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(Mis)Measuring Competitiveness: The Quantification of a Malleable Concept in the European Semester

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and Teresa Hager**

(MIS)MEASURING COMPETITIVENESS: THE QUANTIFICATION OF A MALLEABLE CONCEPT IN THE EUROPEAN SEMESTER*

WORKING PAPER

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ABSTRACT

This paper studies the conceptualization and quantification of ‘competitiveness’ within the main policy coordination framework of the EU, the European Semester. This topic warrants attention since ‘competitiveness’ is not only of central importance in the European policy discourse, but also a theoretically ambiguous and malleable concept with conflicting accentuations, all of which are subject of considerable academic and political debate. By investigating the translation of competition as a contested theoretical concept into concrete indicators within a legally binding document, the paper produces three main insights that deserve further attention, both scientifically and politically. First, the indicators of the semester mainly measure *cost* rather than *technological* competitiveness, indicating a constriction of the concept at the operational level. Second, while EU policy documents regularly stress the competitiveness of the European Union *as a whole*, the indicators in the semester measure *individual country competitiveness*. Finally, the indicators in the Semester measure how the competitiveness of single Member States changes over time, not how they perform relative to others. This shallows the heterogeneity of countries, which is problematic given recent findings according to which absolute differentials of competitiveness across Member States is one important driver of accelerating polarization patterns in the Union.

Keywords European Union · competition · performativity · European semester · political economy

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1 Introduction

Few concepts receive the constant amount of attention in EU strategy papers, treaties, and policy debates as does ‘competitiveness’. It plays an important role in the institutional framework of the European Union since its inception as an economic partnership. Numerous references can be found in the *Treaty of the European Union* and the *Treaty on the Functioning of the European Union*. In 2000, the Lisbon strategy explicated the goal of making Europe “the most competitive [...] economy in the world” and since the *Annual Sustainable Growth Strategy 2020* (ASGS, published in 2019), the concept of ‘competitive sustainability’ forms the center of the economic model pursued by the Union.

This paper is concerned with the measurement of ‘competitiveness’ in the main policy coordination framework of the European Union – the European Semester. The prime focus is on how an *a priori* ambiguous concept such as ‘competitiveness’ gets translated into allegedly unambiguous quantitative indicators, and what the practical implications of this process are. This entails questions on whether there is a consistent view on the nature and determinants of ‘competitiveness’ within the Semester, and what quantitative measures for ‘competitiveness’ are used. Finally, the paper also asks what alternative operationalizations could have been used, and what the consequences of such alternative operationalizations would have been.

The motivation for this assessment is twofold: On the one hand, the literature on socio-economic polarization and divergence in Europe suggests that one factor for unequal development in the EU today is the *competition among Member States*. More precisely, the current institutions are said to foster a competitive ‘race for the best location’ that reinforces existing core-periphery patterns and aggravates the path-dependence of developmental trajectories (e.g. [Kapeller et al., 2019](#)) – a tendency that is in stark contrast to the promise of social convergence offered by the European Union, as formalized already in the Maastricht Treaty in 1992. This disparity between the narrative of the general strategies that focus on the *competitiveness of the EU as a whole*, and the detrimental implications of a *competition within the EU* motivates a closer inquiry into how ‘competitiveness’ is conceptualized within the regulatory framework of the EU.

On the other hand, the existing literature indicates that the concept of ‘competitiveness’ is *malleable*: a number of conflicting interpretations of its precise content co-exist and are subject to considerable political struggles and competing policy paradigms (e.g. [Borrás & Radaelli, 2011](#); [Princen & Esch, 2016](#)). Examples for different views of competitiveness include the ideas of *cost* competitiveness, *technological* or *quality* competitiveness, or the above mentioned *competitive sustainability*. While some of these views are difficult to compare since they refer to very different properties, others, such as *cost* and *technological* competitiveness, contain conflicting views on what makes actors successful in certain situations. Thus, the very process of translating a malleable concept into a quantitative indicator necessarily entails important conceptual and political assumptions, which shall be the main subject of the present analysis.

To this end, the rest of the paper is structured as follows: Section 2 reviews the existing literature on the role of competitiveness within the governance structure of the EU. Then, section 3 describes the key institutional elements of the European Semester and discusses the relevance of informal institutions for its actual functioning. Against this backdrop, Section 4 searches for a consistent interpretation and measurement of ‘competitiveness’ in the most important strategy document of the Semester, the *Annual Sustainable Growth Strategy* (ASGS). Because this search will turn out to be unsuccessful, Section 5 turns to the *Macroeconomic Imbalance Procedure* (MIP) and discusses the quantitative indicators used to measure ‘competitiveness’ therein, and compares them to alternatives. Finally, section 6 summarizes the main insights and concludes. The paper is also accompanied by an appendix, which contains more detailed information about the formal time line of the European Semester, its general content, and the classification of countries within the MIP and *Stability and Growth Pact* (SGP).

2 Theoretical framework and existing literature

The present paper builds upon three different strands of the existing literature: first, works on the malleability of the concept of competitiveness in general and in relation to EU rules; second, literature explicitly concerned with the

contents and effects of the European Semester, and, finally, the literature on comparative economic development in Europe, which has identified competition within the EU as one driver of polarization patterns.

2.1 The malleability of competitiveness as a theoretical concept

The first branch of literature is concerned with the reliability of EU rules on malleable concepts and the underlying conflict between different policy paradigms,¹ which is closely related to the fact that there are many different and contradicting theories of competition in the social sciences and the humanities, many of which take very different ontological, epistemological or normative standpoints (e.g. [Altreiter et al., 2020](#)). For instance, [Borrás & Radaelli \(2011\)](#) explain how the Lisbon strategy, by placing the broad and underdetermined concept of ‘competitiveness’ at its core, has helped to considerably expand the policy space of the EU. In contrast to the sole focus on economies of scale within the Single Market Strategy before, the reference to competitiveness has stressed the relevance of institutional factors ([Borrás & Radaelli, 2011](#), p. 474), thereby expanding the strategic role of policy makers (e.g. [Davies, 2014](#)). As a governance architecture the Lisbon Strategy had an important ‘ideational’ component. An ideational component is made up of a set of ideas, such as ‘governance’, ‘competitiveness’, or ‘sustainability. As argued by [Borrás & Radaelli \(2011\)](#), these ideas themselves have no clear-cut meaning *a priori*. Rather, their precise meaning is discursively malleable, i.e. “they are infused with norms that can be contested, changeable or purposefully created.” ([Borrás & Radaelli, 2011](#), p. 470). These struggles are not only about the precise meaning of the term ‘competitiveness’, but also about the institutions that are supposedly most beneficial for the competitiveness of the Union (see also [Princen & Esch, 2016](#)).

The vagueness of the concept, however, does not compromise its relevance ([Aiginger, 2006](#), p. 63): The practical implications are visible, for instance, in the distinct ways sanction mechanisms are applied in practice². Moreover, the malleability of the underlying concept also comes with an expansion of the policy space since its vagueness enables competitiveness to be a “rhetorical device” that can be used by politicians almost to their liking in justifying policies ([Linsi, 2020](#), p. 865). This fact has been discussed in the literature on the European Union not only with regard to the Lisbon strategy, but with regard to European institutions more generally, especially when it comes to the topic of competitiveness: since there is no universally agreed upon core concept of ‘competitiveness’ (e.g. [Hay, 2007](#); [Blyth, 2013](#); [Princen & Esch, 2016](#)), its ultimate interpretation is subject to discursive power struggles among different policy actors.

2.2 Content and effectiveness of the European Semesters

The second stream of relevant literature is concerned with the content of the European Semester and its political foundations. In this context, [Princen & Esch \(2016\)](#) discuss to what extent the SGP as part of the Semester corresponds to a consistent policy paradigm. They find that “the clash between [...] different perspectives, and the high political level at which decisions were taken, is likely to have led to power-based bargains and compromises without a clear underlying policy paradigm.” (p. 363).

This relates to the general debate about the conflict between economic and social policies in the Semester. At least the design of the European Semester suggests that it is theoretically envisaged so as to enhance the role social policy should play in the governance architecture of the European Union ([Verdun & Zeitlin, 2018](#)). Recent developments related to the *European Pillar of Social Rights* are further evidence of the Commission’s efforts to strengthen social objectives ([European Commission, 2021a](#)). Recent analyses of country-specific recommendations show, however, that the “policy direction” of the EU expressed therein is not clearly social ([Haas et al., 2020](#)) and that the core of the decision-making process are sound budgets indicating at least the political contestation of social policy in the EU ([Copeland & Daly, 2018](#); [Bekker, 2018](#)). [Maricut & Puetter \(2018\)](#) refer to the malleability of rules and concepts mentioned in Section 2.1 by showing that much of coordination within the European Council and especially the Economic and Financial

¹The notion of a ‘policy paradigm’ goes back to [Hall \(1993\)](#) and refers to a set of beliefs and assumptions about relevant problems and feasible solutions.

²The sanctions apply only in the context of the *Excessive Deficit and Imbalance Procedure* of the Semester (for a detailed description see the Appendix); in this case e.g. the Commission can call for policies that increase ‘competitiveness’ as a means to reduce public deficits.

Affairs Council is subject to informal policy dialogue. Within these power struggles, finance ministers usually enjoy advantages relative to “social” ministers in such coordination, indicating that economic interests are prioritized over social concerns.³

Then there are also studies concerned with the actual effectiveness of the European Semester. Several use the implementation scores published by the European Commission and mainly find little evidence for the effectiveness of the MIP (Efstathiou & Wolff, 2019, 2018; Darvas & Leandro, 2015; Deroose & Griesse, 2014; Hradsky, 2017; Hradsky *et al.*, 2016). The use of implementation scores to judge the effectiveness has, however, been seriously called into question (see, e.g., Bokhorst (2019))⁴. Yet, there are also a few case studies that analyse the impact of the MIP on domestic policy agendas (for more details see, e.g., Bokhorst, 2019; Maatsch, 2017; Eihmanis, 2017; Louvaris, 2018; Schreiber, 2017; Schulten & Müller, 2015).

