clearly created incentives for more cooperation in resolution to safeguard financial stability (see 4.2.1). Yet, approaches to banking resolution remained largely national within the EU. As was the case with banking supervision, most countries maintained their own rules and procedures to banking resolution and deposit insurance in a quest to further the interest of their own industries. This came at the expense of overall financial stability, in line with the incentives resulting from the public goods nature of that good. Some even relied exclusively on the same insolvency law which is applied to non-financial companies. Altogether, there were substantial and procedural differences between the laws, regulations and administrative provisions which govern the insolvency of institutions in EU member states (BRRD recital 4).

These different approaches meant that national authorities did not have the same level of control or the same ability to resolve institutions. This would make cross-border resolutions particularly complicated. Furthermore, the differences in resolution regimes had effects on banks' funding costs and subsequently created competitive distortions between financial institutions in different member states. This, in turn, would set incentives to adopt bank friendly ways to deal with non-viable banks, which were not always conducive to European financial stability (BRRD recital 9).

Exceptions to these national approaches were a 1994 EU directive on Deposit Guarantee Schemes (DGSs) (94/19/EC) and a 2001 directive on the reorganisation and winding up of credit institutions (2001/24/EC), which took more than 10 years to negotiate (Quaglia and Spendzharova 2017: 1119). However, the former left almost all modalities of deposit insurance at the discretion of member states, while the latter was mostly limited to assigning jurisdiction to individual national authorities in the case of a non-viable cross-border bank. In practice, there were not only many different public deposit insurance schemes, but some countries like Germany, Austria, Italy and Spain also featured mutual support arrangements among groups of banks. In Germany those were the institutional protection schemes (IPSs) of savings banks (the Sparkassen) and cooperative banks or voluntary ("top -up") deposit insurance operated by the German private bank association (BDB). They provided additional protection to those banks, which did not exist in most other EU member states (Gelpern and Veron 2019). Altogether, some countries provided better deposit insurance coverage than others.

State aid to banks, such as public bailouts and guarantees, was regulated by EU legislation. Article 107(3)(b) TFEU, stipulates that it is only permissible "to promote the execution of an important project of common European interest or to remedy a serious disturbance in the economy of a Member State". Thus, state aid could be justified as long as the Commission concurred with the idea that there was a crisis situation. The first landmark case of state aid control in the banking sector was the Commission's actions in the late 1990s and early 2000s, following complaints by the Association of German Private Banks and the European Banking Federation, which led to the abolition by the German government of pervasive explicit government guarantees on publicly owned regional banks known as Landesbanken (Moser, Pesaresi and Soukup 2002). However, there were no laws or mechanisms stipulating the coordination of state aid to banks among member states.

At the same time, member states pledged cooperation and information sharing within the Committee of European Banking Supervisors (CEBS), and Memoranda of Understanding between national supervisors were drawn up, that also covered cooperation in crisis management (ECB 2003, ECB 2005, Howard and Quaglia 2016a: 28). However, neither binding regulations were put in place, nor an institution or mechanism to enforce cooperation. Crisis management was therefore left at the discretion of national authorities (Kudrna 2012). Altogether, pre-crisis development of national regimes for non-viable banks in EU member states followed many diverse paths. This was also the case with insolvency regimes, which differed from country to country, further complicating the resolution of international banks (Gelpern and Veron 2019).

While there were incentives, especially for banks in closer European-wide cooperation (see 4.1.1.), states shied away from this, as was the case with more unified supervision. In fact, there was no pressure to act, as the banking systems in the EU seemed stable and there were no indications that this would change. Besides, just like with banking supervision, there were doubts that a one fits all approach would account for the heterogeneity of national banking systems (Veron 2013). Some stressed the value of national flexibility and regulatory competition between countries for achieving economic efficiency, making a single supervisor undesirable (Lanoo 2002). Banking nationalism conditioned by the public goods features of financial stability and banking resolution proved to be too strong to allow the creation of a more pooled European banking resolution scheme.

As a result, European banking resolution was as weak institutionally as European banking supervision before the crisis (see section 4.2.3). Just like in the latter, there was neither a forum,

nor a pooling of member state voices to enable enforcement of a common course of action at all in banking resolution. Therefore, an effective enforcement of rules was not possible in banking resolution on the European level.

This weak institutional setup could not establish excludability and alleviate the incentives for short-term and long-term freeriding stemming from the public good features of European banking resolution and financial stability. Especially in a crisis situation, this made direly needed cooperation among different national authorities responsible for resolution very unlikely.

Until the financial crisis, this did not have any negative effects, but unbridled incentives for banking nationalism led to a wave of mergers and acquisitions, leading to ever larger cross-border banking groups and national champions (see chapter 4.2.4). This had the potential to pose serious problems for financial stability during a crisis due to a large number of institutions that had become too-big-to fail.

5.7 Banking resolution during the crisis

5.7.1 The financial crisis – ad hoc and costly national bailouts

It was arguably the lack of effective international cooperation in banking resolution that allowed the financial crisis to become so destructive and global. This is best demonstrated by the failure of Lehmann brothers, which sparked off the global crisis. The US Federal Reserve (Lehman's home country authority) only provided assistance for the resolution (bridge financing and merger with Barclays Capital) of the US arm of Lehman Brothers, but not for the foreign subsidiaries of the bank in 49 other countries. Those were sometimes too big to be bailed out by host country governments, leading to their crash and subsequently to devastating contagion around the globe (Schoenmaker 2013: 72-76). Thus, the US was freeriding on financial stability, by not contributing enough to international financial stability since they did not bailout Lehman's foreign subsidiaries or branches.

Unaddressed collective action problems stemming from the public good nature of financial stability and banking resolution turned out to be particularly harmful for crisis management within the eurozone. It proved fatal that no institutional structures had been built to prevent freeriding banking nationalism during the crisis. Despite the large amount of cross-border banking, European

banking systems ended up fighting the financial crisis largely on national terms, contributing to the exacerbation and protraction of the crisis and its spill over into sovereign finances (Grossman and Woll 2014; Woll 2014). As a result, In the EU, and particularly in the eurozone, the crisis lasted much longer than elsewhere and turned into a sovereign debt crisis in the eurozone.

Despite a show of unity at the Paris conferences among eurozone leaders in October 2008, there was no agreement on concrete cooperation in solving the crises of international banks in the EU. While the Dutch with support of the French as well as representatives of large European banks proposed a European bank rescue fund (bailout fund), the Germans, their supporters and the ECB had nothing of it. German taxpayers did not want to pay for other countries' bailouts (Tooze 2018: 190-191). So, no cooperation in resolution was agreed on. On the contrary, with support of the Commission the choice was explicitly made to keep bank crisis management at the national level and not seek an integrated approach at the European level (Bastasin 2015). This largely reflects the incentive structures of the public good financial stability, which favoured freeriding of the bigger players who did not want to be made liable for others' losses, even if it eventually came at the cost of overall financial stability.

Furthermore, in the crisis conditions of capital scarcity, some member states tried to leverage banking legislation to their own advantage, thus endangering financial stability. The Irish introduction of unlimited deposit insurance without coordinating with other EU Member States threatened capital flight out of other countries into Ireland and major financial disruption until first Germany and then other countries followed suit and provided greater deposit guarantees (Donnelly 2016: 12).

The consequence was a series of costly and largely uncoordinated national rescue operations with generous use of public money. A case in point is the rescue and dismemberment of the internationally exposed Belgian bank Fortis. While its main operations were located in Belgium, Luxemburg and the Netherlands, the three national supervisors barely cooperated in its resolution, following different resolution paths. First, they effected costly separate recapitalisations of their branches of the bank. When this proved insufficient to re-establish trust and save the bank, the Dutch part was bailed out and nationalised, while the Belgian authorities sold the bank's business in their jurisdiction to BNP Paribas. This lack of cooperation in resolution increased the cost of the rescue operation significantly and intensified uncertainty about large cross-border banks in Europe (Schoenmaker 2013: 79-81; Kudrna 2012).

Altogether, the lack of information sharing, and cooperation led to much more costly bailouts. As could be expected on the basis of public goods theory, states mostly concentrated on bailing out banks within their jurisdiction while not supporting other states in bailing out branches or subsidiaries of their banks abroad. This freeriding behaviour ended up making bank rescue operations far more expensive than they could have been under cooperation.

Massive state intervention led to rising sovereign debt and an increasing entanglement of sovereign finances with bank finances. This proved particularly delicate in the eurozone periphery, where countries had either been already heavily indebted (Greece, Italy, Portugal) or where an inflated and crisis-ridden banking sector had become too large for the sovereign to shoulder (Ireland, Spain).

5.7.2 European banking resolution 2008 – 2011: uncoordinated national reforms

First, reforms were concentrated on national resolution regimes, as the existing legal basis for the orderly recovery or resolution of distressed systemically important banks was seen as insufficient in affected EU member states.

The UK Banking Act of 2009 and the German Bank Restructuring Act of December 2010 are among the most prominent of those. They introduced special resolution regimes in those countries with clear frameworks for crisis management and outlined the use of different resolution tools. But while these reforms were far-reaching and ground-breaking in introducing new resolution tools such as bail-ins, they were limited to national jurisdictions.

On the EU level, no further coordination of national resolution schemes was agreed on (Quaglia and Spendzharova 2017). Ostensibly, states were not ready to give up their national prerogative on banking resolution. This suggests that they regarded continued freeriding through banking nationalism more in their interest than effective cooperation on resolution.

Nevertheless, initiatives for harmonisation of different national approaches came from the EU institutions. Inspired by the UK Banking Act of the same year, the European Commission released the Communication of October 2009 (COM(2009) 561). It suggested a harmonised set of resolution tools for all member states oriented towards the British example, the need for ex-ante resolution plans drawn up by banks, and even considered the creation of an integrated resolution regime and potentially a European resolution authority as a last step (European Union 2009). In

May 2010, the Commission recommended the establishment of national bank resolution funds (COM(2010) 254), and in October 2010, it outlined a framework of harmonised resolution powers and tools at the national level (COM(2010) 579) (European Union 2010a, b).

Also, as depicted in chapter 4, stronger cooperation and information exchange of national supervisors was institutionally embedded in the ESAs, including the European Banking Authority. It plays a coordinating role on banking regulatory matters in the EU and EEA, including resolution matters. Due to member state opposition, however, these institutions were not given powers over national regulators and supervisors and a mandate for direct banking supervision and resolution. The public goods features of financial stability during crises thus enticed national supervisors to continue to forbear and withhold information from other supervisors in other national jurisdictions within the single market and continue to try and favour "their" banks. This in turn also undermined attempts for coordinated banking resolution.

Altogether, such incremental reform steps were unable to mitigate the public goods problems that the CEBS had proven unable to get under control. As member states remained largely in control over banking resolution, an effective exclusion of free-riders engaging in banking nationalism remained impossible.

5.7.3 The persistence of banking nationalism: freeriding through national bailouts and exacerbation of the sovereign-bank doom loop

Member states continued to bailout unviable banks just to keep them domestic and engaged in supervisory forbearance while crisis management was not much coordinated and mostly ad hoc. This drove up costs and exacerbated emerging sovereign debt problems.

At least in the first four years of the crisis, EU governments have taken on the enormous fiscal burden of bailing out their own banks, even if restructuring would arguably have been the more effective resolution tool with respect to financial stability in many cases (see 4.3.3.1). By saving creditors and investors, states wanted to support "their" banks in the competition for the CPRs demand and supply of capital. Similarly, they wanted to prevent foreign acquisitions of struggling domestic banks. Altogether, such bailouts motivated by banking nationalism imposed enormous burdens on sovereign finances, while at least some of the ailing banks could have been wound down or sold to foreign interests at a much lower cost to taxpayers, states' fiscal positions and the

common currency's credibility and therefore financial stability (e.g. see Sandbu 2015). Thus, states preferred to freeride on financial stability and fiscal stability during the crisis to prop up their own banks by using the "wrong" resolution tools.

This also decreased the excludability of long-term freeriding. Evidence from the US suggests that large banks receiving bailouts increased their loan risk, apparently due to enhanced moral hazard incentives (Black and Hazelwood 2013; Duchin and Sosyura 2014). Banks which had failed and became unviable were still supported by state money, often keeping their management in place. This did also not create incentives to clean up and stabilise these institutions from the inside. The persistence of zombie banks posed a great obstacle to the recovery of financial stability and economic growth with the accrual of non-performing loans (Lehmann 2021).

As already demonstrated in section 4.3.3.2, in many EU member states (at least those which are home to significant banking groups' headquarters), national supervisory authorities were aware of banks' problems and chose not to disclose them to EU institutions or the public and avoid resolution, even though that would have been better from a financial stability perspective. As outlined in 5.4.2, the public good character of financial stability in a setting of national resolution authorities combined with member states' competition for the CPR capital sets incentives against cooperation. This lack of crisis communication and cooperation led supervisors to act only in the last moment, when it became unmistakably clear that a bank could only be saved by a massive bailout. By this time, resolution costs had increased significantly, making it much more costly than an early solution led by effective communication and coordination, just as predicted in the theoretical part of this chapter.