2.3 Competition and comparative development trajectories in the EU

The final branch of literature relevant for the content of this paper approaches the topic of competitiveness from a different angle: rather than studying how it is infused with meaning in political discourses, it focuses on its implications for comparative socio-economic development. Kapeller *et al.* (2019), for instance, discuss the central role played by intra-European competition for the accelerating polarization tendencies in the Union: European institutions provide incentives for countries to engage in a ‘race for the best location’ *within* Europe. To win this race they rely on their technological superiority (e.g. Austria or Germany) without providing technologically less developed countries the chance to catch up, or on particular institutional ‘location factors’ such as low corporate tax rates (e.g. Ireland, the Netherlands), low labor market regulation (such as many Eastern European countries), or unregulated financial markets (e.g. Luxembourg or Malta). The effects have been documented extensively in the literature and include a structural polarization in terms of industry structures and technological competitiveness (e.g. Simonazzi *et al.*, 2013; Storm & Naastepad, 2015; Gräbner *et al.*, 2020a), the pursuit of different (and incompatible) growth models (e.g. Baccaro & Pontusson, 2016; Gräbner *et al.*, 2020a), and, in the end, a divergence of living standards (e.g. Kapeller *et al.*, 2019). To better understand the reasons for the growing polarization in Europe, an increasing number of studies applies the structuralist distinction between core and periphery countries (e.g. Simonazzi *et al.*, 2013; Celi *et al.*, 2018), where economic development is explained not only by the single country characteristics alone, but also historical events and interdependencies between the economies (for methodological remarks see Gräbner & Hafele, 2020). While the classical distinction is that of a ‘core’ and a ‘periphery’, Gräbner *et al.* (2020b) have delineated four self-reinforcing development trajectories in the EU: core countries, periphery countries, financial hubs and catch-up countries, all of them featuring different main sources for their international competitiveness.

3 The European Semester

Before studying the operationalizations of ‘competitiveness’ within the European Semester, a concise description of the Semester as such will be provided below.⁵ More precisely, this section explains its role within the institutional framework of the EU as well as the important role of *informal* institutions for its functioning. It closes with an overview over those documents that will then be used to study the operationalization of ‘competitiveness’ within the Semester.

The European Semester is the “framework for the coordination of economic policies across the European Union” (European Commission, 2021b) that was established in 2010 to address an apparent lack of policy coordination prior to

³The governance architecture of the European Union is complex and influenced by specific legislative competences. Verdun & Zeitlin (2018) reflect that the introduction of the European Semester represents “a fundamental shift in EU socioeconomic governance” (p. 139). The authors cited in this section are well aware of those shifts and that the introduction of the Semester enhanced EU institutions’ impact on national policy making although no legal shift of sovereignty from members to the Union preceded. The Treaties form the actual legal basis of the European Union and are determined by the Unions nature of economic and market integration. This focus influences the direction that economic and social policies exhibit (Copeland & Daly, 2018).

⁴For a short discussion of implementation scores regarding CSRs as used by the Commission see the appendix.

⁵A more extensive description of the official time line of the Semester and its formal functioning as well as a table with abbreviations of the most important institutions used throughout the section is provided in the appendix.

the financial and economic crisis. It synchronized existing policy coordination frameworks, and extended the scope of policy coordination by not only considering fiscal, but macroeconomic policies more generally. It comprises *inter alia* rather abstract strategy papers such as the *Annual Sustainable Growth Strategy*⁶, the more concrete Country Reports and country-specific recommendations (CSRs), as well as specific indicators with corresponding thresholds, most of them consolidated within the *Macroeconomics Imbalance Scoreboard (MIS)*. The Semester is overseen by the Commission, which monitors the compliance of Member States with the prescriptions of the Semester and delineates country-specific recommendations. All decisions of the Commission are then formally adopted by the European Council.⁷

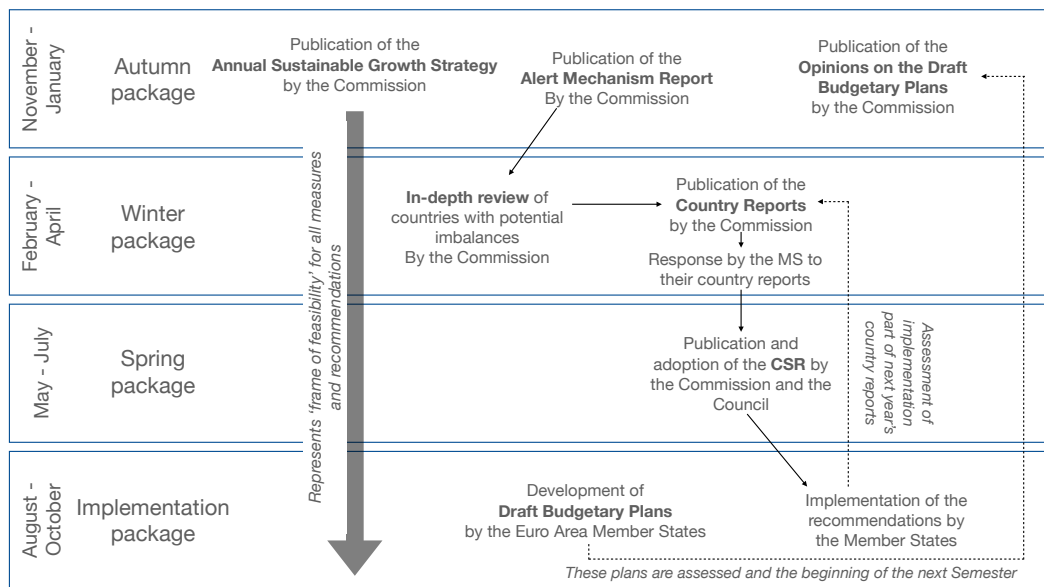


Figure 1: The official time line with the main elements of the European Semester. A more extensive description of this time line and its elements is provided in the appendix.

The name of the European Semester stems from the fact that it formally runs over the period of about one year, starting in November. It is separated into an autumn, winter, spring, and implementation package (see Figure 1). In the course of each Semester, general strategy papers such as the ASGS or the Alert Mechanism Report are published and recommendations tailored to each Member State issued (country reports, country specific recommendations).

A special role is played by the ASGS, which gets published at the beginning of the semester and sets European policy priorities for the next 12 to 18 months. Its relevance derives from the fact that all instructions and suggestions to be developed during the current semester must be traceable to the most recent ASGS. In other words: only measures that are anticipated in the current ASGS can be implemented later. It, thereby, mainly forms the ‘frame of feasibility’ of the current semester and while it remains rather abstract in its wording, it is a key source for identifying the current policy priorities within the Union.

Another center stage element is the Macroeconomic Imbalance Procedure since, together with the Stability and Growth Pact (extended by the Fiscal Compact), it is the legally binding element of the Semester. It runs through the whole cycle and thus, the evaluation of Member States and the actions they take respectively, are not a one shot incident but resemble a thorough process. Member States are first screened for breaches of thresholds assigned to specific indicators.

⁶Prior to 2020 the *Annual Sustainable Growth Strategy* was called the *Annual Growth Survey*. In the following we will only use the term *Annual Sustainable Growth Strategy (ASGS)*.

⁷While the Semester is overseen by the Commission, the Council and the European Council, the introduction of the mechanism of Reverse Qualified Majority Voting respective Commission propositions under the excessive deficit and imbalance procedures significantly increased the influence of the Commission (Van Aken & Artige, 2013). Additionally, the Economic Governance Framework as amended and shaped by the two-pack and six-pack has recently been put under review by the current Commission.

The screenings are revised again and if necessary in-depth reviews are arranged. Intensified monitoring and discussion with Member States follow that ultimately culminate in tailored prescriptions that are reassessed in next year's cycle.

The official time line from Figure 1 suggests that the Semester is a highly formalized process. In practice, however, the analysis of the definite functioning of the Semester is aggravated by the fact that the actual coordination among the European Union and its Member States follows to a considerable extent *informal* (and, thereby, largely undocumented) institutions. In effect, it is not straightforward to discern the actual implementation of the Semester from the official documents. For instance, while the time table in Figure 1 (and more precisely described in the appendix) suggests a clear coordinational hierarchy with first the Commission setting general policy guidelines in the ASGS and country reports, and Member States then answering back, ultimately leading to agreed upon recommendations in the form of the CSRs, *de facto* Member States coordinate with the Commission at the beginning of the Semester and decide upon priorities to be determined officially only later on.⁸ Another example concerns the development of the ASGS. This document is elaborated by several parties by means of circulation. Each party involved may include or exclude passages, words and phrases. Due to the different political orientations of the actors involved the end product integrates a large range of policy directions and a wide variety of indicators, which might be surprising in case one does not know about the circumstances in which the document gets compiled.

This informal character of the Semester poses a challenge for the objective of the present paper: since 'competitiveness' is a malleable theoretical concept and because of the number and heterogeneity of actors (who might hold very different views on what the right or most adequate conception of competitiveness is) involved in the delineation of general documents such as the ASGS, it will be hard to distill a consistent notion of competitiveness from the Semester. To address this challenge we proceed as follows: First, despite the informal way of its creation, the ASGS plays a decisive role in the overall Semester: each measure or policy that is going to be implemented or requested during the semester must be traceable to the ASGS. It, therefore, defines the 'frame of feasibility' of the European Semester. Thus, if one wishes to understand what particular interpretation of 'competitiveness' dominates, the ASGS simply cannot be ignored. At the same time, none of the instructions or indicators in the ASGS is legally binding. With very few exceptions, there are no sanctions for non-compliant members.

This is different for the *Macroeconomic Imbalance Procedure* (MIP) and the *Stability and Growth Pact* (SGP): these are the elements of the Semester that have the strongest legislative basis – the SGP itself, the related *Six Pack* and *Two Pack* contracts, as well as the *Treaty on Stability, Coordination and Governance in the Economic and Monetary Union* – and that even allow for sanctions for non-compliant Member States. With this legal character comes the necessity to formulate clear target dimensions and values. It is this set of target dimensions and values that will be used to infer the underlying notion of 'competitiveness' of the Semester.⁹

4 Frame of feasibility – the Annual Sustainable Growth Strategy

The ASGS is *the* central strategy paper of the European Semester. The first one – back then the *Annual Growth Survey* – was published along with the introduction of the European Semester in 2010. The ASGS sets policy priorities for Europe for the next 12 to 18 months and its exceptional relevance derives from the fact that it defines the contentual frame for the current semester. Topics and measures that are not anticipated in the ASGS are extremely unlikely to be required or suggested in other documents in the current semester, such as, for instance, country reports or country-specific

⁸Information regarding the informal institutions and character of the European Semester stem from interviews with experts and practitioners.

⁹Thus, we do not discuss 'intermediate' documents, such as the country reports and CSRs. However, a short description of implementation scores and designated policy areas as used by the Commission to assess the success of CSRs is provided in the appendix. While we analyzed these documents and did not find a coherent thread concerning competitiveness but instead several, over the years mostly inconsistent applications and implications – a finding that is in line with the "rhetorical device" character of competitiveness discussed in the literature (e.g. Linsi, 2020) – we do not report on these results for reasons of space and because these documents are neither as central as the ASGS nor legally binding as is the MIP.

recommendations – hence, frame of feasibility. Thus, one might expect that the framing and interpretation of the concept of competitiveness in the ASGS yields important information about how it is understood in the overall Semester.

However, in practice the ASGS is a rather general strategy paper that accommodates a wide range of issues and refers to a very diverse set of indicators without being ever too explicit. Definite indicators that entail a clear target dimension or concrete target values are extremely rare. Then again one can find dozens of general instructions regarding what should either be accomplished by Member States or the European Union as a whole, but nothing with regard to what is meant by competitiveness specifically. More precisely, whenever the ASGS is concerned with the topic of ‘competitiveness’, the indicators referred to are rather broad, comprising, for instance, both indicators concerned with innovation and technological competitiveness, as well as cost variables meant to measure cost competitiveness.

This is consistent with the malleable and heterogeneous character of the theoretical concept as discussed in section 2.1. And while disappointing at first, the result is actually not surprising if one considers that the ASGS is written in circulation, with various actors making suggestions on adding or removing certain formulations. Thus, the document entails quasi per construction a wide array of different notions of ‘competitiveness’. This implies that the concept is used rather inconsistently (or very broadly), aggravating a consistent interpretation of the ASGS. Hence, while the ASGS is not as useful as one might expect when it comes to the concrete interpretation of ‘competitiveness’ within the Semester, the way it is written allows for the deduction of contentual trends in the Semester and the relative importance of considerations on competitiveness. To extract this information from the documents the text of the ASGS was analyzed via a word count analysis for selected words in all ASGSs from 2011 to 2021. The results illustrate the relative importance of ‘competitiveness’ as compared to other central concepts and are summarized in Figure 2.

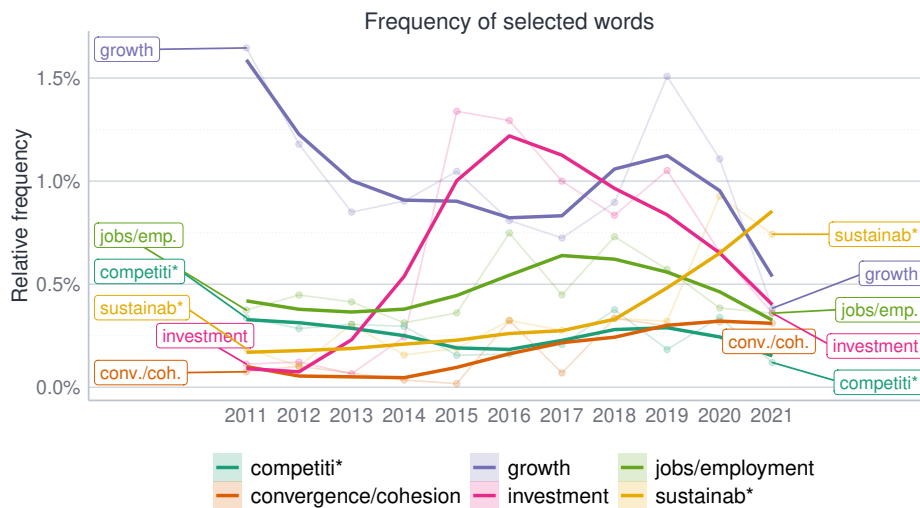


Figure 2: Relative frequency of the words ‘growth’, ‘investment’, ‘jobs/employment’, ‘convergence/cohesion’ and the stubs ‘sustainab*’ and ‘competiti*’. Frequency is measured by the share of these words of all words in each of the ASGS between 2011 and 2021. Points and shaded lines are actual observations, the bold line is the kernel estimate representing the underlying trend.

The concepts of *growth*, *investment*, *jobs/employment* traditionally form the core of the ASGS; concepts related to *sustainability* became quite relevant recently. Therefore, the relative frequency of these terms were used as reference points to assess the relative importance of terms related to *competitiveness*. In order to put the topic of ‘competitiveness’ into relation to the overall promise of economic convergence (which, according to the literature surveyed above, is potentially in conflict with a focus on competition), the terms *convergence* and *cohesion* – used rather synonymous in the ASGS – were also considered. The results in Figure 2 indicate that the topic of competitiveness is of similar importance if compared to the other concepts mentioned before, although the topic of ‘sustainability’ does have a

greater presence just now. If compared to the other topics, however, the relevance of ‘competitiveness’ remains rather stable over time.

In all, the analysis of the ASGSs has shown (1) that there is no consensus about the precise meaning of ‘competitiveness’ in the main strategy document of the Semester, which reflects the malleable character of ‘competitiveness’; (2) that the topic of ‘competitiveness’ is of continuous relevance in the ASGS, notwithstanding the fact that policy makers involved do not share an unanimous definition; and (3) that ‘competitiveness’ is written about as much as about convergence, an interesting insight given the argument from the literature that the relation between the two concepts is rather intricate (e.g. [Kapeller et al., 2019](#), see also Section 2.3).

5 The measurement of country competitiveness in the Semester

As indicated in section 3, the MIP and SGP allow to sanction, in some cases, countries not adhering to the rules and recommendations issued based on the MIP/SGP. This requires the respective rules to be formulated more concretely, which is why at this point concrete, quantitative indicators are used to measure the performance of the Member States. The indicators used to measure competitiveness are part of the MIP (the SGP refers largely to national budgets) and are compiled in the MIS, which in all comprises 14 headline and 28 auxiliary indicators.¹⁰ Three headline indicators are explicitly labeled as measuring ‘competitiveness’ ([European Commission, 2011](#)) and, thereby, contain information on how the Commission interprets this malleable concept in practice.

All indicators of the MIS come with respective thresholds used to identify countries that suffer from macroeconomic imbalances. If Member States are trespassing the thresholds, the Commission commands an in-depth review (IDR) and declares the countries in its *Alert Mechanism Report* (see section 3 and the appendix). The IDR consists in visits to Member States, closer monitoring and a closer inspection of alleged imbalances. If the suspicion of serious imbalances gets confirmed during the IDR, concrete recommendations will be issued to remedy them.

The three headline indicators that are explicitly meant to quantify the competitiveness of Member States are (1) the three-year percentage change in the real effective exchange rate (REER), which should not exceed ± 5 or ± 11 per cent for Euro and non-Euro countries, respectively; (2) the five-year percentage change in export world market shares, which should not fall below -6 per cent; and (3) the three year percentage change in nominal unit labour costs (ULC), i.e. the ratio of labour cost to labour productivity, which should not exceed 9 or 12 per cent for Euro and non-Euro countries, respectively. All three indicators refer to percentage changes and, thereby, do not take into account the different levels of the countries.

Figure 3 shows the dynamics of the indicators for countries following different development models. The development models referred to were identified in [Gräbner et al. \(2020b\)](#) and are summarized in Table 1.¹¹ The reason why Figure 3 refers to the development models and not individual countries is that this allows for the relation of the present considerations with the result of the polarization literature surveyed in section 2.3.¹² This literature argues that *competition among Member States* and a simultaneous *divergence in competitiveness* among Member States are an important driver of a polarization in living standards, pointing to a conflict between the overall goal of convergence within the EU on the one hand, and competition *among* Member States on the other (e.g. [Kapeller et al., 2019](#)).

Four main conclusions emerge from an inspection of the indicators and their dynamics. The first concerns the selection of indicators in the first place: two of the three measures of competitiveness are directly meant to measure *cost*

¹⁰A more complete description of all indicators, the thresholds and the resulting assessments of the countries can, again, be found in the appendix.

¹¹Different development models are characterized by different main drivers for the country’s development. For instance, the economic development of core countries relies mainly on a sizeable and complex industry sector, whereas financial hubs rely mostly on the value added created in their financial sectors. See [Gräbner et al. \(2020b\)](#) for more details, and [Baccaro & Pontusson \(2016\)](#) for the related concepts of a growth model.

¹²Moreover, a visualization containing all individual countries, which we provide in the appendix, is less clear and, thereby, less illustrative.

Table 1: The country groups delineated by Gräbner *et al.* (2020b).

Country group	Member
Core countries	Austria, Belgium, Denmark, Finland, Germany, Sweden
Periphery countries	Cyprus, France, Greece, Italy, Portugal, Spain
Financial hub	Ireland, Luxembourg, Malta, Netherlands
Catchup countries	Bulgaria, Croatia, Czechia, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, Slovenia

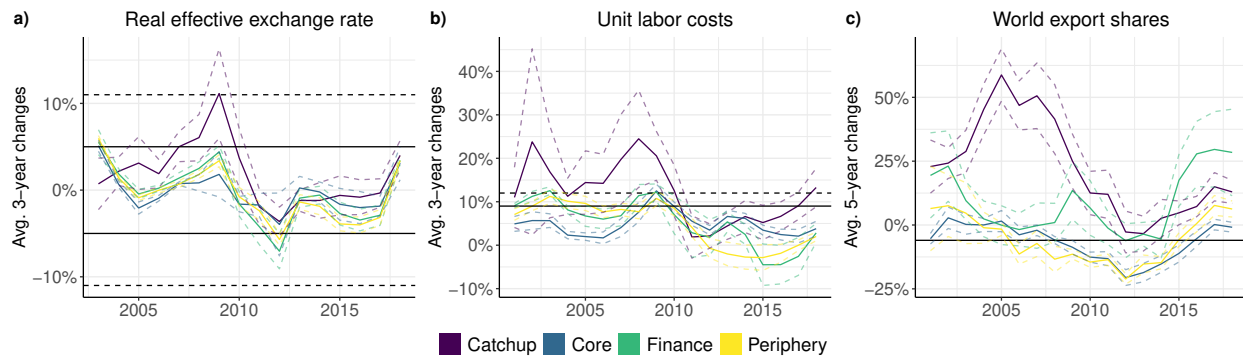


Figure 3: The three main competitiveness indicators of the MIP for countries in different country groups. The complete line refers to the average, the dashed lines indicate the standard deviation of the group. The black line refers to the threshold of the MIP. If there is an alternative threshold for non-Euro countries, it is indicated via a dashed black line.

competitiveness (labor costs and relative exchange rate). More precisely, if one understands ‘competitiveness’ broadly as the ability to gain market shares for one’s products on global markets, then one can distinguish between two main sources of competitiveness: low prices or exceptional goods (or, similarly, goods of exceptional quality, see [Sutton, 2012](#)). Given the relatively high social and ecological standards in the European Union, the pursuit of an export strategy that is mainly built on cost advantages is not promising (see also [Kapeller *et al.*, 2019](#)). Rather, the relatively advanced countries in the European Union must base their export model on *technological* competitiveness, i.e. their ability to produce products that other regions cannot produce (or, at least, cannot produce on the same level of quality). Policy measures that boost the cost competitiveness of a country are, however, unlikely to boost its technological competitiveness since the production of more advanced products usually comes with *higher* costs. Given that for advanced countries such as Euro Member States it is technological rather than cost competitiveness that is of particular relevance on international markets (e.g. [Carlin *et al.*, 2001](#); [Storm & Naastepad, 2015](#); [Dosi *et al.*, 2015](#)), it is notable that two of the three measures of competitiveness are directly meant to measure cost competitiveness via labor costs (ULC) and the relative value of the European currency (REER).¹³ The third indicator, export shares, is a very broad measure of general competitiveness. The dimension of *technological* competitiveness is not considered in the MIS indicators, nor does one find any reference to the concept of ‘competitive sustainability’, which, while being vague itself, takes a prominent place in the current Annual Growth Strategy of the Union (see Section 4).