There is evidence, that member states discouraged external acquisitions of banks, even if this would have been in the interest of financial stability in the EU (see section 4.3.3.4). This also meant that the transfer of business as important and low-cost resolution tool was compromised significantly as its use in a cross-border setting was discouraged by national authorities. The alternative solution were all too often national bailouts (Veron 2013). This contributed to the entrenchment of the sovereign-bank nexus.

Furthermore, as depicted in 4.3.3.6, the motivation of creditor states' bailouts of debtor states was partly motivated by banking nationalism. Creditor states did not restructure periphery states' debt in order to spare their banks which were heavily invested there. This took away the liability of their banks for their investments and set moral hazard incentives of long-term freeriding.

Altogether, national reforms of resolution schemes did not lead to sufficient communication and cooperation in banking resolution. So, member states continued to freeride on financial stability by lenient and ineffective supervision and by choosing the wrong and more costly resolution tools. They usually chose financial assistance in form of state aid over creditor financed restructurings. This further strained financial stability and led to an expanding public debt and the intensification of the sovereign-bank doom loop.

5.8 Introduction of the banking union and the Bank Recovery and Resolution Directive (BRRD)

5.8.1 Incentive structures informing the institutional design of the new banking resolution regime

5.8.1.1 Intensification of the crisis

Such practices of banking nationalism played an important role in deteriorating the sovereign debt crisis (see 4.4.1 for a more thorough depiction) and fuelling the sovereign-debt doom loop. By the time of the Spanish debt crisis, which clearly originated in the country's banking system and threatened the survival of the euro, policy makers became aware of the devastating dynamics of the sovereign-debt doom loop.

As explained in section 4.4.2.1, this acute crisis situation increased the costs of continued low-level cooperation and freeriding dramatically, while the prospective immediate benefits of closer integration increased significantly resulting in stronger centripetal effects. Thus, incentives for radical reform emerged to overcome the public good incentives for banking nationalism by a new supranational institutional architecture in banking policy.

5.8.1.2 Proposal of banking union and centralised European resolution

On 26 June 2012 the European Council President Herman van Rompuy proposed the creation of a common financial supervisor, a common bank resolution scheme and a deposit guarantee fund.

A few days later, the heads of state and government of EU member states agreed on a plan to create a banking union. For them, this included primarily the introduction of the common ECB supervisor under whose auspices resolution was intended to be done by a mix of direct national and ESM recapitalisations. This was flanked by the proposal of the Bank Recovery and Resolution Directive (BRRD), based on the "Key Attributes of Effective Resolution Regimes for Financial Institutions" by the FSB (FSB 2011). It envisioned harmonised resolution rules and bail-ins from 2018 onwards to assert market discipline (Veron 2019).

But in September 2012, Germany, the Netherlands and Finland backtracked from this original plan and stipulated that member states should take care of legacy issues[24] from the crisis themselves, while only problems that appeared under the new ECB supervision would be handled by the ESM (Veron 2019).[25] This contradicted the initial aim of breaking the vicious circle between banks and sovereigns, as it left member states deal with their legacy issues individually instead of offering a supranational solution.

Banking nationalism conditioned by the public good character of financial stability in the EU, had become salient again, after it had briefly been overshadowed by the urgency of the crisis situation. After Mario Draghi's announcement on 26 July that the ECB would "do whatever it takes to preserve the Euro" the markets had calmed considerably, making far reaching reforms less pressing.

5.8.1.3 Introduction of the new European resolution regime: BRRD, SRB, SRF

While the SSM regulation was introduced in 2013, the negotiations over introducing a Single Resolution Mechanism (SRM) centred around a supranational Single Resolution Board (SRB) and equipped with a Single Resolution Fund (SRF) turned out to be more complicated. It became clear that resolution and the issues of who would pay for failing banks touched even more upon member

[24] Legacy issues is what the Germans termed non-performing loans stemming from the banking crisis in EU countries.

[25] The 'Helsinki declaration' of the three ministers is available at https://vm.fi/en/article/-/asset_publisher/joint-statement-of-the-ministers-of- finance-of-germany-the-netherlands-and-finland. For good measure, the same statement added that "direct bank recapitalisation by the ESM should take place based on an approach that adheres to the basic order of first using private capital, then national public capital and only as a last resort the ESM", implying that even in the future, ESM direct recapitalisation would not be aimed at breaking the bank-sovereign vicious circle. The decision was eventually made in 2018 to terminate the ESM direct recapitalisation capability when the ESM's backstop to the Single Resolution Fund is in place. The need for ESM direct recapitalisation of problem banks may be considered again in the future, however, either proactively or under duress in a crisis scenario (Veron 2019).

states' essential interests than supervision, making it more contentious (Donnelly 2014). Negotiating positions were mainly informed by the health of national banking systems, while for specifying the details of the new banking resolution system, banking system structure was also determining. On the main issues, this pitted states with healthy banking systems which rejected redistribution and supranationalisation due to moral hazard concerns against those with legacy issues which were in favour (Howarth and Quaglia 2016). This distribution roughly corresponds to the division between creditor and debtor states present in fiscal policy. This was no coincidence. The sovereign-bank doom-loop fuelled by banking nationalism as a result of the public good character of financial stability in the EU let financially weak states and banks pull each other down.

The Commission with support of the ECB and debtor states under the leadership of France proposed a system with centralised decision making around the Commission and a mutualised bank financed fund. Germany's finance minister on the other hand, proposed a resolution scheme based on coordination of harmonised national resolution authorities and funds, rather than a supranational pooling of authority and resolution funds (Schäuble 2013). This would have been a solution unable to break the sovereign-bank nexus and establish sufficient excludability of freeriding.

Eventually a compromise solution was reached. The SRM was established including the SRB and SRF. The SRB was given roughly the same remit as the ECB single supervisor. It was made responsible for the preparation of resolution plans and the decision on resolution schemes which could be vetoed by the Commission within a short timeframe. The Council could confirm or reject some of those vetoes which were directed against the use of the SRF or which denied public interest (see details in chapter 5.8.3.). Furthermore, Germany as the biggest contributor to the SRF and the ESM asserted against debtor states that the use of mutualised funds would be a last resort option and that the financial industry and private investors should foot the bill first (Veron 2019). Thus, a compulsory bail-in of 8 percent before the deployment of any common EU-wide funds as part of the BRRD was to be introduced from 2016 onwards.

The topic of bail-ins prompted different national positions on creditor rankings, i.e. which private investors should be bailed in first and how much. Creditor states like Germany, Finland, the Netherlands and Denmark were in favour of strict hierarchies, while a group of states under the leadership of France preferred more national flexibility, so that the Council could not agree on a common standard (European Council 2013). Eventually a relatively flexible format was agreed on according to which shareholders suffer losses first, followed by unsecured creditors, while covered

deposits were left with the highest level of protection (Donnelly 2016: 18; Howarth and Quaglia 2016: 120-121).

Another point of contention pitting creditor against debtor states was the composition of the SRF. While Germany and her allies, concerned about moral hazard, pleaded for as little pooling of funds and common liability as possible, France and countries in the eurozone periphery pushed for a mutualised resolution fund. The end result was yet again a compromise, whereby the fund was codified by international agreement and composed of initially separate national compartments which would be mutualised until 2024. This reflected Germany's concern about first solving legacy issues before mutualising liability and keeping redistributive elements under intergovernmental control (Howarth and Quaglia 2016: 126).

For similar reasons, the introduction of a supranational deposit insurance scheme with pooled deposit insurance funds and common liability was blocked by the Germans, Dutch and Finish (Tümmler and Thiemann 2020; Donnelly 2016). A Deposit Guarantee Scheme Directive (DGSD) was introduced in 2014, which stipulated the harmonisation of national Deposit Guarantee Schemes, while bracketing out the question of pooling of funds and suprantionalisation of control. This idea, encapsulated in the Commission's EDIS proposal was shelved for the time being. As the crisis in Cyprus demonstrated, creditor states were ready to force states to close down their banks and bail-in depositors (Donnelly 2016: 15). For this to be possible, intergovernmental control over deposit insurance was necessary, as this allowed creditor states to determine conditions for redistribution.

Altogether three legislative acts realigning the handling of non-viable banks in the eurozone were enacted in short succession in 2014. The third EU Deposit Guarantee Scheme Directive (DGSD, 2014/49/EU), The Bank Recovery and Resolution Directive (BRRD, 2014/59/EU), and the SRM Regulation (or SRMR, (EU) 806/2014) including the SRF and the SRB, enacted in April, May, and July 2014 respectively. The following sections will deal with them individually and evaluate how much they were able to alleviate incentives for freeriding rooted in the public good character of financial stability. Additionally, sections on a fiscal backstop, central bank liquidity assistance, state aid and insolvency regimes will complete this analysis of the reformed EU banking resolution regime.

5.8.2 The BRRD: progress towards a harmonised regulatory basis for banking resolution in Europe

Specification and harmonisation of resolution schemes

The BRRD (European Union 2014a) provided the legislative backbone of the new resolution regime as part of the Single Rulebook. It applies not only to banks and financial holding companies in the eurozone but to all EU and EEA countries. It stipulates that every participating state must have their own specialised resolution authorities, which should draw up resolution plans for their biggest banks or banking groups. Every signatory member state must also install a resolution fund financed by the national banking industry to recapitalise or bail out banks if necessary. All financial institutions of a country have to contribute to these funds. Contributions are calculated on the basis of the institution's size and risk profile (European Commission 2022).

The BRRD also introduced clear criteria and processes under which a supervisory or resolution authority could declare banks "failing or likely to fail" (FOLTF) (Article 32(1)).[26] Furthermore, it proscribed the criteria and process under which resolution authorities may place a FOLTF bank under resolution. Most prominently, this included the "public interest" condition, stipulating that a bank should only be resolved if it is in the interest of the public to do so. As public interest one or more of the following objectives were explicitly mentioned in the BRRD: maintaining financial stability, protecting covered depositors and safeguarding public funds by minimising reliance on extraordinary public financial support (Single Resolution Board 2022)[27]. In case a resolution is not in the public interest, a bank should be liquidated according to conventional bankruptcy law (BRRD Recital 45). In case of a decision in favour of resolution, a resolution scheme should be chosen by the relevant resolution authority which makes "no creditor worse off" than they would have been in case of a national standard insolvency proceeding without state aid.

Better coordination of cross-border resolutions

Furthermore, "resolution authorities should be required to consult each other and cooperate in resolution colleges when resolving group entities with a view to agreeing a group resolution scheme" (BRRD Recital 96). "The production of a group resolution scheme should facilitate

[26] A bank is FOLTF if any of the four following conditions: If it infringes conditions for authorisation, if liabilities exceed assets, if it is unable to pay debt or liabilities, if it needs extraordinary public financial support.
[27] More details can be found here: https://www.srb.europa.eu/en/content/public-interest-assessment-0

coordinated resolution that is more likely to deliver the best result for all institutions of a group" (BRRD Recital 99). To facilitate cooperation with third country institutions (outside the EU and EEA) the European Banking Authority (EBA) is empowered to develop and enter into framework non-binding cooperation arrangements with authorities of third countries, based on common principles and approaches that are being developed by the Financial Stability Board (FSB) and the G20 (BRRD Recital 101).[28]

Resolution tools: creditor financed bank restructuring

Arguably the most revolutionary part of the BRRD was the 8 percent bail-in provision. It stipulated that 8 percent of a bank's own funds and "eligible" liabilities (under criteria detailed by the BRRD[29]) should be bailed-in first, as long as this does not endanger financial stability. Only if this would not be sufficient for successful resolution, money of resolution funds could be mobilised for support, while the injection of public money should be only the last resort (as long as compliant with relevant state aid provisions) (BRRD Article 55). For this to work without endangering financial stability, resolution authorities were to set minimum requirements for own funds and eligible liabilities (MREL) for banks to make the bail-in condition more credible and operable in case of resolution (BRRD Recital 80).

The idea to make a partial bail-in compulsory before any public money could be spent on bailouts was supposed to break the sovereign-bank doom loop and to counter moral hazard incentives for banks.

Other restructuring tools stipulated in the BRRD include the sale of business or shares of the institution under resolution (without the consent of shareholders), the setting up of a bridge institution, and the separation of the performing assets from the impaired or under-performing assets of the failing institution (BRRD Recital 59). All these (including bail-in) can involve the

[28] The EBA plays a coordinating role on banking regulatory matters in the EU/EEA, including the regime for non-viable banks. It has no direct authority on individual resolution cases, however, except in highly restrictive conditions of crisis that have never been activated as of April 2022.