Second, the three main indicators exclusively refer to relative changes of individual countries, i.e. percentage point changes with regard to previous values. This means that they do not consider the performance of a country relative to others, which would be more intuitive given the general meaning of ‘competitiveness’, but only its individual trend. The fact that absolute differences between countries are likely to be relevant is illustrated in Figure 4, where we compare the levels of the third indicator, world export shares, after controlling for the population size of the different countries, to its

¹³Moreover, these measures are computed using information on the entire economy. One might argue that only the costs in selected sectors are relevant for actual cost competitiveness, since, e.g., the health care sector is only concerned with offering services in the local economy, but is not meant to compete on global markets. This issue could be addressed by using sectoral data.

average changes between 2010 and 2019. The relationship is not very pronounced, indicating that the focus on relative changes over time shallows important differences in levels across countries.

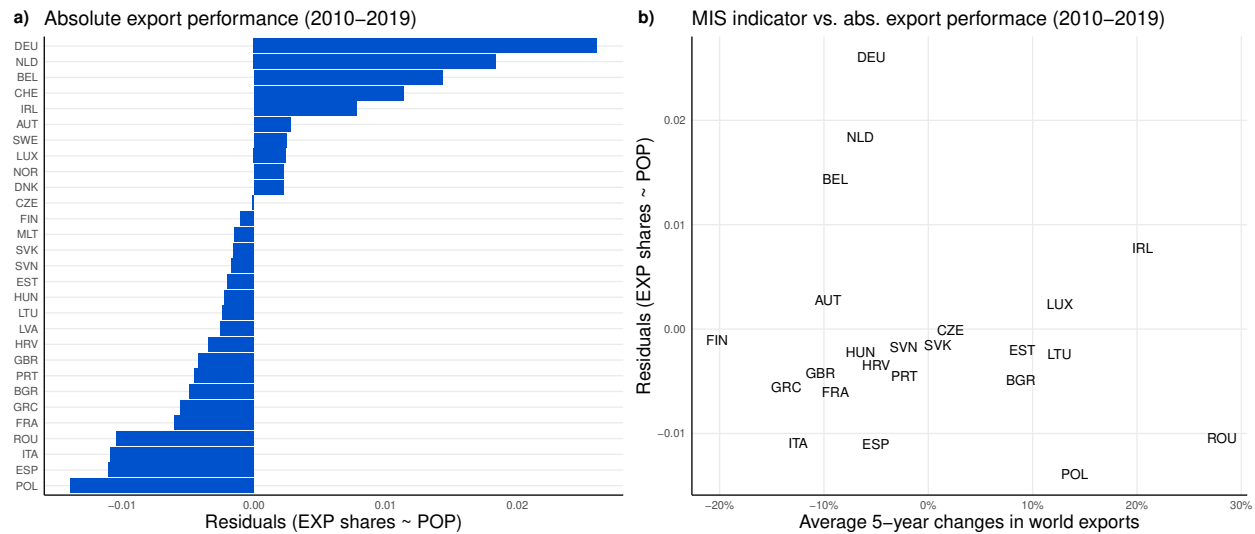


Figure 4: The residuals after regressing world market shares on population as an absolute measure for competitiveness (panel a) and the relationship of this measure to the average 5-year changes of world export shares as used in the MIS. Data refers to the period between 2010 and 2019. Source: Eurostat.

To underscore the relevance of the previous two points, the competitiveness of the Member States as measured by the MIS indicators is now compared with a measure of technological competitiveness, that also allows for a direct comparison of the levels across countries. More precisely, we will use the index of economic complexity (ECI, [Hidalgo & Hausmann, 2009](#)), which is meant to measure the level of technological capabilities accumulated in a given economy. It has, in a slightly modified version, also been used as a direct measure for the overall competitiveness of a country ([Tacchella et al., 2013](#)). A comparison of the ECI with the measures used in the Semester might show to what extent the latter takes into account the dimension of *technological* competitiveness.

As can be seen in figure 5, however, the correlation between the ECI and all variables used in the MIS is modest at best. Regarding ULC, the correlation tends to be positive, indicating that more advanced countries have higher ULC, consistent with the fact that more complex products usually have higher factor costs. For the other two variables, no clear pattern shows itself. One has to keep in mind, however, that the ECI is a stock variable, whereas the MIS indicators measure changes. Nevertheless, if one takes them as general measures of country competitiveness, one would expect a clearer relationship than the one observed in figure 5.

To compare changes in economic complexity with the indicators in the MIS one would need to use changes in the global ranks of economic complexity since changes in the indicator as such cannot be meaningfully compared over time. However, even if changes in the ranks are considered, the relationship is not as clear as one would have expected (see figure 6): ULC are, if anything slightly positively associated with improvements in the global ECI ranking, consistent with the quality interpretation above. There is a slightly positive relationship for the REER, which is surprising in the sense that a higher REER implies a reduction in cost competitiveness, but consistent with the results according to which cost competitiveness is not essential for the export success of advanced countries (e.g. [Carlin et al., 2001](#); [Storm & Naastepad, 2015](#); [Dosi et al., 2015](#)). Finally, there is a considerably positive relationship with changes in the world export shares. This latter point is by far the most straightforward relationship, yet it is largely driven by countries from the Eastern European catch-up category. For the remaining countries the relationship is moderate at best.

The third noteworthy issue with regard to the headline indicators on competitiveness is the fact that these indicators measure not mainly how individual countries contribute to the competitiveness of the EU as a whole, but rather how

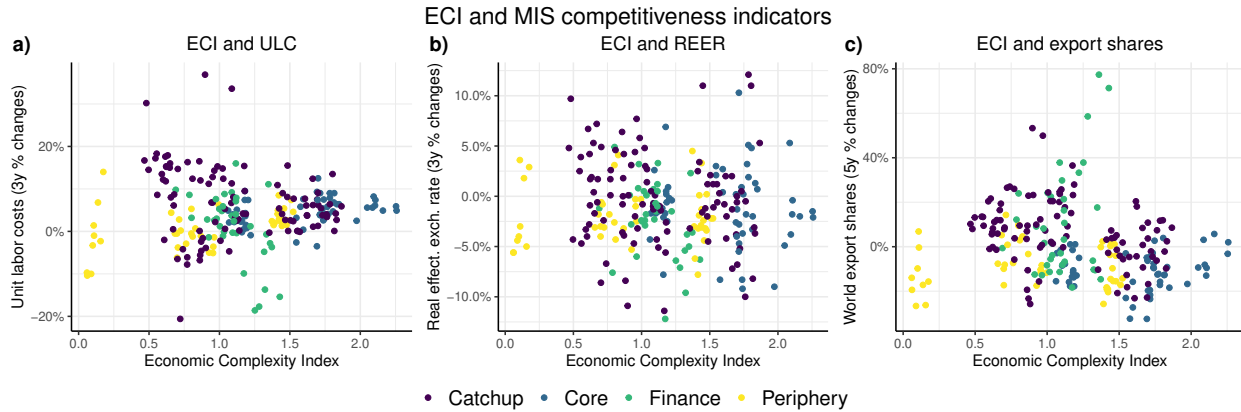


Figure 5: The relationship between the Economic Complexity Index as a main indicator for technological competitiveness and the competitiveness indicators in the MIS. Data spans from 2010 to 2019. Source: Eurostat and Atlas of Economic Complexity; authors’ own calculations.

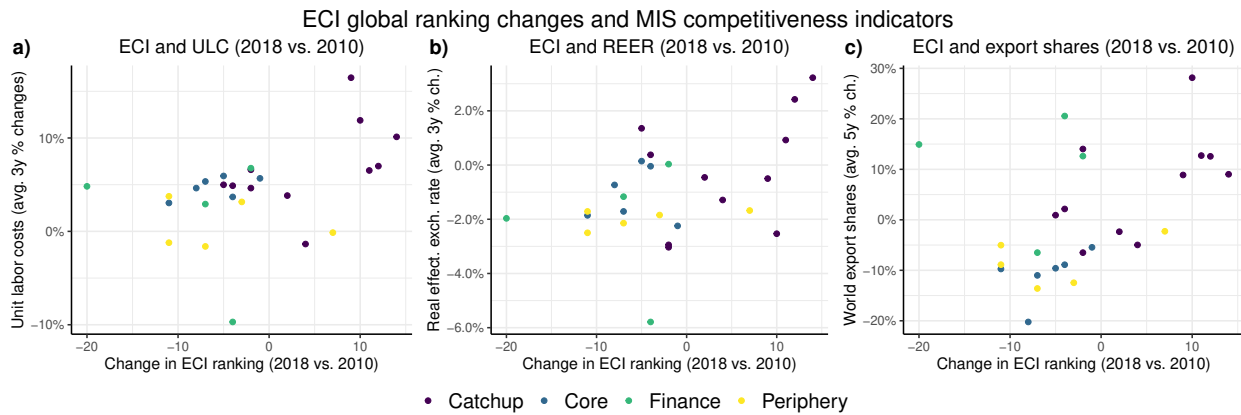


Figure 6: The relationship between changes in the global rank of the Economic Complexity Index from 2010 to 2019 and the competitiveness indicators in the MIS. Source: Eurostat and Atlas of Economic Complexity; authors’ own calculations.

these countries perform within the EU. Sometimes, their individual competitiveness is explicitly measured against that of other EU countries. For the computation of the REER, for instance, the rate is relative to a set of 42 countries in which 27 countries are from the EU itself. When computing world export shares, an increase in the competitiveness of one EU country comes, *ceteris paribus* also with a decline of competitiveness of the other Member States. While measuring the competitiveness of the EU as a whole is not trivial, the misalignment of the rhetoric in the strategy papers and the indicators used in the Semester is noticeable. While measuring the competitiveness of the EU as a whole is not trivial, the misalignment of the rhetoric in the grad strategy papers, such as the Lisbon Strategy or Europe 2020, and the indicators used in the Semester is noticeable

Finally, when it comes to the actual dynamics of the indicators, one cannot observe any clear pattern for countries following different development models (see figure 3). While one might interpret this as evidence against the findings of the polarization literature surveyed above, an alternative interpretation would stress the fact that the MIS indicators do not measure the kind of competitiveness that, according to the literature, is decisive for the success of the development models, i.e. (differences in the level of) *technological* competitiveness. This latter interpretation is more consistent with the observation that differences among groups are visible if one takes into consideration measures for technological competitiveness, such as the ECI, which show intuitive behaviors for the different country groups (Gräbner *et al.*, 2020a).