[29] Shareholders would suffer the first losses, followed by unsecured creditors. Secured, collateralised or otherwise guaranteed claims, protected deposits as well as certain types of unsecured liabilities were excluded from bail-ins (BRRD Recital 70-73). NRAs were granted considerable flexibility, notably the power to exclude liabilities on a discretionary basis for one of four reasons: if they could not be bailed-in within reasonable time; to ensure continuity of critical functions; to avoid contagion; to avoid value destruction that would raise losses borne by other creditors (Howarth and Quaglia 2016: 121).

exchange of management of a failing institution. Thus, the focus of the BRRD's resolution regime lied on creditor financed bank restructuring and on avoiding public bailouts.

5.8.2.1 The BRRD's potential to help turning banking resolution into an excludable network good and financial stability into a club good

Excluding short-term freeriding on financial stability by banks: More predictability and less time of uncertainty

The prescription that all states in the remit of the BRRD introduce dedicated resolution authorities and resolution funds certainly was a progress towards more harmonisation and towards better resolution practices. Especially considering that some states only used standard bankruptcy proceedings before or did not have modern resolution authorities or resolution funds (Gelpern and Veron 2019).

All this increased predictability both for banks and public authorities through better planned, more rule based and streamlined resolution processes. Resolution authorities preparing resolution plans together with banks would provide them with a set of thought-out options of action to take for different eventualities in case a bank would have difficulties servicing its liabilities. Similarly, banks would be able to prepare what to do in case of difficulties according to resolution plans. Of course, a crisis situation can always hold surprises. But generally, the BRRD prescriptions would increase predictability, and likely reduce the time of uncertainty of taking a decision on resolution and choosing a resolution scheme for a bank.

If implemented, this would reduce the incentives for panic selling across all EU and EEA countries. Investors in troubled banks would therefore have less incentives to short-term freeride on financial stability in their competition for the common pool resource of capital. This was due to the prospect of a resolution which would potentially be less harmful to them instead of liquidation.

Excluding short-term freeriding by states on financial stability: more coordination through harmonisation and resolution colleges

The foundation of resolution authorities and resolution funds according to minimum harmonised standards in all EU states certainly facilitated coordination of the resolution of large international banks compared to the pre-BRRD situation. The same applies to the gradual harmonisation of

resolution rules as prescribed in the BRRD. It decreases the degree of divergence in national resolution legislations which should provide better conditions for successful cooperation and decrease the scope for coordination failures, following Schoenmaker's (2013: 69-70) logic. The harmonisation of rules through the BRRD therefore has the potential to decrease the propensity of states (through their national resolution authorities (NRAs)) to freeride on financial stability or on resolution efforts of others advertently or inadvertently. For example, the common criteria for FOLTF have the potential to make the point of when a resolution or bankruptcy decision will be taken more uniform across the EU. As long as NRAs stick to the rules, premature action or forbearing thus becomes less likely.

The creation of resolution colleges and drawing up of common resolution plans for cross-border banks has the potential to further improve coordination in resolution. This would prevent national resolution authorities from freeriding on short-term financial stability and forestall banking nationalism.

Excluding freeriding by states on financial stability and breaking the vicious circle: the "public interest" and "no-creditor-worse-off" conditions

The public interest condition is another important stipulation of the BRRD with potentially positive effects for short-term financial stability. It allows resolution only if in the "public interest", i.e. if necessary from a financial stability point of view (and to save depositors), otherwise a bank should be wound down according to standard national bankruptcy proceedings. This can help to spare resources of resolution authorities, and potentially of resolution funds and state aid. This can work against the sovereign-bank doom loop and can help that scarce resources are available for those banks that really need to be resolved to save financial stability in a larger crisis situation.

The public interest provision can also exclude other motivations for resolution such as those stemming from banking nationalism which constitute freeriding on financial stability by states. For example, the public interest clause would prevent immediate costly bailouts just to keep domestic banks domestic or bailouts of smaller banks without systemic significance but with the potential to accumulate burdens on state budgets.

The stipulation that resolution make "no creditor worse off" compared to standard bankruptcy proceedings, can work as a guarantee that the least costly option is taken to deal with a failing bank. This again is to preclude resolutions or recoveries of banks which would better be wound

up, but where states have an interest to perpetuate them for example due to nationalist considerations. Thus, it is another important rule to preclude freeriding of states on financial stability both short-term and especially long-term through the creation of zombie banks.

Excluding freeriding on financial stability and breaking the vicious circle: bail-ins

The need for bail-ins before any form of bailout (resolution fund or state aid) across all member states of the EU and EEA is perhaps the most important rule of the BRRD. Its main goal is to break the vicious circle between banks and sovereigns by making private investors liable instead of burdening state budgets with the costs of bank failures.

In the same vein, the bail-in provision can avert short-term freeriding by states who want to support "their" banks and increase their competitiveness and access to capital without regard to financial stability in a crisis situation. This includes different variants of banking nationalism such as costly bailouts to keep national champions running, or the preclusion by states of foreign acquisitions of struggling national banks through bailouts which tend to be much more damaging for financial stability than mergers or acquisitions.

At the same time, the bail-in provision has the potential to be a strong means against moral hazard, i.e. long-term freeriding by banks and other investors. As long as banks put aside enough MREL, the bail-in tool should not pose a threat to financial stability. As banks are legally excluded from bailouts without previous bail-in, the provision of MREL can be an effective practical instrument against banks gaining the status of too-big-to-fail as it can enable the exclusion of big banks from bailout funds without endangering financial stability. This would essentially assert that bailouts do not turn into CPRs for large banks, enabling them to freeride on financial stability. For the bail-in clause to successfully raise excludability, however, it needs to be ensured that large banks do put aside enough MREL.

Excluding freeriding by banks and states on banking resolution: preventing regulatory arbitrage and regulatory competition

Harmonisation of legislation through the BRRD can also reduce the possibility of banks for long-term freeriding by regulatory arbitrage. The more harmonised the rules in Europe become, the less a bank would gain from relocating to the member state with the most favourable resolution regime. This in turn would decrease the incentives for member states to build more competitive resolution

regimes not with the goal of European financial stability but to support both their own banks (banking nationalism) and to attract foreign banks in a competition for the common pool resource of capital.

Creating network effects: attraction of outside states and banks

If the BRRD were uniformly applied, regulatory arbitrage would only be really possible with relation to states outside the EU and the EEA. But as a uniform regulatory approach to resolution in such a large collection of important states as in the EU and the EEA, the BRRD has the potential to create a lot of credibility and economies of scale, and it is more likely that outside banks will choose to migrate inside the EU/EEA, rather than European banks moving outside. The fact that an increasing number of BRRD signatories also increases its attractiveness suggest that it has the potential to help turning banking resolution in Europe into a network good. Together with the increased excludability that harmonisation provides, this could help turning banking resolution in Europe into an excludable network good.

5.8.2.2 The BRRD's shortcomings: limited harmonisation and remit, weak institutions

Incomplete harmonisation

Altogether, harmonisation of resolution schemes has proven to be a drawn-out and so far incomplete process. The BRRD is a directive, leaving considerable room for national jurisdictions to interpret the rules. The coordination of harmonisation has been driven by the EBA which was to develop regulatory technical standards to spell out in more detail the provisions of the BRRD. Nevertheless, the EBA's specifications often still allowed for leeway of national legislators, also because technical standards could still be amended by the Commission which was more amenable to member state rather than banking industry influence (See 4.3.2.2). Thus, EU regulators' rule-making competences were limited at the domestic level, which significantly constrained their ability to achieve regulatory coherence across member states (Quaglia and Spendzharova 2018).

The example of different national rules concerning MREL demonstrates this. The BRRD legislation did not prescribe a minimum level of MREL. The EBA's regulatory technical standards of July 2015 specified a minimum of 8 percent MREL of total liabilities for large global systemically important (G-SIB) banks. Those where however amended by the Commission,

reportedly under pressure of some national governments and banking industries, mainly those of Italy, France and Portugal (Finance Watch 2016).

Subsequently, Germany, France, Italy and the UK, for example, adopted different rules on creditor hierarchies and debt subordination. Their legislation aimed at reducing the costs for domestic banks by adjusting EU legislation to national demands. This nationalism in MREL specifications created discrepancies across jurisdictions which would make bail-ins of cross-border banks extremely cumbersome in practice (Quaglia and Spendzharova 2018). Hence, by tailoring MREL legislation according to their interests, states were freeriding on financial stability. Moreover, this undermined the single market and created competitive distortions, setting incentives for regulatory arbitrage, which was also criticised by the ECB (Asmussen 2013).

Altogether, the provision of MREL has been very uneven across different states and banks. Especially in those countries badly affected by the crisis such as Italy and Greece, banks were already struggling to adjust to the new capital rules of the CRD IV and CRR and resolve legacy issues. For such banks, it has been particularly tough to acquire expensive subordinated debt and source sufficient MREL. This especially applies to middle-sized banks which mainly rely on depositor funding. For them it is particularly hard to raise subordinated debt to prices they can shoulder (Garicano 2020; Restoy 2018). Consequently, many European banks do not have sufficient subordinated MREL claims, with the result that the 8 percent bail-in rule can often not be implemented without risking financial instability (Dewratipont et al. 2021). With respect to such banks, bailouts are likely to be still necessary to safeguard financial stability during a crisis.

Loopholes of the BRRD

While such cases of limited harmonisation were due to incomplete specification of the BRRD, some banks were simply left outside its remit. The BRRD did not apply to banks that participate in mutual support arrangements such as IPSs. Those were exempted mainly on the initiative of Germany and Italy. This allowed a continuation of privileged treatment of such banks and therefore their and their states freeriding on financial stability (Gelpern and Veron 2019). Thus, a major bastion of banking nationalism was left untouched by the BRRD. The scale of this problem is demonstrated by the fact, that just in Germany banks holding around 30 percent market share of all German banking business fall under mutual support arrangements such as IPSs (Schäfer 2016).

Another loophole left by the BRRD makes the employment of state aid by member states possible (see section 5.8.7). In fact, in numerous national resolution cases and several resolution cases of the SRB, such as those of Banca Popolare di Vicenza and Veneto Banca (known as the "Veneto banks"), state aid was employed after a negative PIA, while the bail-in clause was circumvented.

Thus, the BRRD so far did not manage to establish a coherent and effective legislative basis for resolution in the EU. It left loopholes to bypass it and harmonisation is still highly incomplete. The extent of these differences is compromising the excludability of financial stability and banking resolution for banks and states in the EU. At the same time, the incomplete level of harmonisation has limited the complementarity of consumption of European banking resolution, limiting network effects.

But, while the loopholes would require amendments to the BRRD, which have not taken place so far, harmonisation has been progressing steadily over the last years. Resolution regulation as part of the Single Rulebook has therefore great potential to progressively play a larger part in increasing excludability and network effects to turn banking resolution in the EU into more of an excludable network good.

Weak institutional strength of EBA and resolution colleges obstruct effective enforcement of BRRD

However, all these potential benefits crucially depend on states to actually implement and enforce the BRRD and make harmonisation happen in reality, not just on paper. Without a supranational European resolution authority similar to the ECB supervisor in the field of banking supervision, this is unlikely, as national authorities could not be easily excluded if they disobey or bend the rules. The EBA, which, apart from its legislative tasks, was also mandated to contribute to the consistent application of the new legislation, was not equipped with the necessary enforcement powers (see 4.3.2.1).

This is particularly true concerning measures designed to exclude short-term freeriding. Resolution colleges stipulated by the BRRD for resolution of cross-border banks in theory represent a means to prevent national resolution authorities from short-term freeriding on financial stability and to prohibit banking nationalism. However, decision making in resolution colleges was not pooled and remained with NRAs affected in a particular resolution case (BRRD Recital 98). As there are no provisions to compel national resolution authorities to agree to a group resolution scheme and

comply with it, NRAs will likely continue to pursue their own interest given the public good structure of (short-term) financial stability.

The same applies to the resolution of banks with branches or subsidiaries outside the EU. To facilitate cooperation with third country institutions (outside EU) the EBA is empowered to develop and enter into framework cooperation arrangements with authorities of third countries, based on common principles and approaches that are being developed by the Financial Stability Board (FSB) and the G20 (BRRD Recital 101). But such cooperation agreements are non-binding, so that those who do not follow them and who are therefore freeriding will not be excluded.

Thus, to really make a difference and significantly increase the excludability of banking resolution and financial stability, a central European authority would be necessary, able to enforce the creation and implementation of common resolution plans for cross-border banks.

A crucial criterion therefore, which will decide over success or failure of the BRRD, is the need for a supranational European authority to guarantee enforcement. Only this way freeriders on European banking resolution and financial stability could be excluded effectively and network effects could develop. Only this could turn European banking resolution into an excludable network good and financial stability in the EU into a club good.