In all, the elaborations above suggest that, first, within the MIS the malleable concept of competitiveness is translated into a consistent set of quantitative indicators, and thereby, interpreted in a very particular way. Thus, in contrast to the (vague) ASGS, not all different interpretations of ‘competitiveness’ are considered, but mainly the specific idea of cost competitiveness. Second, the indicators show differences in levels across countries; they only measure changes in the competitiveness of single countries. This is a rather counterintuitive approach, given the general character of ‘competitiveness’ as a *relative* concept. Finally, the way ‘competitiveness’ is measured is inconsistent with the common narrative of the EU to become a competitive region *as a whole*; rather, the indicators focus on country-specific rather than EU-wide competitiveness. As will be discussed below, this has also some important implications for how the measurement of competitiveness in the Semester relates to the overall promise of economic convergence.

6 Discussion

The present paper was concerned with the interpretation (and operationalization) of the concept of ‘competitiveness’ in the central policy coordination framework of the EU, the European Semester, an analysis that was aggravated by the relevance of informal institution governing the actual practice of the Semester as such. This question is, nevertheless, relevant since while the concept of ‘competitiveness’ is regularly mentioned in the main strategy papers of the EU, the existing literature has stressed its malleability and the fact that the ultimate interpretation of what ‘competitiveness’ means and how it is determined has been subject to discursive struggles and differing policy paradigms within the EU.

Against this backdrop the paper was concerned with the search for translations, which turn the theoretically ambiguous concept into concrete and quantitative indicators. The first attempt to identify such translations was made with regard to the central strategy document of the Semester, the ASGS. While the ASGS is extremely important since it defines the ‘frame of feasibility’ for a whole cycle of the Semester, the Commission therein remains very vague on the specific definition and determination of competitiveness. Instead of translating the ambiguous concept into concrete indicators, references are made to a wide array of different and conflicting interpretations found in the theoretical literature. This, however, does not compromise the importance of ‘competitiveness’: the word count analysis indicates that competitiveness is a constantly discussed subject within the ASGS, the extent of which is currently comparable to central concepts such as ‘convergence’, ‘growth’ or ‘employment’.

The encountered ambiguity motivated the analysis of the legally most binding parts of the Semester, the MIP and SGP. In the MIP, the concept has been translated into three concrete headline indicators, which are meant to measure the competitiveness of countries. They, in turn, allow for the deduction of the underlying theoretical concept that turns out to be much more homogeneous than the one confronted with in the (vague) ASGSs.

The analysis of these indicators has produced three major insights that deserve further attention. As conjectured above they all show a close relation to the empirical results found in the literature on European socio-economic polarization that diagnose a conflict between the central promise of economic convergence and competition between Member States. First, the indicators used in the MIP are mainly meant to measure *cost* competitiveness. There are no indicators concerned with *technological* competitiveness present in the MIP, suggesting a constriction of the concept that deserves to be subject of closer inspection. This is particularly relevant since earlier, as well as more recent results from the polarization literature highlight the relevance of *technological* rather than *cost* competitiveness (e.g. Carlin *et al.*, 2001; Storm & Naastepad, 2015; Dosi *et al.*, 2015; Kapeller *et al.*, 2019). *Technological* competitiveness is the main determinant of the success on international markets for more advanced economies. At the same time, the lack thereof in poorer periphery countries is at the root of current polarization tendencies (e.g. Gräbner *et al.*, 2020a). Therefore, the absence of a measurement for technological competitiveness is problematic, at least given the goal of the EU to foster convergence among Member States.

Second, the indicators used in the MIP tend to place competition *between* Member States at center stage; they do not measure how individual countries contribute to the competitiveness of the EU *as a whole*, but rather how their own competitiveness changes over time. This points to an inconsistency with the alleged goal of the more general

strategy papers such as the Lisbon Strategy, where the main concern is to enhance the competitiveness of Europe *as a whole* and, more fundamentally, with the promise of the EU to achieve a convergence of living standards among its Member States – a topic that is at least as important in the yearly ASGS as is competitiveness. In practice it means that beggar-thy-neighbor policies, which may help to increase the competitiveness of a single Member State at the expense of the others, are not desirable from this general viewpoint, but they can improve the assessment of a country within the MIP. Of course, one might argue that the competitiveness of the European Union as a whole is nothing but the sum of the competitiveness scores of its members, and that the individualistic incentives currently in place actually are fostering overall competitiveness as well. However, there are dilemma-like situations where overall cooperation and coordination among Member States would be preferable as compared to a state where each country maximizes its own competitiveness. Collecting corporate taxes or ensuring ecological production standards are only two of the most prominent examples in this regard. This second insight emphasizes the potential of the indicators to foster divergence since competition *between* countries in the EU is a main driver of the current polarization patterns (e.g. [Kapeller et al., 2019](#)).

Third, existing indicators focus on *changes* in the competitiveness of countries rather than their levels relative to others. This is potentially problematic since it shallows the obvious heterogeneity of countries. The literature on comparative economic development has found that *absolute differences* of competitiveness across countries are one important reason for the accelerating polarization between core and periphery countries in the EU (e.g. [Gräbner et al., 2020a](#)). The current measurement is inapt to reflect these difference. However, if the central policy coordination mechanism of the EU does not measure the present heterogeneity, it is less likely to become addressed by adequate policies. Rather, in order to put the persistent differentials in levels of competitiveness on the agenda, they have to be highlighted by the relevant indicators. A consideration of such indicators, such as the ECI used above, would point to the fact that not only considerable differences exist, but also that without addressing these differences the political promise of the EU to foster social convergence becomes ever more difficult to achieve. What is needed is a strategy geared towards improving the competitiveness of the currently least competitive countries in the EU – at least if one wishes to realize the original convergence promise of the European Union.

In all, ‘competitiveness’ is a theoretically diverse, malleable and contested concept, with a close connection to the problem of economic convergence. The present analysis has focused on the translation of such a contested theoretical concept to a set of quantitative indicators in the European Semester, and has highlighted several aspects that warrant further attention. This has provided a glimpse on the numerous implicit assumptions that enter the operationalization of competitiveness, but also highlighted the powerful implications different approaches to its measurement have, especially with regard to the topic of economic polarization within Europe.

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APPENDIX TO
(MIS)MEASURING COMPETITIVENESS: THE QUANTIFICATION
OF A MALLEABLE CONCEPT IN THE EUROPEAN SEMESTER*

WORKING PAPER

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ABSTRACT

This appendix complements the main paper by providing additional information on the European Semester and alternative ways to illustrate some of the main findings. Section 1 contains a detailed description of the content and the time line of the Semester. Section 2 provides information about how Member States were classified according to the MIP and SGP criteria. Then, Section 3 reproduces Figure 3 of the main paper for the SGP and MIP categories discussed before, as well as for individual Member States. Finally, Section 4 summarizes information about the country-specific recommendations, most importantly the policy areas covered and assessment of the degree to which the recommendations were implemented by the Member States.

Keywords European Union · competition · performativity · European semester · political economy

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1 Main elements of the European Semester

In the following the main rules and procedures of the Semester are summarized. For an overview over the most common abbreviations used in the Semester see table 1.

1.1 A full cycle of the European Semester

The official mandatory timetable of the European Semester runs over one year – hence the name ‘Semester’. It is divided into four packages starting in November (see Figures 1 and 2): the autumn, the winter, the spring, and the implementation package.

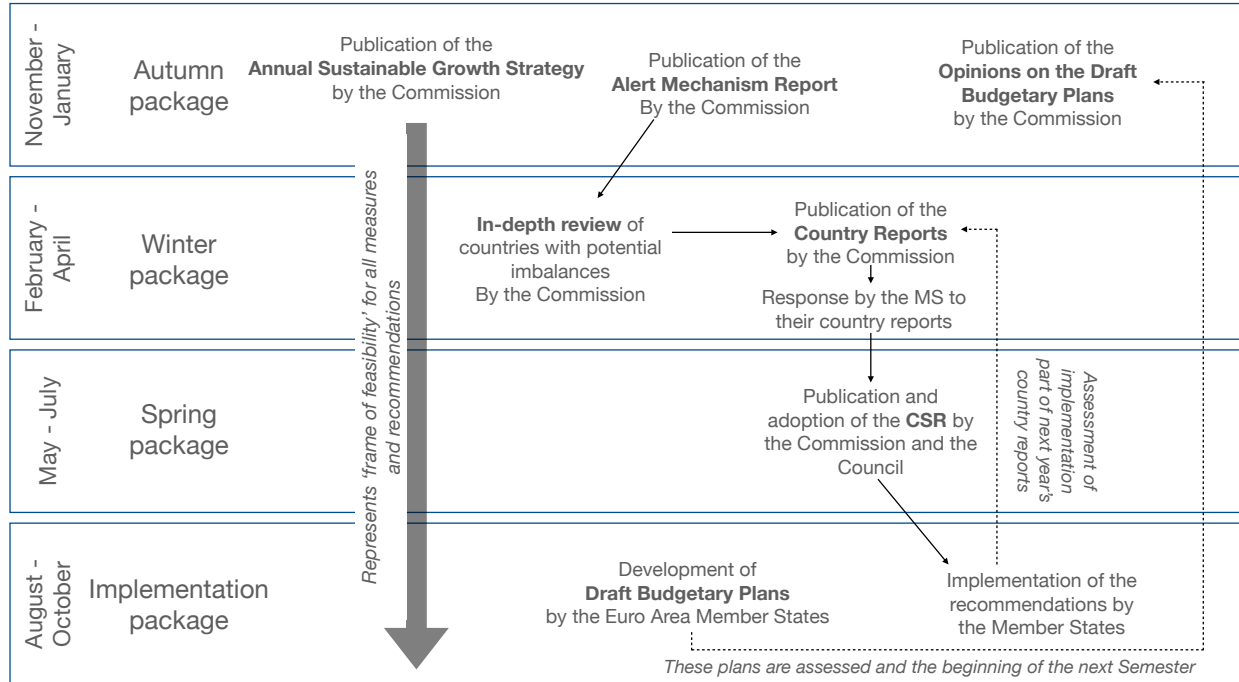


Figure 1: The main elements of the European Semester.

In November, the autumn package constitutes the start of the Semester: the Commission publishes the *Annual Sustainable Growth Strategy* (ASGS) setting social and economic priorities as well as policy guidance for the upcoming year. At the same time, the Commission issues an Opinion on each draft budgetary plan (DPB) prepared by Euro Area

Table 1: Abbreviations of Concepts of the European Legal Framework.