5.8.3 The SRM Regulation: progress towards a strong single European resolution authority

The SRM regulation (SRMR) created the Single Resolution Board (SRB) figuring as central European resolution authority, independent of national authorities. It became operational in 2015-2016. Unlike the BRRD it is limited to banks within the eurozone. Under Article 7 of the SRM Regulation (European Union 2014b), the SRB is directly responsible for resolution planning and resolution decisions relating to all banks directly supervised by the ECB (i.e. significant institutions under the SSM Regulation), as well as to "other cross-border groups" as delineated in Article 3(24) of the Regulation. It should be assisted in doing so by the relevant national resolution authorities (NRAs). All other (usually smaller) banks in the eurozone are under the remit of national resolution authorities, with indirect oversight by the SRB. The SRB participates in resolution colleges and crisis management groups for banking groups which have operations in

both the euro area and other jurisdictions inside and outside the European Union, and in related coordination exercises or crisis simulations (Veron 2019).

The SRMR specifies the procedure of a resolution case within the SRB's remit. Under Article 18 (1) SRMR, the SRB can do inspections of banks within its remit and decide whether a bank is FOLTF – a right it shares with the ECB single supervisor, but which it has not exercised so far.

Once an SRB bank is declared FOLTF (either by the ECB or by the SRB), the SRB decides on whether to take resolution action following a public interest assessment (PIA) based on criteria determined in the BRRD and SRMR. If the failure of the institution endangers financial stability, interrupts the provision of critical functions, or affects the protection of depositors, it is in the public interest to take resolution action, as outlined in the above section on the BRRD (BRRD Recital 45). Otherwise, the institution will be liquidated under national insolvency proceedings. In case the PIA is positive the SRB decides on a specific resolution scheme, which, along with its PIA verdict can be challenged or modified by the European Commission before it can be implemented within 24 hours of the SRB's decision. In case the Commission rejects the PIA or the use of the SRF, the Council can either confirm or refuse this rejection within the same tight timeframe by a simple majority. In the latter case, the SRB can go ahead with its resolution scheme.

A resolution scheme will be executed by the relevant national resolution authority or authorities. The resolution of smaller banks which are not under the remit of the SRB remains the responsibility of relevant national resolution authorities, while the SRB still holds a coordinating function between different branches, subsidiaries and banks within the banking union area in case of a failing international bank.

5.8.3.1 The institutional setup of the SRB: relative strength

The internal decision-making process of the SRB is largely based on supranational majority decisions. It is located in the SRB's Executive Session composed of a chair, a vice-chair and four further full-time members of the Board, which should act independently and objectively in the interest of the union as a whole. The Council appoints the members of the SRB Executive Board after a proposal by the Commission which has to be approved by the Parliament (SRBR Recital 31). The executive session deliberates and decides on the resolution of banks or banking groups together with the representative or representatives of their member states resolution authorities (SRBR Recital 32). There are also permanent observers of the Commission and the ECB present

in all sessions. If no joint agreement by consensus can be reached on a particular resolution case, the chair and the four further full-time Board members take a decision by simple majority. The decision on resolution and choice of resolution scheme is therefore placed in supranational hands. In case of decisions involving the SRF, however, decision making is less centralised, requiring a two-thirds majority of the Board, which also includes representatives of all NRAs (Howarth and Quaglia 2016: 123). Internal Resolution Teams (IRTs) composed of SRB and NRA staff and coordinated by the Board's senior staff prepare the resolution schemes.

The execution of resolution schemes is done by national resolution authorities. If NRAs fail to comply with a decision of the SRB, the Board has the power to address executive orders directly to the troubled bank. The SRB therefore has a means of enforcement. However, due to the limited harmonisation and loopholes for state aid in the BRRD, this could lead to legal disputes during national implementation.

Altogether, the appointment of its staff as well as its composition make the SRB a relatively independent and supranational institution, comparable to the Supervisory Board of the ECB. Its decision making depends on majority decisions of its supranational members, except when the SRF is involved. On paper the SRB has the necessary powers to enforce its decisions on the national level, but the execution of resolution by NRAs and possible legal issues could undermine an effective enforcement. It might not always have the monitoring capacity to make sure its decisions are followed in detail. The SRB is however still a relatively young institutions which is still growing its staff base and is likely to improve its expertise and monitoring capacities.[30] Altogether, the SRB is a relatively strong institution with largely supranational decision making, precise instructions and considerable enforcement powers.

However, the SRB depends on the Commission and in some cases on the Council to send a bank into resolution and needs their approval for a chosen resolution plan. This decentralises the decision-making power of the SRB, with outside players having one additional veto in the decision-making on resolution of the eurozone's largest banks. Nevertheless, veto power is primarily in the hands of the supranational Commission, while the Council can only back or overturn the Commission's decision. It can only do so by a simple majority, which is hard to mobilise for one or a few member states with affected banks. Especially as they have less than 24 hours to do so and the Council lacks the structure to make such rapid decisions (Howarth and

[30] In April 2022 it comprised around 400 employees, while the target size is 450. (Source: SRB employee)

Quaglia 2016: 123). So, while the veto of the Commission does restrict the decision making power of the SRB, it does not add a strong intergovernmental element.

5.8.3.2 Impact of the SRM resolution on public good features of banking resolution and short-term financial stability

Turning banking resolution into an excludable network good and financial stability into a club good?

The SRB as largely supranational resolution authority for countries in the European banking union clearly had the potential to overcome the incentives for freeriding which had plagued national resolution authorities and create network effects by enforcing the BRRD and the SRMR, turning European banking resolution into an excludable network good. It could change European banking resolution from a patchwork of national resolution authorities to a hierarchical model, which would promise to address the collective action problems stemming from the public good problems of financial stability and of coordinated European banking resolution.

If it could manage to effectively transfer banking resolution from the national to the European level, the SRM could become the second big step (after supranational supervision) towards a significant alleviation of Schoenmaker's financial trilemma and Pisani-Ferry's impossible trinity. This is because it could potentially help transform short-term financial stability - and together with the SSM, long-term financial stability - in the eurozone from a public good to a club good by increasing excludability. And because it had the potential – together with the BRRD – to turn European banking resolution from a public good into something akin to an excludable network good through excludability of freeriding and by making it increasingly attractive with a rising number of participants.

Limitation of the SRB's scope

However, the limitation of the SRB's remit to large banks within the euro area limits its potential positive effects and the mere coordination function of the SRB in resolution colleges for failures of smaller international banks does not provide the necessary powers to really enforce solutions in the interest of European financial stability. But considering that those banks are not - at least

individually - decisive for systemic stability, this should not decisively limit the positive effect of the SRB on European financial stability.

Enforcement contested

However, if the SRB proves unable to enforce its resolution decisions on the national level and allows NRA forbearance, this could undermine the excludability of freeriding. Furthermore, legal uncertainty due to limited harmonisation of the BRRD on the national level could lead to legal uncertainty at the detriment of financial stability (Donnelly 2014b). The resolution of Banco Popular Español in 2017, the only SRB resolution executed so far, went ahead relatively smoothly and in line with the SRB's decision, however. Following a positive PIA by the SRB, the bank was sold to Banco Santander without state aid. However, the resolution did leave in its trail a number of lawsuits, which could increase legal uncertainty for future SRB resolutions (Mesnard et al. 2017; Gelpern and Veron 2019: 43).

Dilution of centralised decision-making: Commission and Council involvement

The fact, that the Council can back or overturn a veto of the Commission to a resolution decision of the SRB adds the possibility for member states to have some influence on the resolution process of the eurozone's largest banks, at least concerning the PIA and the use of the SRF. Some would see this as an inroad for member state influence, particularly of Germany and creditor states (e.g. Donnelly 2016), which would significantly decrease the excludability of SRB resolution. However, as explained above, this influence is very limited in theory, as the Council has no veto of its own and depends on the supranational Commission using its veto first. During the cases of SRB resolution so far, the Commission did not use its veto, so that the Council did not get involved. Sure, the mere existence of member state involvement could also influence the Commission in its veto decision, which however is pure speculation. Without further empirical evidence it is hard to make an argument in favour of it. The relatively strong institutional setup of the SRM suggests relatively high excludability of freeriding by member states and their NRAs.

Complexity of the decision-making process

The relative complexity of the process involving the ECB, the SRB, the Commission and possibly the Council could potentially cost vital time before a resolution decision is taken and has been criticised by the ECB (ECB 2013), the IMF (IMF 2014) and others like the US Treasury secretary (Financial Times 2014). However, the SRMR stipulates that only 24h (and in exceptional cases 48h) can pass until a decision must be taken, and in the four resolution cases so far (as of April 2022), decisions have been taken within that timeframe. This is not to say that in case of a more complicated resolution case this could be different, which would leave more time for short-term freeriding.

Slow adoption of resolution plans and build-up of MREL for SRB banks

The SRMR became active on 1 January 2016, but only by the end of 2019 all banks under the SRB's watch were covered by a resolution plan. The initial build-up of MREL is underway but far from complete with implications for SRB choices in future unviable bank situations (Veron 2019). As Dewratiport et al. (2021) have pointed out, most SRB banks do not have sufficient MREL, so that the bail-in rule cannot be implemented without endangering financial stability.

This would significantly limit the excludability of the SRM and likely prompt freeriding by national bailouts during a crisis (see section 5.4.2.2.1). This in turn would provide further incentives for long-term freeriding by banks. At the same time, the resulting lack of credibility of SRB resolution also precludes the development of network effects. Thus, while the SRB has great potential to turn banking resolution for the eurozone's largest bank into an excludable network good, it has not achieved this so far.

5.8.4 The Single Resolution Fund (SRF): relatively strong, but bypassed and too small

As specified in the SRMR (European Union 2014b), the SRM is equipped with its own bailout fund, the SRF. It is supposed to absorb losses and compensate creditors as well as provide liquidity in resolution. It is funded by a levy on banks collected by national resolution authorities. The SRB can use money from the SRF in its resolution schemes under certain conditions. The SRF was established by the SRMR. However, its assumption and mutualisation of national funds are

codified in a separate inter-governmental agreement (IGA) which is formally outside of the EU legal framework.[31] This happened on the initiative of Germany, because of legal and constitutional concerns.

The SRF is gradually built up by mutualising national resolution funds of banking union countries, as defined by the BRRD over a period of eight years starting in 2016 (SRBR Recital 20). Their contributions come from banks which are charged according to their size and risk profiles. Thus, banks with higher risk profiles have to pay more. By 2024, the SRF is scheduled to reach at least one percent of the amount of covered deposits of credit institutions in all 21 Banking Union countries. As of July 2021, the SRF stands at approximately 52 billion euro (SRB 2021). In case such ex-ante contributions are insufficient to cover the losses or costs incurred by the use of the SRF, additional ex-post contributions may be bridge financed by borrowing from the member states by Loan Facility Agreements (LFAs). This borrowing shall be recouped with the ex-ante and ex-post contributions within the maturity period of the loan. In fact, the risk adjusted contribution to the fund reaches 20 percent of all contributions. To allow the SRB to calculate the individual contribution, institutions are required to provide necessary data within certain timeframes. Institutions, therefore, need to report data to the national resolution authorities (NRAs) by 31 January of every year at the latest. Where an institution does not submit all the required data on time, the SRB may use estimates or its own assumptions to calculate the annual contribution of the institution. In certain cases, the SRB may assign the institution concerned to the highest risk adjusting multiple. The SRB therefore has strong means of enforcement to gain necessary information from banks for calculating their SRF contributions (SRB 2021).

The actual use of the SRF as part of a resolution scheme of the SRB is however strictly circumscribed. Funds can only be used after a 8 percent bail-in and should be limited to 5 percent of total liabilities of a failing bank (BRRD Recital 73). Furthermore, disbursement is conditional on a positive or conditional decision of the Commission backed by the Council (SRBR Recital 30).

[31] The SRF IGA is available at:
http://register.consilium.europa.eu/doc/srv?l=EN&f=ST%208457%202014%20INIT.

5.8.4.1 Impact of the SRF on public good features of banking resolution and short-term financial stability

Mitigating moral hazard, increasing excludability to long-term freeriding of banks

The design of the SRF as a bank financed fund spares state budgets and thus works against the doom loop. It also makes the use of funds less conducive to moral hazard than public bailouts. Especially the risk weighted contributions of banks to the SRF, which the SRB enforces, hold incentives to decrease risk and therefore enhance long-term financial stability. Thus, the design of the SRF potentially increases the excludability of long-term freeriding.

Moral hazard is further decreased by the rule that creditors have to be bailed in before any use of the SRF. This leaves market incentives against freeriding on capital and financial stability provided by others in place and increases the excludability of capital and financial stability. The limitation of the SRF bailout to 5 percent of total liabilities of a failing bank works in the same way, as banks cannot expect to be reimbursed fully for their failure.

Limited size and employment possibilities of the SRF: effects on excludability limited

The decision-making process allowing the employment of the SRF is very complex. It can be vetoed by the Commission with a confirmation of the Council, and it has to be passed by the SRB by a two-thirds majority. Thus, states can technically block its use on the grounds of banking nationalism. The ECB feared that this could negatively affect the SRF's credibility (ECB 2013).

Furthermore, the 5 percent of total liabilities of a failing bank might simply not be enough to ensure an orderly resolution or recovery and endanger financial stability. Similarly, experts have criticised the limited size of around 60 billion euro of the fund (e.g. Donnelly 2014: 30). Even the head of the SRB, Elke König pointed out in a conference in April 2018 that "this will always be too little for any systemic bank" (König 2018a).[32] Additional ex-post contributions to the fund will likely not be able to change much, as banks are usually much less able to contribute once a crisis is ongoing. In case of a systemic crisis, it is therefore likely that member states will have to step in and bailout large banks, which would turn banking resolution back into a public good and reintroduce all the problems of banking nationalism which the SRM was supposed to counter. Of course, this would also undermine financial stability.

[32] Elke König at a conference in April 2018: https://www.youtube.com/watch?v=E3CibWPUktA

5.8.5 The ESM fiscal backstop: too weak and too small

Whether this can be prohibited largely depends on the existence of a sufficiently large backstop to the SRF. In 2013, the creation of a backstop provided by the ESM was agreed in principle. The backstop function would be activated where, even after imposing losses on the banks' shareholders and creditors through a bail-in, the SRF is temporarily short of resources to facilitate the orderly resolution of the distressed banks. While no decision on implementing a backstop was taken until 2018, the ESM had a recapitalisation tool for banks (outside the SRM) which comprised up to 60 billion euro, and which was used to assist Spain in its banking crisis in 2012.

Between 2018 to 2021, an agreement on an ESM backstop was reached and signed, but it was made more conditional than the recapitalisation vehicle which it replaced.[33] Disbursement of aid was intergovernmental, depending on all 19 member state representatives in the ESM to mutually agree on support within 12 hours (extendable to 24 hours) after an SRB request. If the European Commission and the ECB concluded that a failure to urgently adopt a decision would threaten the economic and financial sustainability of the euro area, The ESM Board of Directors could take a decision under an emergency voting procedure (qualified majority of 85% of the votes cast). Altogether, centralisation of decision making was therefore extremely low for the ESM backstop, making it institutionally weak (Deslandes and Magnus 2019).

The backstop is also limited to the target size of the SRF, around 60 billion euro and with a cap of 68 billion euro (ESM 2021). This will double the capacity of the SRF to around 120 billion euro but would likely not be enough even in case of the failure of one systemic bank (König 2018a). This stands in stark contrast to the US, where the FDIC has expansive borrowing authority from the US Treasury for its Deposit Insurance Fund (DIF) and Orderly Liquidation Fund (OLF). Furthermore, the backstop function of the ESM will likely not be in force before 2024.[34]

An insufficient backstop, however, would decrease the excludability of short-term financial stability and necessitate national bailouts in case the SRF and the limited backstop have been depleted. The lack of excludability to freeriding on financial stability by banks and states as

[33] Conditions include that (i) loans under the backstop facility shall only be granted as a last resort and to the extent that it is fiscally neutral in the medium term; (ii) contributions to the SRF have been transferred; (iii) "there is no ongoing event of default on borrowings of the SRB from the ESM"; and (iv) the permanence of the resolution framework as agreed under the Banking Package (Deslandes and Magnus 2019). For more details see ESM press release, "Explainer on ESM reform and revisions to the ESM Treaty", 24 June 2019, available at https://www.esm.europa.eu/press-releases/explainer-esm-reform-and-revisions-esm-treaty.

[34] The common backstop could be introduced earlier than 2024 provided that banks make sufficient progress in reducing their exposure to risks, notably non-performing loans. This is unlikely after the Covid crisis.

depicted in section 5.4 would therefore contribute to a continuation of public good problems in European banking resolution and a persistence of the sovereign-bank nexus. This would first harm debtor states which have difficulties to provide a large enough national fiscal backstop, but ultimately undermine financial and fiscal stability in the EU as a whole.

As the ESM is member state funded, the European backstop also poses the issue of burdening public funds as well as moral hazard (long-term freeriding by banks). However, these issues are addressed relatively well. If the ESM credit line is used by the SRF, the SRF will have to pay back the ESM loan with money from bank contributions within three years, although this period can be extended by up to another two years. As a result, it will be fiscally neutral over the medium term (ESM 2018).

5.8.6 Emergency liquidity assistance in the EU: institutionally weak

The SRF and its backstop are also unlikely to provide sufficient liquidity for one or several systemic banks in resolution. This issue is being actively discussed but has not yet received a satisfactory policy response (e.g. IMF 2018; Deslandes and Magnus 2018a; Demertzis et al. 2018).

While the ECB is by law prohibited from monetary financing, emergency liquidity assistance (ELA) by national central banks is an option for resolution financing[35]. It is governed by the 2017 agreement on emergency liquidity assistance (ECB 2017). Under that agreement, national central banks of the Eurosystem may provide central bank money to banks facing liquidity problems against collateral that is of lesser quality than the collateral eligible under the single monetary policy framework, charging a penalty interest rate in return. ELA is exempt from state aid rules as specified in the Commission's 2013 Banking Communication (Deslandes and Magnus 2019).

However, national level conditions for use are quite strict and it can be authorised only in very specific situations (ECB 2017). Therefore, ELA is not regarded as a generally available source of resolution financing that the SRB may avail of or count on when resolving a bank.

Furthermore, there is no effective institutional centralisation of decision making on a coordination of national ELA on the European level. Providing liquidity on a national level does not impose

[35] The backstop cannot be provided by the ECB since this would violate key principles underpinning the ECB institutional and monetary framework. These principles are the following: (i) independence of central banks; (ii) monetary financing (financing resolution comes down to financing a public deficit); (iii) the ECB can only operate according to a functioning market economy (Deslandes and Magnus 2019:10).

excludability on freeriding on financial stability and raises issues of banking nationalism which have plagued other aspects of international banking resolution before the introduction of the SRM (see section 5.4). For example, it complicates the coordination of ELA for cross-border banks. Ideally the ECB would be able to provide ELA for SRB banks. ECB President Mario Draghi has called for a centralisation of the ELA in the hands of the ECB. But so far the ECB has no mandate for it. This can lead to liquidity shortages in case of the resolution of larger banks and undermine financial stability. In fact, the Banking Union framework has been qualified by Elke König as "being geared towards addressing solvency issues more than liquidity" (König 2018a).

Altogether, liquidity provision for FOLTF banks in the EU is institutionally weak and still ridden with public good problems. Freeriding by national central banks, for example by only providing liquidity to "their banks" and within their borders while ignoring branches or subsidiaries in other countries with smaller central banks, can undermine financial stability. Thus, low excludability to freeriding on financial stability via national ELA exacerbates public good problems in European banking resolution.

5.8.7 Persistence of state aid: enabling the circumvention of the SRM

The Treaty on the Functioning of the European Union (TFEU), and specifically its article 107(3), allows state aid "to promote the execution of an important project of common European interest or to remedy a serious disturbance in the economy of a Member State".

In its 2013 Banking Communication (European Union 2013), the Commission considers that "the requirements for the application of Article 107(3)(b) of the Treaty to State aid in the financial sector continue to be fulfilled[36]." The Commission has not updated this position as of December 2022, so that it retains a very permissive general stance with respect to state aid, while it decides on a case-by-case basis.

Consequently, the Commission has allowed states to continue bailing out their banks to further their economic interest, often at the expense of European financial stability (Donnelly 2017). This has been possible because the BRRD as well as the SRMR have left loopholes that have permitted states to use Article 107(3) TFEU to justify the use of state aid and bypass national resolution funds and the SRF. This often worked by avoiding resolution and going straight to liquidation

[36] I.e. that the conditions of serious disturbance in the economy are in place that justify the use of state aid.

which is still largely regulated on the national level (see the following section) and for which the BRRD does not prescribe the employment of national resolution funds or the SRF. The Commission has authorised state aid, at first, in the form of guarantees and capital injections, later on, in the form of restructuring aid, helping to split banks into "good" and "bad" and to effect sales of assets and, eventually, in the form of liquidation and closure aid (Nicolaides and O'Connor 2018). This has happened with large banks such as the Veneto banks which were provided state aid to limit the damage of liquidation after a negative PIA by the SRB which precluded a use of the SRF. But also small non-systemic national banks like LCCU in Lithuania received public cash injections by their home states.[37] There have also been cases of precautionary recapitalisation with state aid, such as the case of the ailing Italian bank Monte dei Pasci die Siena, where the Commission authorised state aid amounting to 5.4 billion euro in 2017, even though the bank was liquid and solvent (Nicolaides and O'Connor 2018).

By providing some banks with an advantage through injection of public money or cheaper market finance facilitated through state guarantees, such practices distorted the single market and left the door open for states to pursue policies of banking nationalism and thus freeride on financial stability. Furthermore, it perpetuated the sovereign-bank link and set incentives for long-term freeriding by banks, thereby undermining the goals of the SRM and perpetuating public good traits in European banking resolution and financial stability.

5.8.8 No harmonisation of insolvency regimes: enabling the circumvention of the SRM

Insolvency regimes for banks have remained national in the EU. They are still very diverse, both in terms of general structure (administrative or judicial) and specific aspects, such as the hierarchy of claims or the triggers to initiate proceedings (European Commission 2020; Restoy et al. 2020).

Triggers to initiate national insolvency regimes are in most countries not aligned with the triggers to initiate resolution, particularly the conditions that justify a bank being considered as FOLTF, as per Article 32(1) BRRD. After a negative PIA of the SRB, the BRRD stipulates a liquidation on the national level. But the fact that such banks do not necessarily fulfil the national criteria to be put into bankruptcy proceedings means that member state authorities often just apply state aid

[37] All cases of state aid authorised by the Commission can be looked up here: http://ec.europa.eu/competition/state_aid/scoreboard/index_en.html

under Article 107(3) TFEU (European Union 2007). This means that the lack of harmonisation of insolvency regimes is used as loophole by signatory states to circumvent the BRRD and its goal to break the sovereign-bank link by dissolving banks instead of bailing them out.

Furthermore, the variety of insolvency regimes increases complexity and can diminish the predictability of what will happen in case an international bank becomes non-viable and hence holds incentives for short-term freeriding for banks. Furthermore, divergent rules pose opportunities of legislative arbitrage for banks and distort the single financial market. Thus, it can induce freeriding by states trying to provide more attractive insolvency conditions and by banks who choose the most favourable jurisdictions which impose the most lenient standards, and which are most likely to provide generous bailouts. Insolvency law in the EU is therefore still plagued by public good problems, which also negatively affect excludability in banking resolution.

This problem has been recognised by many and proposals have been made to alleviate these problems. The granting to the SRB of administrative authority to liquidate banks beyond the existing BRRD resolution framework, in place of the current insolvency proceedings defined in national law, has been advocated by the IMF (2018), while others have called for a harmonisation of national insolvency regimes (Restoy et al. 2020) or an EU liquidation regime alongside an EU resolution regime (König 2018b). The former could plug the loopholes in SRB resolution and the latter two, if well designed, could turn insolvency proceedings in the EU into a club good by introducing a high degree of excludability.

5.8.9 Deposit insurance in the EU: limited harmonisation and institutional weakness

The DGSD introduced in 2014 as part of the single rule book stipulated that each EU member state has a compulsory DGS that insures deposits up to a harmonised limit of 100,000 euro. This was a major step towards more harmonised national systems raising excludability to freeriding by regulatory competition. It would make such cases as the unilateral extension of insurance cover by Ireland in 2008 (see section 5.7.1) legally impossible.

Nevertheless, it did not change anything about the co-existence of several DGSs in some member states covering certain types of banks, which would provide better protection.[38] Certain member states, such as Italy and Germany, have "voluntary" or "top-up" deposit insurance covering all or a subset of banks. Those are usually private sector arrangements which are not covered by the DGSD. Furthermore, in some states national DGS can provide support for the restructuring or closure of troubled banks beyond the mere insurance of covered deposits (enabled by Article 11(6) of DGSD) (Gelpern and Veron 2019: 39). Furthermore, Commission plans to require risk-weighted premiums were rejected in favour of member states deciding how to charge banks. Thus, harmonisation remains limited.

Moreover, control over decision making on deposit insurance in the EU remained intergovernmental. Coordination between DGS during a crisis was to be done by the Council. No pooling of funds was agreed, while borrowing across different DGS remains voluntary and use of ESM funds for insolvent banks when deposit insurance had run out was kept limited (Donnelly 2016: 12-13). In November 2015, the Commission has published a legislative proposal for a European Deposit Insurance Scheme (EDIS) with pooled deposit insurance under centralised control (Commission 2015), a solution which has also been backed by the IMF and numerous other experts (IMF 2013). This proposal has been blocked so far in the legislative process by the Council.