Abbreviation	Concept
AMR	Alert Mechanism Report
ASGS	Annual Sustainable Growth Strategy
ASG	Annual Growth Survey
CSR	Country-specific Recommendation
EDP	Excessive Deficit Procedure
EIP	Excessive Imbalance Procedure
DBP	Draft Budgetary Plan
IDR	In-depth Review
MIP	Macroeconomic Imbalances Procedure
MIS	Macroeconomic Imbalances Scoreboard
MTO	Medium-Term Budgetary Objectives
SGP	Stability and Growth Pact

Member States (see below). Also part of the European Semester are the Euro Area recommendations as well as the *Joint Employment Report*.¹ The *Macroeconomic Imbalances Procedure* (MIP) is initiated by the publication of the *Alert Mechanism Report* (AMR) by the Commission. The AMR uses the *Macroeconomic Imbalances Scoreboard* (MIS, see section 1.2) to assess potential (internal and/or external) economic imbalances. Those countries with imbalances that warrant further investigation are then given an in-depth review (IDR). The winter package (February-April) comprises the publication of Country Reports that include the results of the IDR and are published for all Member countries in February. They comprise an analysis of the member states' current economic situation as well as their advancements made in implementing the country-specific economic policy recommendations issued during the previous cycle. Officially, Member States respond to these country reports in the month after their publication by describing their reform strategies for the upcoming year, yet is discussed in the paper, informally the content of the reports and recommendations has been agreed upon by the Commission and Member States already in advance. In April, Member States present their national reform programs as well as their stability (Euro Area members) or convergence programs (non-Euro Area members). Therein, states address the policies they (intend to) implement as well as outstanding country-specific recommendations (CSR) and a three-year budget plan respectively. The spring package (May-July) consists of the assessment of these programs by the Commission as well as the publication and endorsement of country-specific recommendations (CSRs). The recommendations are integrated into next year's national budgets and reform plans of Member States. CSRs constitute individually customized advice for member states "on how to boost jobs, growth and investment, while maintaining sound public finances" (European Commission, 2021b). They specifically take into account the priorities identified in the Annual Sustainable Growth Strategy and are endorsed by the Council in July. The Semester closes with the implementation package (August till October), in which Member States incorporate the CSR into reform plans and national budgets for the following year. Euro Area members additionally need to publish a DBP in October that subsequently is assessed by the Commission with relevant CSRs and Stability and Growth requirements in mind (Commission Opinion on DBPs). It assesses the plans as either compliant, broadly compliant or at risk of non-compliance. The Commission's Opinion can then be taken into account when finalizing national budgets. This constitutes a whole cycle. Whenever a member state is part of a different financial assistance program supervised by the European Union (e.g. the *European Stability Mechanism* for Greece, or the *Balance of payments assistance facility* for Hungary), it does not partake in the European Semester. In the following, the two main elements of the semester, the MIP and the SGP, are explained in more detail.

1.2 The Macroeconomic Imbalances Procedure

As part of the European Semester the MIP was introduced in 2011 as a consequence of the "Six Pack" reform of economic governance. It consists of a scoreboard – the Macroeconomic Imbalances Scoreboard (MIS) – that contains 14 headline and 28 auxiliary indicators meant to quantify external and internal (im)balances, as well as the overall

¹The *Joint Employment Report* consist of an analysis of employment and the social situation in Europe as well as of national policy responses. The Euro Area recommendation discusses critical issues concerning the function of the Euro area and entails suggestions for concrete measures that can be implemented on a national level.

Table 2: The main elements of a full cycle of the European Semester.

Month	Action
November	Publication of the ASGS, the AMR and the Opinion on the DBPs by the Commission
December	Member States adopt budgets
February	Publication of Country Report by Commission
April	Presentation of national reform programs and stability and convergence programs by Member States
May	Publication of CSRs by Commission
October	Publication of DBPs by Member States

Table 3: The headline indicators of the MIS. Indicators (3) - (5) are meant to measure 'competitiveness'.

#	Indicator	Unit
(1)	Current account balance	3 year average
(2)	Net international investment position (NIIP)	per cent of GDP
(3)	Real effective exchange rate (REER)	3 year percentage change
(4)	Global export market shares	5 year percentage change
(5)	Unit labor costs (ULC)	3 year percentage change
(6)	House price index	1 year percentage change
(7)	Private sector credit flows (transactions)	per cent of GDP
(8)	Private sector credit debt	per cent of GDP
(9)	General government sector debt	per cent of GDP
(10)	Unemployment rate	3 year average
(11)	Youth unemployment rate	3 year change in p.p.
(12)	Long-term unemployment rate	3 year change in p.p.e
(13)	Activity rate	3 year change in p.p.
(14)	Financial sector liabilities	1 year percentage change

competitiveness of the member state in question. The headline indicators are summarized in table 3. Headline indicators (3) - (5) are explicitly labeled as measuring 'competitiveness' (European Commission, 2011) and thereby contain information on how the Commission interprets this malleable concept in practice (see below).

For each headline indicator indicative thresholds are assigned.² The breach of one or more thresholds necessitates an economic investigation undertaken by the Commission as part of the AMR. The AMR assesses whether Member States are at risk of imbalances or exhibit imbalances and identifies those countries that need further investigation via an IDR. The IDRs then form part of the basis for MIP-specific CSRs.

An IDR may result in one of the following assessments: (1) *no imbalances*, (2) *imbalances*, (3) *excessive imbalances* or (4) *excessive imbalances with corrective action*. Thus, the MIP consist of a preventive arm and a corrective arm. The corrective arm comprises the excessive imbalance procedure (EIP), a procedure that can be activated for Member States with excessive imbalances. As part of the EIP, a corrective action plan is submitted that envisages measures as well as a time frame. While Member States that fail to comply with the corrective action plan may in principle face sanctions, such as fines, so far no Member State has been subject to an EIP. In cases where there are (excessive) imbalances, specific monitoring is applied.³ In practice, this takes the form of intensified dialogue between national authorities and the European Commission. This dialogue is meant to ensure that the Member States implement policy measures according to their recommendations issued by the Commission.

1.3 The Stability and Growth Pact

Surveillance under the SGP distinguishes between Euro Area and non-Euro Area members. The SGP was adopted in 1997 to complement the restricted role of the ECB. Since 2013 the "Two Pack" regulation ensures closer monitoring as well as policy coordination for Euro Area members in order to counteract tendencies that might culminate in another financial crisis. The central provisions are that (1) government deficits must not exceed 3% of GDP, that (2) total government debt must not exceed 60% of GDP, and (3) that the structural deficit does not exceed a country specific value. The "Two Pack" regulation envisages the assessment of draft budgetary plans (DBPs) that have to be submitted by Member States in October each year as well as the "correction of excessive deficit" (European Parliament and European Council, 2013). Central for the evaluation of the DBP are the adherence to CSRs as well as EDP recommendations. The evaluation of DBPs should provide concrete ex ante guidance and categorizes the countries as either (1) compliant, (2) broadly compliant, or (3) at risk of non-compliance.

²The thresholds represent the lower and upper quartiles of the distribution of the indicators' values for the Member States in a pre-defined time period. The (indicator-specific) dates can be found in European Commission (2011, p. 5-6).

³Prior to 2016 only selected Euro Area countries identified with imbalances relevant to the Euro Area and countries exhibiting excessive imbalances received specific monitoring.

Just as the MIP, the SGP comprises a preventive and a corrective arm. The *preventive arm* is meant to monitor budgetary policies. It does so via the Medium-Term Budgetary Objectives (MTOs) that specify budgetary targets for each Member State and takes into account cyclical constraints and should make sure that budgets are in line with SGP demands (for a thorough discussion of MTOs and a critique see [Heimberger & Kapeller, 2017](#)). The CSRs also include references to the preventive arm of the SGP: here, a *Significant Deviations Procedure* might be opened if Member States do not adhere to their MTOs. If they fail to correct their budget, they might become subject to the corrective arm of the SGP, the *Excessive Deficit Procedure* (EDP). Member States' ideas on how to reach their MTOs are the subject of the *stability and convergence programs*. Those programs are in turn assessed by the Commission performing a structural balance analysis as well as keeping in mind the expenditure benchmark, a rule that seeks to keep the net growth rate of government spending at par with its medium-term potential economic growth rate. As indicated above, the corrective arm of the SGP consists of the EDP. EDPs are conducted since 2009 and are meant to ensure a correction of excessive deficits or debts. They usually start with a Member State being at risk of breaching the 3% deficit threshold or the 60% debt level. Member States have a specific time horizon (usually 6 months) in order to comply with Commission recommendations issued at the beginning of an EDP. Since 2013 the "Two Pack" creates a system of closer monitoring and reporting on countries.

If Member States fail to implement effective action as described by the recommendations, the EDP is stepped up, a new deadline is set and revised recommendations are issued. Such step ups usually come with sanctions. Such a choice is decided by the Commission as well as the Council. If, however, effective action was taken, the EDP is abrogated. This means that Member States can either be in or out of an EDP. For Euro Area members an entry into an EDP means also to draft "economic partnership programs" (EPPs), which provide a roadmap for structural reforms considered as instrumental to an effective and lasting correction of the excessive deficit" ([European Commission, 2021a](#)).

2 The indicators of the Semester in practice

To complement the existing literature on the European Semester, and to illustrate more clearly what the rules and institutions mentioned in Section 1 mean in practice, this section comprises a description of how EU Member States are actually classified by the legally binding indicators of the Semester. These classifications take place within the SGP and MIP procedure. In the course of the MIP Member States are evaluated according to the MIS. The first step of the evaluation consists in detecting benchmark breaches of the 14 headline indicators of the MIS. If Member States are trespassing, the Commission commands an in-depth review (IDR). Countries in need of an IDR are declared in the Alert Mechanism Report. The IDR consists in visits to Member States, closer monitoring and as the name indicates a closer inspection of alleged imbalances. The outcome of the IDR can either be that no imbalances, imbalances or excessive imbalances were detected. The categorization that we use for the MIP are the results of the IDRs, meaning that countries are allocated into one of the following categories: (1) no IDR, (2) IDR with no imbalances, (3) IDR with (excessive) imbalances, and (4) non eligible for AMR assessment. For the sake of clarity, the categories 'IDR with imbalances', 'IDR with excessive imbalances' and 'IDR with imbalances and specific monitoring (before 2016)' were merged into one category ('IDR with (excessive) imbalances') since all of the categories send a somewhat similar signal to Member States. Thus, in practice there are five (six) different categories, and not just three.

In the context of the SGP two classifications prevail. First, we consider the evaluation of draft budgetary plans of Euro Area members by the Commission. The drafts are published in October and then classified by the Commission to either comply, broadly comply, be at risk of non-compliance or to be at a particularly serious risk of non-compliance with SGP provisions. Second, we use the presence or absence of an Excessive Deficit Procedure (EDP) as a categorization⁴. Thus, Euro Area Member States are categorized as either (*broadly*) *compliant* or (*particularly serious*) *risk of non-compliance*, and *all* Member States along their status in an EDP (yes or no).