This partial harmonisation of national DGS through the DGSD is a step ahead in ensuring that all member states have basic deposit insurance, creating a somewhat more level playing field and less incentives for banks and states to freeride by arbitrage. However, national responsibility for deposit insurance perpetuates the sovereign-bank link and threatens European financial and fiscal stability as some states might not be capable of delivering enough to cover deposits in their jurisdiction alone. Within the integrated EU financial market bank failures in one member state could overburden their domestic DGS and backstops, which could lead to bank runs with devastating effects on national and European financial stability. This is because a system of national DGS in the EU allows a public good dynamic whereby those countries capable of providing aid (usually creditor states) for overburdened ones (usually debtor states) would freeride on short-term financial stability by not assisting those who need it, as explained in section 5.4.2. Such freeriding behaviour could only be excluded by pooling deposit insurance funds which would

[38] The full list and key statistics of national deposit insurance schemes in the EU are available on the European Banking Authority's website at https://eba.europa.eu/regulation- and-policy/recovery-and-resolution/deposit-guarantee-schemes-data

be distributed by a strong, swiftly acting supranational institution. The introduction of EDIS in the form outlined in the Commission's proposal from 2015 could be up to that task.

5.9 Conclusion: no sufficient increase of excludability, financial stability endangered in case of crisis

Altogether the reformed system of banking resolution in the EU represents a significant upgrade compared to the situation before the crisis. However, while it is based on legislation and institutional structures with great potential, it runs short of turning banking resolution and financial stability in crisis into anything comparable to a club good or excludable network good. This is likely because at the time of negotiations the acute phase of the crisis had passed and incentives for changing the system under crisis pressure proved weaker than the incentives for member states to freeride and preserve the possibility to do so by introducing a relatively weak institutional setup. Following creditor states' interests the redistributive part of the regime emerged to be weak in practice, while rules were strict and designed to exclude freeriders but finally turned out to be toothless mainly due to weak enforcement.

Significant progress in harmonisation, but only medium precision of rules and weak enforcement

The BRRD certainly increased the harmonisation of national resolution schemes and increased the predictability and potentially the speed of resolution in the EU and EEA. This entailed higher excludability of short-term freeriding on financial stability by banks through panic selling, as well as higher excludability to freeriding by regulatory arbitrage by banks and regulatory competition by states. This also held the potential of creating network effects and attract banks outside the EU and EEA.

Furthermore, some of the elements of the BRRD, such as the public interest, no-creditor-worse-off and bail-in provisions were skilfully designed to increase excludability to freeriding by states through banking nationalism and long-term freeriding by banks through incurring too much risk. In doing so they would also work against the sovereign-bank nexus and prevent bailouts motivated by national economic interests rather than financial stability considerations.

However, these tools based on creditor financed bank resolution were largely not enforced. One reason for this was the institutional weakness of the EBA as rule maker specifying less precise BRRD provisions. Thus, regulatory coherence was often not achieved on the domestic level. For example, MREL requirements turned out to be different across different national jurisdictions. This undermined the possibility of using the bail-in tool without endangering financial stability and opened the door to regulatory competition and arbitrage. Furthermore, loopholes in the BRRD allowed for the use of state aid and the exemption of some banks. Moreover, the enforcement of legislation remained in the hands of NRAs for all but the biggest banks.

A relatively strong SRB with limited leeway

The SRB as supranational resolution board has a remit limited to the eurozone. But it turned out to be a relatively strong institution, albeit its somewhat complex decision-making process and the veto power of the Commission. This clearly raised the excludability of freeriding for banks which could be expected to fall under its authority in case they turned out FOLTF. On paper these were roughly the same banks which fell under the remit of the ECB Supervisory Board. However, the shortcomings in legislative harmonisation, notably in MREL requirements also restricted the leeway of the SRB in prescribing bail-ins.

Pooled funds SRF and ESM backstop: SRF relatively strong, ESM weak and both not large enough to realise their potential of high excludability

This also affected the use of the SRF, which was only legally possible after a bail-in. Generally, the SRF had a supranational character as it pooled bank contributions from across the eurozone. These contributions were risk-adjusted, which increased its excludability to long-term freeriding by banks (reducing moral hazard). Furthermore, the SRB was given strong means of enforcement to gain necessary information from banks for calculating their risk adjusted SRF contributions. The SRF represented an alternative to state aid and worked against the sovereign-bank nexus to further financial stability. However, with roughly 60 billion it was too small and backed up by an institutionally weak ESM fiscal backstop which was also too little to be effective in case of a more serious crisis.

In that case, it would not be possible to effectively exclude freeriding on financial stability in the EU through national bailouts. This harmful dynamic of national bailouts would not only undermine

financial stability in the EU, but also continue the sovereign-bank doom loop, which had proven so devastating in undermining fiscal stability in the context of the common currency.

European deposit insurance and ELA: weak institutions providing low excludability

In European deposit insurance the reliance on national funds and fiscal backstops is complete, as creditor states blocked any pooling of funds and supranationalisation of control. This weak institutional setup was unable to impose a significant degree of excludability to financial stability, apart from through a limited harmonisation of national systems. Consequently, European deposit insurance remains largely trapped in a public good dynamic. The same can be said of emergency liquidity assistance, which remains the domain of national central banks. So, there are still large pockets in the resolution regime in the EU which remain – apart from some legal harmonisation – without significant capacity to exclude freeriding.

Excludability of freeriding of the entire European resolution regime is further compromised by the Commission's liberal stance towards state aid and the lack of harmonisation of insolvency law. This has been exploited by member states engaged in the competition for the CPR capital to circumvent BRRD provisions of bail-ins and resolution funds by not officially resolving but either propping up or liquidating "their" banks with state aid. This was usually in the interest of their national economy or important interest groups, but at the expense of European financial and fiscal stability. It decreased excludability for long-term freeriding (moral hazard) and therefore long-term financial stability and left zombie banks in place which had become a burden on the economy, but which were artificially kept alive by state aid.

For the segment of very large banks under the supranational remit of the SRB financial stability became closest to having club good features. Freeriding of states through banking nationalism would largely be impossible through essentially centralised decision making and banks would be less likely to be treated leniently and therefore encouraged to long-term freeride. While the only SRB led resolution so far (Banco Popular Español) went smoothly, it is still hard to judge how well the SRB could enforce its resolution decisions against the influence of NRAs which are executing them. However, these are problems of institutional capacity which are likely to change over time with increasing SRB expertise and staff.

Club good features limited to very large SRB banks

There is however a bias towards further limiting the scope of actual SRB resolution to only the biggest banks even among those in the SRBs remit. In the four cases the SRB has handled so far, it has used a negative PIA three times. Two of those were Banca Popolare di Vicenza and Veneto Banca with balance sheets of around 30 billion each. They were passed on to their national authorities for resolution, which resolved them using state aid. Much larger Banco Popular (130 billion) was resolved without state aid by the SRB. This sets the bar for SRB resolution very high, as observed by the head of the EBA Andrea Enria (Borrelli 2017). It effectively excludes a large share of banks, including some under the single supervisor (above 30 billion) from single resolution and therefore reduces the SRB's potential positive effects on financial stability. While club good features are limited to very large banks, relatively large banks are left under NRAs. This makes banking resolution and financial stability a public good for banks as large as 30 billion euro, leaving the door open for NRAs to engage in banking nationalism and thus freeride on financial stability (Gelpern and Veron 2019). Furthermore, "middle class" banks, i.e. those which are too small to pass an SRB PIA, can be too large to be resolved or liquidated under national law without causing financial stability problems for member states (Restoy 2018). This essentially leaves the sovereign-bank doom loop intact concerning all but the biggest banks in the euro area.

Moreover, the propensity of member states to continue to exploit the Commission's lenient stance on state aid and bailout their banks could influence the SRB estimation of public interest as well as the no-creditor-worse-off principle. While in theory, the SRB must assume no state aid in its PIA decision and no-creditor-worse-off determination, in reality the prospect of public bailouts may influence its decision for a negative PIA, thus limiting the reach of supranational resolution and the transformation of banking resolution and financial stability from public to club goods. Furthermore, there is significant litigation risk connected with SRB resolution, as the case of Banco Popular Espanol has shown (Mesnard et al. 2017). This creates further incentives for the SRB to decide for national resolution (Gelpern and Veron 2019: 45).

If the current Commission stance on state aid is extended, more member states might optimise their NRAs to facilitate the treatment of future cases of bank failures with national public bailouts. This would be synonymous with low excludability to freeriding and an entrenchment of a competitive dynamic of banking resolution in the provision of banking resolution for all but the biggest banks in the EU. This would further complicate coordination and cooperation of international bank resolutions. Another negative effect could be that the SRB could further "raise

the bar" for its public-interest assessment and further diminish the range of banks that de facto fall under its remit, limiting excludability to a yet smaller circle of very large banks.

On the other hand, if the commission adopts a more prohibitive stance towards state aid, either by revising its assessment of a general state of financial crisis or by changing treaty law, the balance between SRB and NRAs resolution could shift in favour of the SRB (Gelpern and Veron 2019). This would extend club good features of banking resolution and financial stability to an increasing share of the banking industry with beneficial effects for financial stability in the eurozone and the EU.

Long-term freeriding on financial stability: dependence on the SSM for crisis prevention

The prospect of continued bailouts for all but the largest European banks holds incentives for long-term freeriding on financial stability for all smaller banks. Such moral hazard issues can encourage banks to accumulate more risk. Thus, the SRM framework holds relatively little incentives for crisis prevention, which is left to the SSM to deal with.

However, as long as banking supervision works well, banks should not be able to run excessive risk. Nevertheless, there can always be cases of supervisory failure.

Altogether, financial stability in the EU is therefore largely dependent on successful crisis prevention by the SSM. As long as it works well, financial stability should be safeguarded. In case it does not manage to do so, for example due to large shocks leading to a larger crisis, the reformed system of European banking resolution would be ill-equipped to tackle it. This would likely also undermine the legitimacy of European banking policy as a whole.

6 Conclusion

The conclusion is divided up in three sections, which will answer the four research questions introduced in chapter 1.5:

1. How can fiscal and financial stability be conceptualised as public goods and what role does fiscal and banking policy play in providing it on the national, international and European level?
2. How strong were the institutions in European fiscal and banking policy before and after the reforms following the financial and sovereign debt crises?
3. How far did institutions manage to mitigate public goods problems before and in the wake of the financial and sovereign debt crises?
4. How did the public goods character of fiscal and financial stability shape institutional choice and determine institutional strength before and in the wake of the crises?

As explained in chapter 2.3, public goods traits are directly related to institutional strength. Institutional strength directly impacts public goods features in a policy field, while public goods fields also influence institutional strength. Questions 2 and 3 are therefore so closely intertwined that they are dealt with in one common section, 6.2.

6.1 The public goods conceptualisation of fiscal and financial stability and the role of fiscal and banking policy in the national, international and EU contexts

6.1.1 Fiscal stability and fiscal policy in the national, international and EU contexts

The dissertation has conceptualised fiscal stability as a good dependent on fiscal sustainability and growth and has shown how the excludability of this good among states decreases with mounting international economic interdependence. While excludability of national fiscal stability has been decreasing since the end of Bretton Woods and increasing globalisation, excludability is particularly low in the EU and especially so in the eurozone, due to exceptionally high

interdependence and the lack of national monetary policy capacity. Thus, fiscal stability is a public good in the EU with particularly low excludability. This makes the need for fiscal coordination urgent to prevent member states from freeriding both on stability and growth and thereby endangering the provision of the public good fiscal stability and the common currency.

6.1.2 Financial stability and banking supervision in the national, international and EU context

The dissertation has shown how financial stability depends on low levels of systemic risk. Systemic risk is increased by banks which decrease their capital base and increase risk to become more profitable which augments the danger of bank defaults. As bank defaults can undermine overall financial stability, this constitutes freeriding on financial stability. Competition among banks for the CPRs demand and supply of capital set incentives to act that way. To prevent banks from freeriding on financial stability and to avert financial crises, banking regulation and supervision are put in place. If crises occur banking resolution comes in to manage them in a way that limits harm to financial stability.

Such banking policies, can be relatively effective on the national level in the absence of international banking and capital mobility, making them club goods with high excludability to outsiders. The globalisation and liberalisation of financial markets since the 1980s however, has massively decreased the excludability of national banking policies and financial stability. This has increased the possibilities for banks to freeride through regulatory arbitrage in legislations with varying levels of strictness of banking policy. It has also set the stage for competition among states for the international CPRs supply and demand of capital by means of banking legislation and supervision attractive to banks. This has favoured more lenient banking policies, engendering a race to the bottom of regulatory and supervisory lenience to attract more capital and buttressing national champions. By allowing banks to freeride on financial stability through lenient banking policies, states themselves freeride on financial stability. This kind of banking nationalism decreases the excludability of financial stability for banks and states substantially, turning both financial stability and banking policies into public goods.

This is particularly so in areas of high financial interdependence like the EU. In the eurozone, the ‘impossible trinity’ of an absence of co-responsibility over public debt, the lack of monetary financing, and bank-sovereign interdependence makes financial stability particularly fragile and

linked up with fiscal stability. At the same time, a high degree of financial integration significantly narrows the possibilities of national authority and supervision, while incentives for freeriding on financial stability by banks and states are particularly high in the EU and even more so in the eurozone. In this context, financial stability is a public good with a particularly low level of excludability.

6.1.3 Financial stability and banking resolution in the national, international and EU context

The role of banking resolution is mainly to protect financial stability in crisis situations, i.e. in short-term, while banking supervision is rather aimed at safeguarding financial stability in the long run. In case of a looming default, investor and depositor withdrawals can precipitate bank failures and cause contagion endangering overall financial stability. To prevent this kind of freeriding on short-term financial stability, banking resolution should be quick and based on clear and enforceable resolution rules and employ suitable resolution tools to prevent lengthy bankruptcy proceedings and uncontrolled bank failures.

Resolution tools based on creditor financed bank restructuring such as bail-ins tend to increase the excludability of long-term freeriding, while diminishing that of short-term freeriding. Resolution tools providing financial assistance to failing banks such as bailouts on the other hand, decrease the excludability of long-term freeriding, while increasing that of short-term freeriding. In other words, letting a failing bank's counterparties shoulder the costs tends to be better for safeguarding long-term financial stability, while letting the state or third-party private actors foot the bill to rescue or orderly resolve a bank is more likely to protect financial stability in an acute crisis situation, i.e. in the short-run. The excludability to long-term freeriding is similarly low with respect to state aid tools and bank financed resolution and deposit insurance funds, albeit somewhat higher for the latter.

On the national level, without capital mobility, banking resolution and its enhancement of financial stability is a club good for states. For banks, bail-ins have excludable network good features and financial assistance like bailouts are private goods for bailed out banks and public goods for other banks in the system which profit from the stabilising effects of a bailout for the financial system. For banks which are too-big-to-fail, financial assistance constitutes a CPR, because they cannot be excluded lest they endanger financial stability and there is only a limited pool of bailout money.

The rise of international banking and the massive increase of capital mobility since the 1980s has decreased the excludability of short-term financial stability, as investors could more easily freeride by withdrawing money from struggling banks and transferring it to save havens, making banking crises much more sudden, devastating and far-reaching. Furthermore, banking resolution became a public good for banks, as they were no longer confined to one country but could move to jurisdictions with larger backstops. Banking resolution and financial stability also became public goods for states. The excludability of national banking resolution policies decreased, as did the excludability of financial stability in crisis situations. The resolution (or lack thereof) of a bank in one country could impact banks and financial stability in other countries through positive and/or negative externalities.

Orderly resolution in one country, for example through a bailout, can have positive effects on international financial stability. If other states profit from this without contributing by installing well-functioning resolution regimes themselves, this constitutes "beggar thy neighbour" freeriding on banking resolution of others and on financial stability.

If a state resolves a bank within its jurisdiction with international business or branches, at the detriment of international financial stability, this is equally freeriding. Bail-ins for example can threaten counterparties in other countries and therefore overall financial stability while ringfencing and not bailing out foreign branches of a national bank, can lead these branches to crash uncontrolledly in case their host state is not capable to bail it out.

To avoid coordination failure among different countries and their resolution authorities in case of an international bank crisis, information sharing and cooperation is key. States trying to protect their banking champions, however, have strong incentives to guard negative information for themselves instead of coordinating, thus freeriding on financial stability. States are further motivated to only bailout their own banks due to the threat of freeriding of others on their bailouts.

Furthermore, states could leverage their resolution regimes to attract banks and capital usually through larger fiscal backstops or resolution funds. Competition for capital in the context of banking nationalism tends to motivate states to bailout national champions even if those should rather be restructured for the sake of international long-term financial stability. On top of that, public bailouts can also have negative spillover effects into state finances, endangering fiscal stability.

With high financial interdependence and the impossible trinity, short-term financial stability was particularly fragile in the EU and closer linked to fiscal stability than elsewhere. Bank-sovereign

interdependence was high, there was no common European backstop for banks, the ECB was prohibited from engaging in monetary financing of sovereign debt and was not allowed to act as a lender of last resort providing emergency liquidity to banks. This made cooperation in resolution particularly necessary in case of crisis.

The public good structure of financial stability and banking resolution in an international and particularly in the EU context made cooperation unattractive to member states, however. This could lead to a breakdown of the public good financial stability during crises. At least unless strong European institutions in banking resolution could increase excludability of short-term financial stability and banking resolution.

6.2 Strength of the institutions in European fiscal and banking policy and their effects on the public goods character of fiscal and financial stability before and after the crisis

6.2.1 European fiscal policy

6.2.1.1 Weak institutions in European fiscal policy before the crisis unable to mitigate public good incentives

Before the crisis, fiscal rules were limited to the goal of furthering stability, leaving growth enhancing policies at the discretion of member states. The main reason for this bias towards asserting stability rather than growth was the stronger negotiating position of creditor states in the foundation of the SGP, which were more interested in preventing stability freeriding of debtor states rather than addressing their own growth freeriding behaviour. The dissertation has shown how this distribution of power and a bias towards preventing stability rather than growth freeriding, rooted in the different varieties of capitalism of creditor and debtor states also shaped further institutional development in European fiscal policy.

The public goods features of fiscal stability made it unattractive for member states to renege on the opportunity of freeriding. The immediate benefits of freeriding were higher for member states than those of more integration. As hypothesised in chapter 2.3.3. this yielded a weak institutional setup in European policy coordination. This provides an answer to the third research question.

In fact it was weak in all three dimensions of centralisation of decision making, precision of rules and enforcement. Decision making in the Commission responsible for determining compliance with fiscal rules was based on majority voting. But a political bias against enforcing rules made this relatively high degree of pooling ineffective. Fiscal rules were vague, leaving large room for interpretation, while they could only be enforced by a qualified majority in the ECOFIN Council – a decision threshold never reached.

No rescue mechanism with a fiscal backstop was introduced on the European level. Instead, the no bailout clause was put in place to persuade member states not to rely on bailouts and provide incentives for policies aimed at fiscal sustainability. In practice this meant that in case of a debt crisis, member states would have to negotiate any coordination or resource sharing in the framework of the Council or the Eurogroup, without any pooling of decision making, and no designated rules and enforcement mechanism in place.

Thus, European fiscal policy both in terms of policy coordination and a rescue mechanism can be classified as institutionally weak as hypothesised in section 2.2. In rescue funding it was even weaker as no rules were in place at all. As the theory in section 2.3.4 suggests this went hand in hand with the persistence of public good traits, which resulted in continued growth and stability freeriding.

6.2.1.2 Strengthened but still overall weak institutions only slightly mitigating public good incentives after crisis reforms in European fiscal policy

The weak institutional setup before the crisis resulted in suboptimal production levels of fiscal stability, which became obvious when Greece could not repay her debt in 2010. This sparked the eruption of the eurozone sovereign debt crisis. The benefits for deeper cooperation through strengthening of institutions became larger than those of continued freeriding. This resulted in a set of reforms of fiscal policy on the EU level.

The reforms of the SGP during the sovereign debt crisis strengthened European fiscal policy coordination somewhat but not enough to ensure the enforcement of rules. Surveillance was increased, decision making in the Council sanctioning the breaching of rules was further pooled and made subject to reverse qualified majority voting, and the budget and debt break rules were transferred into national law. Moreover, the Macroeconomic Imbalances Procedure (MIP) was put in place to counter growth freeriding, although its rules were less strict than those of the SGP.

Decision making on enforcement of fiscal rules, including the MIP, remained in the hands of a politically constrained European Commission and member states, many of whom remained ambiguous about or even out-rightly opposed to strict fiscal rules, which due to numerous qualifications and exceptions remained imprecise. Thus, the SGP remained a weak institution which was unable to transform the public good fiscal stability into a club good or excludable network good. This was underlined by the continued non-compliance of member states to the rules of the reformed SGP and the newly instituted MIP, as well as their inability to guarantee fiscal stability in face of the Covid-19 crisis in 2020. Generally, the fiscal framework put in place also displayed a bias towards preventing stability freeriding rather than growth freeriding, which can be explained by the stronger negotiating position of creditor states.

At the beginning of the sovereign debt crisis in 2010 the absence of a rescue mechanism proved catastrophic, as Greece and later other states were at the verge of defaults that could have broken the euro. Member states had to agree in tough intergovernmental negotiations in the Eurogroup on an institutional architecture for rescue funding.

Subsequently, significant progress was made in the field of rescue financing with the establishment of the EFSF and EFSM in 2010 and the ESM in 2012. The EFSM, the first fund created during the sovereign debt crisis had a rather centralised decision-making process. Based on the community method and qualified majority voting, it drew on the common EU budget as financing instrument and was linked to strong conditionality to exclude stability freeriding. It can therefore be regarded as the strongest institution out of the three funds. Due to its small size of 60 billion euro, it however failed to make a real difference.

The EFSF and the ESM were based on an intergovernmental structure with low centralisation of decision making. The EFSF required unanimity, while the ESM demanded unanimity or a qualified majority of 85 percent of votes. Individual votes were made to be weighted according to member states' shares of the ESM capital stock. This always provided larger member states with a veto and allowed them control over the disbursement of money and over conditionality for those receiving money. Rules of conditionality were precise and enforceable, as non-compliance would threaten so-called programme countries with a stop of financial support. With 500 billion and 400 billion respectively, the ESM and EFSF remained too small and their decision making too decentralised to significantly increase trust in the markets and provide sustainable fiscal stability. Sure, the permanence of the ESM made its altogether positive impact on fiscal stability valid in the long term. It proved too small and too controversial because of its connotation with austerity

however, to play a decisive role in the Covid-19 crisis, proving that it was not strong and large enough to provide fiscal stability in face of a larger crisis. All three funds were linked to strong conditionality based on fiscal retrenchment, so that they certainly increased the excludability of fiscal stability with respect to stability freeriding. Because of their focus on austerity, one-sided conditionality for debtor states and their limited size, they did however not do enough to counter growth freeriding of creditor states. Altogether, while increasing excludability to stability freeriding for programme countries, they did not manage to turn fiscal stability into a club good.

The Recovery and Resilience Facility (RRF) with centralised EU-level raising of funds, a more centralised decision making in terms of its aid provision, a size of 750 billion euro in loans and grants, and a more investment and growth-oriented conditionality is likely to prove stronger and more successful in securing fiscal stability as it better balances stability and growth. This is because with its more centralised control it promises to come much closer in turning fiscal stability into a club good than the three funds introduced during the sovereign debt crisis.

6.2.2 European banking supervision

6.2.2.1 Weak institutions in European banking supervision before the crisis unable to mitigate public good incentives

Despite this heightened fragility, the institutional setup in European banking policy was weak on all dimensions before the crisis. The Committee of European Banking Supervisors (CEBS) composed of national banking supervisory representatives was responsible for coordinating banking supervision in the EU from 2004 onwards, while there was a regulatory collage rather than a level playing field in banking regulation, as well as national systems for banking resolution and deposit insurance with only rudimentarily harmonised legislation. Decisions in the CEBS were taken in negotiations between member state representatives, rules were vague and left wide areas of discretion to member state banks, and there was no enforcement mechanism to make sure that rules were observed. This institutional setup did little to exclude freeriding among banks through taking on too much risk and states through banking nationalism, so that financial stability remained a public good with a particularly low level of excludability. Before the crisis, EU member states provided lenient regulation and supervision for their own national champions and supported them in their merger activities making many of them too-big-to-fail. This widespread freeriding behaviour undermined the production of long-term financial stability.

6.2.2.2 Reforms create strong institutions turning financial stability into a club good and European banking supervision into an excludable network good

This became obvious when the financial crisis erupted in 2008. Only through this shock, the benefits for deeper cooperation through strengthening of institutions became larger. The resulting reforms enacted profoundly transformed European banking supervision. At first, member states shied away from providing EU institutions with strong, independent decision-making powers to overcome national freeriding. The EBA, put in place in 2011 made progress on establishing a single rule book of banking for the EU. Decision making on technical standards, was pooled in qualified majority voting, but could still be amended by the Commission. This was a clear centralisation and strengthening of rulemaking power compared to the CEBS. However, the EBA was not authorised to enforce these rules as supervisory power was only granted to it in a state of emergency, which member states never activated. Furthermore, to establish consistent, efficient and effective supervisory practices the EBA could only rely on non-binding guidelines and recommendations. Evidently, member states had no interest in strong enforcement, as they preferred to continue policies of banking nationalism and therefore freeriding due to incentives in the public good nature of financial stability. With medium centralisation of decision making and precision and low enforcement powers, the EBA was therefore a relatively weak institution, which could not increase excludability to financial stability much, so that it remained a public good.