⁴The assessment of compliance with SGP rules via medium-term budgetary objectives (MTOs) and the launch or abrogation of an Excessive Deficit Procedure (EDP) is partly independent of the Semesters timetable and depends on the budgetary situation of Member States.

2.1 MIP and SGP Status Over Time

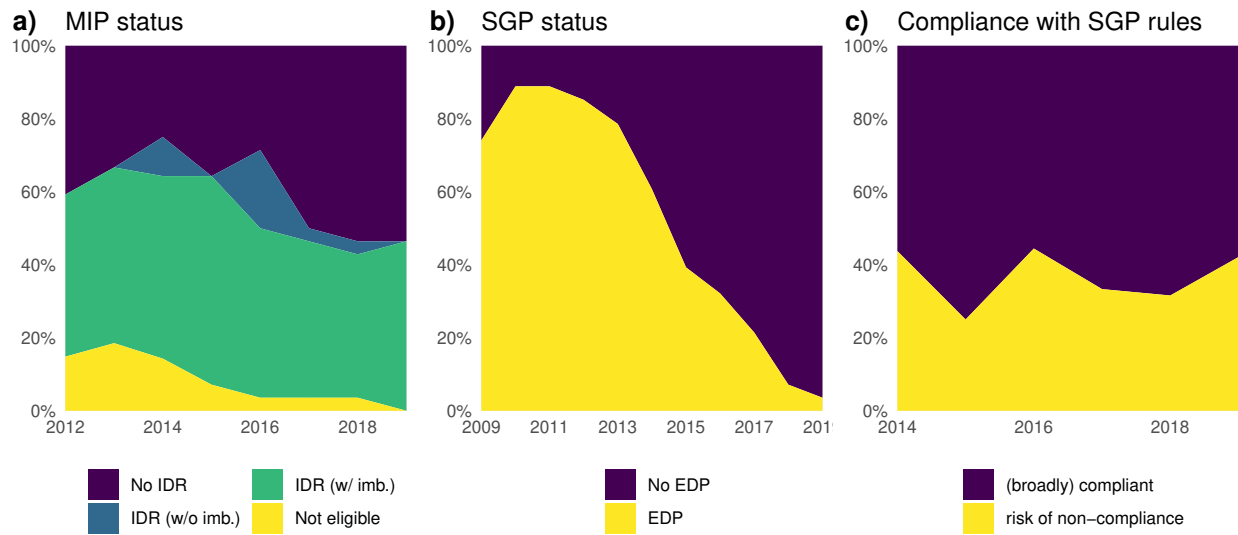


Figure 2: MIP and SGP status over time (panels a and b), as well compliance to SGP rules (panel c). The category 'risk of non-compliance' in panel c also includes category particularly serious risk of non-compliance.

How are countries classified according to the MIP and SGP procedures described in section 1 in practice? Figure 2 shows the relative number of countries that belong to an MIP (a) and SGP (b) status over time, and how countries comply with the SGP rules (c). Regarding the MIP status, the overall numbers remain relatively stable, with those countries not being eligible for AMR assessment and those that are not diagnosed with imbalances after receiving and IDR being rather temporal exceptions, and those not receiving an IDR at all slightly growing over time. When it comes to the SGP (figure 2b), one immediately notices that the share of countries participating in an EDP decreases drastically over time, from 100% to almost 0% of Member States. The initially high shares are due to the fact that the EDP was introduced after the financial and economic crisis, a time where practically all Member States experienced difficulties with their budgets and government debts. The current state with almost no countries in an EDP is as it should be under normal conditions. With regard to the compliance (figure 2c), a slight majority of countries is consistently classified as (broadly) compliant, with the numbers being relatively stable.

How do the MIP and SGP status correlate with each other? Are those countries receiving an IDR also participating in an EDP? And are countries that comply with the SGP rules less likely to receive an IDR? In Figure 3 one can observe how the MIP status correlates to the compliance with the SGP rules (panel a) and the SGP status (panel b). The figure contains all observations between 2014 and 2019 and confirms what one might have expected: countries that do not receive an IDR in the MIP tend to be more compliant with the SGP rules, and are less often subject to an EDP. Interestingly, however, countries receiving an IDR but are not diagnosed with imbalances are relatively more likely to run a risk of non-compliance with the SGP rules than being subject to an EDP. As with regard to the other status groups, only minor differences are observable. Finally, as shown in panel c, those countries that do not undergo an EDP tend to be considered more compliant with the SGP rules than the rest.

2.2 The persistence of MIP and SGP status classifications

The literature on comparative economic development in Europe has diagnosed the relevance of path dependencies for the development trajectories of the Member States in the EU (e.g. Kapeller *et al.*, 2019; Gräbner *et al.*, 2020a, and the literature review). This begs the question of whether this path dependency is also visible in the MIP and SGP status

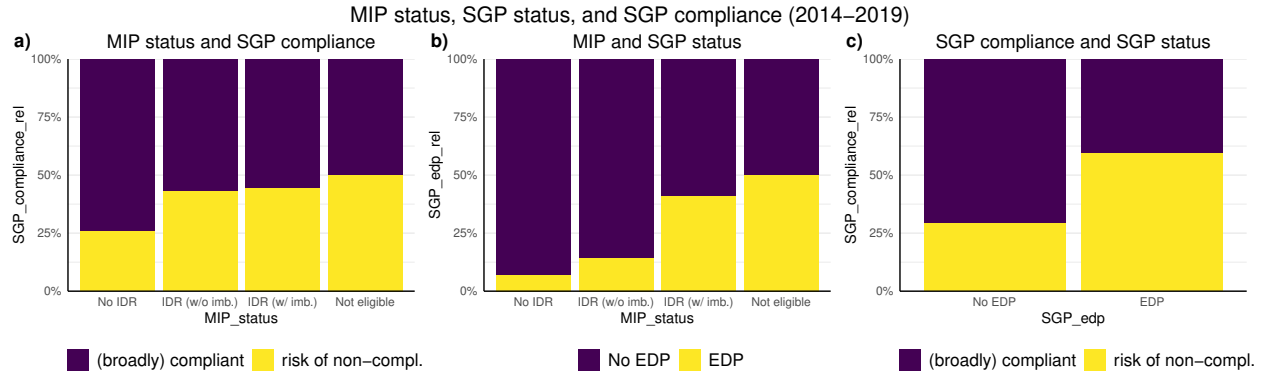


Figure 3: Relationship between MIP status and SGP status (panel a) and MIP status and SGP compliance (panels b).

of the countries. To this end, one may consider the status of a country in time $t - 1$ and t to see how often countries actually change their status, and conditional probabilities for a status change to identify potential path dependencies.⁵

Panels a and b in Figure 4 present the results for the MIP status in the time period between 2012 and 2019. Panel a) represents absolute changes and indicates that most ‘movements’ take place within the group of ‘IDR with imbalances’ and ‘No IDR’. If one considers the conditional changes in status (panel b), which shows the probability to be in status y when the status in the previous year was x , it becomes even clearer that countries not receiving an IDR come into a situation where they become subject of the IDR only in 1 out of 10 cases. Countries for which no imbalances were found in $t - 1$ have always moved into the group of not receiving an IDR in t . Conversely, countries in an ‘unfavorable status’, i.e. IDR with imbalances or being not eligible at all most likely remain in this situation in the future. At least for the limited time horizon for which the Semester exists, it remains very unlikely that a country diagnosed with imbalances in the past manages to get rid of them in the future. Thus, the overall path dependency of European development trajectories diagnosed in the macroeconomic and political economy literature is clearly visible in the MIP assessments as well: There is a tendency for countries to remain in either a problematic or non-problematic area, but changes between the two groups are scarce.⁶ A consideration not of yearly changes, but changes in classification between the 2012 and 2019 corroborates this impression (see down below for a detailed exposition): countries tend to remain in the good or bad status they begin with, and all positive exceptions are realized by countries on favorable development paths (core and catch-up countries, see below). The assessment of the countries’ compliance with the SGP rules indicates a similar pattern: compliance behavior is rather persistent (see panels c and d), yet it is relatively more likely that countries become more compliant rather than the other way around.

2.3 MIP and SGP Status persistence and development trajectories

So far, all countries have been treated equally. To align the observations with the empirical literature on comparative development in Europe and to take into account structural path dependencies, an explicit consideration of different development paths in the EU seems interesting. To this end, the country groups delineated in Gräbner *et al.* (2020b) are used.⁷ Gräbner *et al.* (2020b) come up with the classification summarized in table 4 via the means of a descriptive analysis of the structural characteristics of the economies as well as a cluster analysis on the reaction of countries to a

⁵One might argue that the observational period is too short and that the mechanisms determining the classification of the countries only take effect over longer time periods. An alternative graphical illustration comparing the classification changes over the whole period can be found down below. This figure indicates that changes do take place over the whole period and that the mechanism is thus effective.

⁶Note that this does not imply any causal statement about the effect of the classification. All that means is that the developmental path-dependence diagnosed in the polarization literature also shows itself in the classification of the countries within the semester.

⁷The most controversial choice here is France: if one considers mainly economic indicators, it is more of a periphery country, yet, if one focuses on political factors, it is more adequate to treat it as part of the core. See Gräbner & Hafele (2020) for a more extensive discussion of this case.

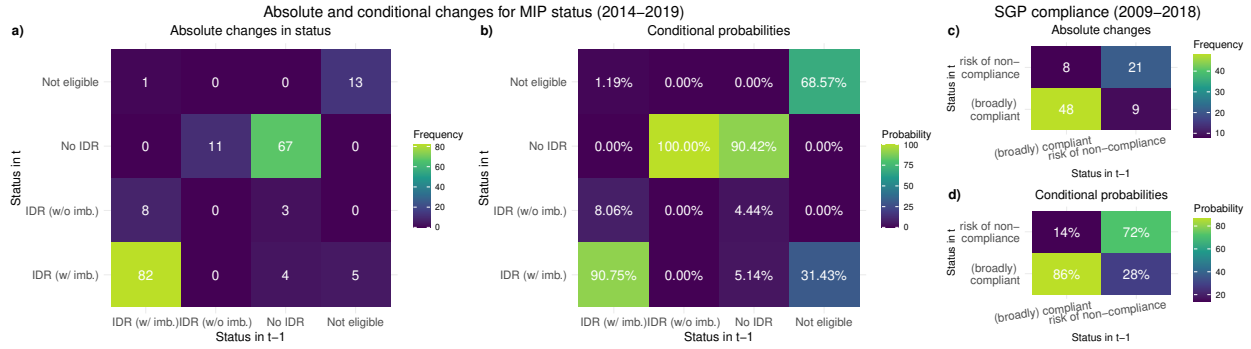


Figure 4: Number of absolute changes between MIP status (panel a) and conditional probability for the MIP status in t given the status in $t - 1$ (panel b), as well as the same information for the assessment of a country’s compliance with the SGP rules. The underlying data of panels a and b includes all years between 2012 and 2019, the data for panels c and d spans 2014 and 2019..