The consequence was further freeriding of member states and their banks on financial stability. This included such harmful practices as supervisory forbearance, ring-fencing and costly bailouts of banks and sovereigns to protect national banking industries, which further exacerbated the crisis and its spillover from banks to states.

This led to another escalation of the crisis, which finally changed the cost-benefit calculations of member states in favour of real supranationalisation of banking supervision. As the Spanish banking crisis pushed the euro to the brink, and member states recognised the sovereign debt doom loop as the motor of the crisis, they understood that the immediate benefits of cooperation clearly outweighed the benefits of continued freeriding, resulting in stronger centripetal effects.

This explanation of institutional change is in line with the hypothesis presented in 2.2.3 that institutions meant to produce public goods will be weak unless the immediate benefits of more integration will be higher than those of freeriding.

In June 2012, they agreed to build a European banking union and establish a Single Supervisory Mechanism (SSM). As a result, supervisory power over the eurozone’s largest banks with 85

percent of the euro area's banking assets was passed on to the ECB. The new supervisory institution turned European banking supervision from a coordination into a hierarchical model. It turned out to be a strong institution with a decision-making process delegated to national and supranational non-governmental experts deciding by majority. They could effectively enforce rules of the single rule book through fines and even directly set capital requirements to individual banks.

This institutional design practically turned financial stability for the euro area's largest banks in the eurozone into a club good and banking supervision in the eurozone into an excludable network good for large banks and states. For large banks, it limited possibilities of regulatory arbitrage to outside the banking union. The assertion of harmonised rules legislation of the single rule book by the ECB across banking union member states largely excluded freeriding of states through banking nationalism. At the same time, the new system was attractive to large banks due to regulatory economies of scale and greater credibility, which created network effects for outsiders. These centripetal network effects applied to states outside the banking union, whose large banks would lobby for them to join the banking union. The joining of the banking union by the non-eurozone states Croatia and Bulgaria, as well as strong lobbies pushing for joining in other states testifies to this.

Nevertheless, there are still some limitations. Harmonisation of banking regulation in the EU and EEA through the single rule book in banking is still a work in progress, there are still loopholes in the regulation of smaller banks, regulation on limiting bank structures is still missing and the remit of the SSM is still limited to eurozone countries, as well as Bulgaria and Croatia, which somewhat limits the excludability of banking supervision, regulation and financial stability.

Altogether the reforms in banking supervision have been very successful in excluding freeriding and furthering financial stability in the eurozone. This became clear when despite the economic shock of the Corona virus crisis (which did not originate in the financial system like the previous crisis) European banks have remained largely stable due to greater resilience.

6.2.3 Banking resolution

6.2.3.1 Weak institutions in European banking resolution before the crisis unable to mitigate public good incentives

Before 2009, there were different national systems for banking resolution with only rudimentarily harmonised institutions and legislation. Deposit insurance cover and rules, fiscal backstops and insolvency law varied considerably across the EU. Member state supervisors pledged information sharing in crisis management within the CEBS, but no mechanism for common decision making or enforcement of cooperation was installed. Just like banking supervision, banking resolution on the European level was therefore weak on all three dimensions before the crisis. Because of the public good features of short-term financial stability and banking resolution in the EU, incentives for the continued possibility of freeriding was more attractive to member states than imposing excludability by law. Therefore, short-term financial stability as well as banking resolution remained public goods and freeriders could not be excluded.

6.2.3.2 Reforms create medium strong institutional setup unable to turn financial stability and banking resolution into full club or excludable network goods

During the financial crisis starting in 2008, the lack of institutionalised cooperation in resolution proved fatal. The consequence was a series of costly and largely uncoordinated national rescue operations, increasing sovereign debt and often keeping alive zombie institutions. This constituted freeriding on short-term financial stability by increasing costs and perpetuating instability in the banking system and long-term financial stability by signalling banks that they were not made accountable for their losses. Reforms of banking resolution were first restricted to the national level, as member states continued to support “their” banks against international competition, while EU level reforms such as the establishment of the EBA focused only on coordinating resolution, which were undermined by public good incentives for continued freeriding, such as through forbearing by national authorities. This further strained financial stability and led to expanding public debt and the intensification of the sovereign-bank doom loop.

As described in the previous section on banking supervision, the acuteness of the Spanish banking crisis led to a point where the costs of continued low-level cooperation and freeriding became dramatic. At the same time, the prospective immediate benefits of closer integration increased

significantly resulting in stronger centripetal effects, so that member states agreed on creating a banking union. But by the time the details of a Single Resolution Mechanism (SRM) were negotiated, the acute crisis situation had passed, since Mario Draghi had announced to do "whatever it takes" to preserve the euro" in July 2012. Consequently, the immediate benefits of deeper cooperation and building strong institutions decreased, while benefits of freeriding through banking nationalism became more salient again. Furthermore, banking resolution touched even more on member states' essential interests than supervision, making it more contentious.

The resulting institutional setup of European banking resolution was only a limited success, yielding a medium strong institutional setup falling short of turning financial stability into a club good and banking resolution into an excludable network good for all but the very largest banks in the system.

The BRRD certainly increased the harmonisation of national resolution schemes and increased the predictability and potentially the speed of resolution in the EU and EEA. This entailed higher excludability of short-term freeriding on financial stability by banks through panic selling, as well as higher excludability to freeriding by regulatory arbitrage by banks and regulatory competition by states. This also held the potential of creating network effects and attract banks outside the EU/EEA.

Furthermore, some of the elements of the BRRD, such as the public interest, no-creditor-worse-off and bail-in provisions were skilfully designed to increase excludability to freeriding by states through banking nationalism and long-term freeriding by banks through incurring too much risk. In doing so they would also work against the sovereign-bank nexus and prevent bailouts motivated by national economic interests rather than financial stability considerations.

However these tools based on creditor financed bank resolution were largely not enforced. One reason for this was the institutional weakness of the EBA. It often yielded unprecise rules which left room for national interpretations enabling freeriding through banking nationalism for example in the field of MREL specifications (chapter 5.8.2.2). Furthermore, loopholes in the BRRD allowed for the use of state aid and the exemption of some banks. Moreover, the decision making on enforcement of legislation was not pooled but remained in the hands of NRAs for all but the biggest banks, allowing them to continue to freeride on short-term financial stability.

The SRB as the centralised enforcer of the BRRD turned out to be a relatively strong institution, albeit its somewhat complex decision-making process and the veto power of the Commission. This clearly raised the excludability of freeriding for banks which could be expected to fall under its

authority in case they turned out FOLTF. On paper these were roughly the same banks which fell under the remit of the ECB single supervisory board. However, the shortcomings in legislative harmonisation, notably in MREL requirements also restricted the leeway of the SRB in prescribing bail-ins.

Similarly, the SRF turned out to be a relatively strong institution. Contributions came from banks and were risk-adjusted, which increased its excludability to long-term freeriding by reducing moral hazard. Furthermore, the SRB was given strong means of enforcement to gain necessary information from banks for calculating their risk adjusted SRF contributions. It also represented an alternative to state aid and worked against the sovereign-bank nexus to further financial and fiscal stability. However, with roughly 60 billion it was too small and backed up by an ESM fiscal backstop with low centralisation of decision making which was also too little to be effective in case of a more serious crisis.

In that case, it would not be possible to effectively exclude freeriding on financial stability in the EU through national bailouts. This harmful dynamic of national bailouts would not only undermine financial stability in the EU, but also continue the sovereign-bank doom loop, which had proven so devastating in undermining fiscal stability in the context of the common currency.

In European deposit insurance the reliance on national funds and fiscal backstops turned out to be complete, as states like Germany blocked any pooling of funds and supranationalisation of control. In case of a crisis, member would therefore have to largely rely on negotiations for coordination of deposit insurance. This weak institutional setup was unable to impose a significant degree of excludability to financial stability, apart from through a limited harmonisation of national systems. Consequently, European deposit insurance remained largely trapped in a public good dynamic. The same can be said of Emergency Liquidity Assistance, which remained the domain of national central banks. So there are still large pockets in the resolution regime in the EU which remain – apart from some legal harmonisation – without significant capacity to exclude freeriding.

Excludability of freeriding of the entire European resolution regime is further compromised by the Commission's liberal stance towards state aid and the lack of harmonisation of insolvency law. This has been exploited by member states engaged in the competition for the CPR capital to circumvent BRRD provisions of bail-ins and resolution funds by not officially resolving but either propping up or liquidating "their" banks with state aid. This was usually in the interest of their national economy or important interest groups, but at the expense of European financial and often fiscal stability. It decreased excludability for long-term freeriding and therefore long-term

financial stability and would continue to leave zombie banks in place which are a burden on the economy, but which are artificially kept alive by state aid.

For the segment of very large banks under the supranational remit of the SRB financial stability financial stability became closest to having club good features. Freeriding of states through banking nationalism would largely be impossible through essentially centralised decision making at the SRB and banks would be less likely to be treated leniently and therefore encouraged to long-term freeride. However, so far only the very large Banco Popular Español of 130 billion euro was resolved under the SRB, while three other large banks were handed down to national resolution authorities due to negative public interest assessments.

Thus, financial stability and banking resolution so far remains a public good for banks as large as 30 billion euro, i.e. all those which are too small to pass an SRB PIA. However, those can be too large to be resolved or liquidated under national law without causing financial stability problems for member states.

The prospect of continued bailouts for all but the largest European banks holds incentives for long-term freeriding on financial stability for all smaller banks. Such moral hazard issues can encourage banks to accumulate more risk. Thus, the SRM framework holds relatively little incentives for crisis prevention, which is left to the SSM.

Altogether, financial stability in the EU is therefore largely dependent on successful crisis prevention by the SSM. As long as it works well, financial stability will likely be safeguarded. In case it does not manage to do so, for example due to large shocks leading to a larger crisis, the reformed system of European banking resolution would be ill-equipped to tackle it. This would likely also undermine the legitimacy of European banking policy as a whole.

6.3 The public goods character of fiscal and financial stability decisively shaped institutional choice and determined institutional strength

This dissertation has generally shown that the public good features of the fiscal and financial stability have decisively shaped institutional choice. Outside of a crisis context it clearly determined the weakness of institutions. This is because the lack of excludability of the public goods fiscal and financial stability enables member states (and banks) to freeride on fiscal and

financial stability, i.e. to enjoy the goods without having to contribute to their production through responsible policies. In this context, the short-term benefits of freeriding are clearly larger than the short-term benefits of building strong institutions, which would punish freeriding behaviour. This is why member states opted for weak institutional setups in fiscal and banking policy, which has been hypothesised in chapter 2.3.3. These weak institutional setups then were crucial for a production of fiscal and financial stability on suboptimal levels, which played an important role in leading to the financial and sovereign debt crises.

During the crisis member states stood to lose so much – namely an uncontrolled breakup of the euro and huge economic losses - that reducing their opportunities to freeride seemed acceptable if it could alleviate the crisis and reduce its costs. The benefits of freeriding on public goods provision became smaller than the benefits of deeper cooperation and institutional strengthening. This shift in cost-benefit calculations of member states has been decisive in triggering institutional reform.

How far these reforms went and how strong institutions turned out cannot easily be explained by public goods theory alone. Rather, it depended largely on the political dynamic between creditor and debtor states which had different interests and in which creditor states usually had the better negotiating position due their stronger fiscal stance. Those interests, largely informed by member states' varieties of capitalism and/or the structure and health of their banking systems led them react differently to the incentives set by the public good structure of fiscal and financial stability in terms of what kind of freeriding they wanted to continue to tolerate and what kind to preclude. In fiscal policy, creditor states wanted to continue growth freeriding and prevent stability freeriding. Debtor states wanted creditor states to invest more, support larger bailout funds, and thereby fight growth freeriding, while keeping restrictions on expenditure at a minimum and thereby continue stability freeriding.

Like in fiscal policy, creditor states tended to favour rules over resource sharing in banking policy. Despite the necessity of greater pooling of resources, such as in banking resolution and deposit insurance to secure financial stability, creditor states were weary to pool more money at the European level, while debtor states pushed for it. The reluctance to spend and invest roughly aligns with the idea of growth freeriding in fiscal policy.

In banking supervision, the structure of banking systems also played a role – a factor that did not always align with the debtor vs. creditor dichotomy. States with many small or mid-sized savings banks like Germany and Italy, wanted a more limited remit of the ECB and less strict harmonisation of rules to allow for banking nationalism, i.e. freeriding with respect to some of

their banks. Those jurisdictions dominated by large institutions like France and the Netherlands on the other hand, wanted a more extended ECB supervisory coverage and therefore to wished to extend excludable network good features to banking supervision and financial stability for all banks.

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