Table 4: The country groups delineated by Gräbner *et al.* (2020b).

Country group	Member
Core countries	Austria, Belgium, Denmark, Finland, Germany, Sweden
Periphery countries	Cyprus, France, Greece, Italy, Portugal, Spain
Financial hub	Ireland, Luxembourg, Malta, Netherlands
Catchup countries	Bulgaria, Croatia, Czechia, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, Slovenia

rise of European integration. This analysis is consistent with the structuralist view according to which countries follow different development trajectories that are (a) self-reinforcing and (b) determined not only by the characteristics of the individual countries, but also by the relationships between them (for more details on this approach see, e.g., Gräbner & Hafele, 2020). An important determinant of these relationships are the European institutions, which, according to Gräbner & Hafele (2020), foster an *intra-European competition* which then again stabilizes current power asymmetries and unequal development patterns (a more detailed discussion can be found in Kapeller *et al.*, 2019). Based on these results, one would expect more dependent countries to be those that are more likely to be trapped in an unfavorable MIP and SGP status, and to be more under the surveillance of the EU.

The results on changes in the MIP status that are presented in figure 5 are largely consistent with this hypothesis, and they show a striking difference between periphery countries and the rest. The majority of the core countries are in an unproblematic status, yet considering the conditional transfers hints at an internal heterogeneity of this group also highlighted by Gräbner *et al.* (2020a): a core country is either consistently located at a situation where it gets regularly diagnosed with imbalances by an IDR, or it reaches and remains in a situation where it does not receive an IDR at all. Catchup and finance countries are very similar to each other, with the former being slightly more persistently located in the favorable circumstances. Except the fact that a few of them are not eligible for an MIP, they are generally similar to the core countries as well. The situation of periphery countries is, however, very different and considerably more detrimental: there hardly is any improvement in status and persistence in the “worst” categories is strongest compared to the other country groups. In the end, not a single periphery country ever leaves the problematic status of being either diagnosed with imbalances or not even be eligible for the AMR at all.

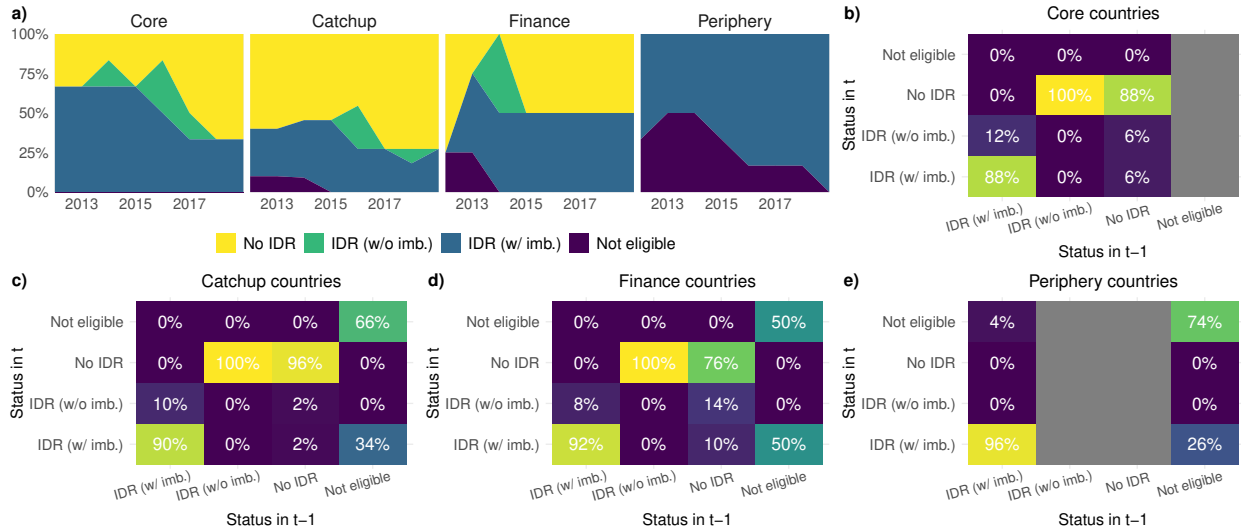


Figure 5: Conditional transfers between MIP status categories for different country groups (2012 - 2019).

Results on the compliance with the SGP rules are presented in figure 6. Only Euro Area members are considered here since only those get evaluated on basis of their DBP. When it comes to the shares of the countries in the respective status groups, one again finds immediately that while the vast majority of core, catchup and financialized countries are considered to behave (broadly) compliant with the SGP rules, the situation for periphery countries is exactly the opposite. When it comes to the conditional movements, one finds moderate levels of path dependency in the case of core countries: compliant countries tend to remain compliant, yet nothing like this can be said for non-compliant countries. Catchup countries behave pretty persistently either in accordance with or against the SGP rules (but with the vast majority of catchup countries complying with the rules), whereas periphery countries take an intermediate position: they show considerable persistence, yet still to a lesser extent than the catchup countries. Financialized countries always are considered compliant.

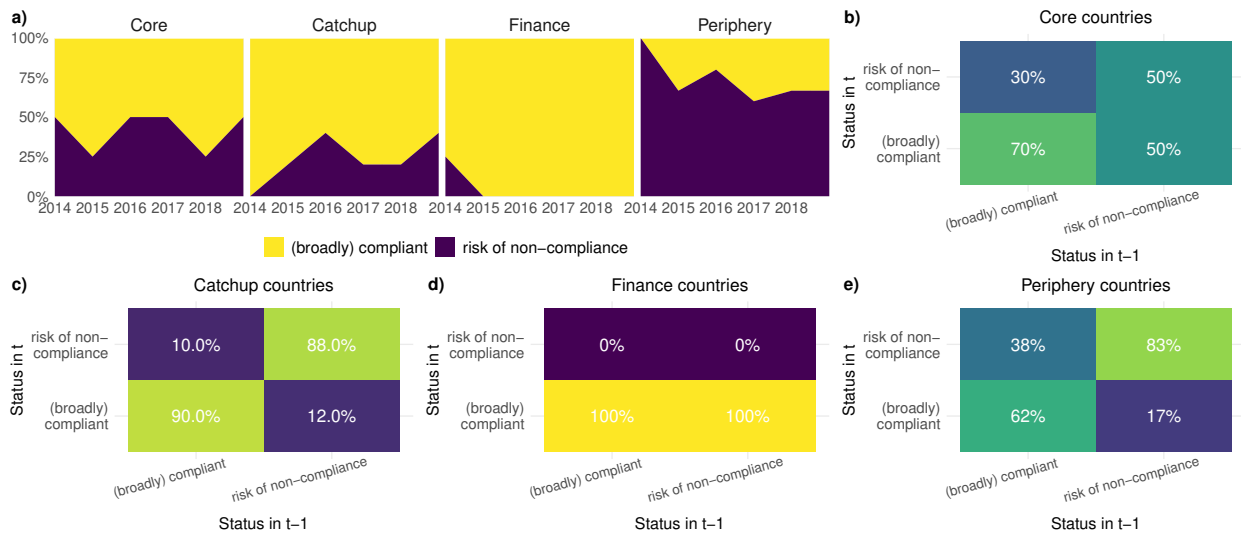


Figure 6: Conditional transfers for different countries regarding their compliance with the SGP (2014-2018).

When it comes to the participation in an EDP (see figure 7), one observes, first, that after the financial crisis, the majority of countries in all groups entered an EDP. In the following years, the vast majority of countries left the EDP, such that

in 2019 only one periphery country (Spain) undergoes an EDP. Against this background it is not surprising that, when one considers the conditional transition probabilities, the cases where Member States switched from being in no EDP into being in one are quite rare and stem from the fact that certain countries entered the EDP not immediately after the crisis (2009) but in 2010. Aside from this, a path dependency is again clearly visible, although given the overall trend towards leaving the EDP, the transition probabilities are less illuminating for the case of the EDP than for the cases discussed above.

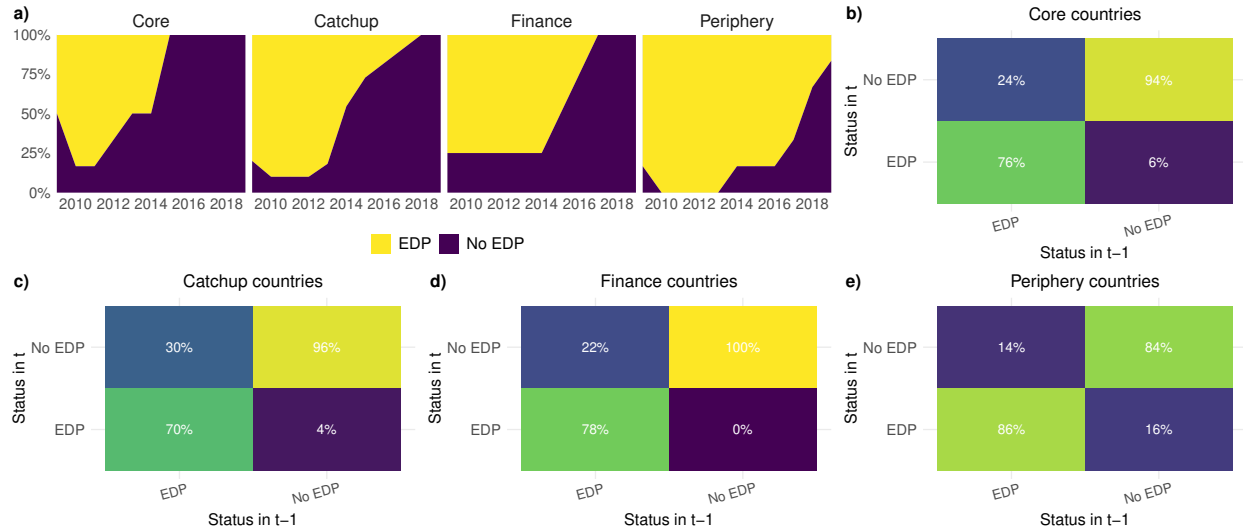


Figure 7: Conditional transfers for different country groups regarding their participation in an EDP (2009-2019).

2.4 MIP and SGP status transition over whole period

Figures 8 and 9 show absolute and conditional transition probabilities for the SGP and MIP status *over the whole period*. Here we compare the status in t_{min} with that in t_{max} .

This consideration corroborates the findings from the main paper and indicates that over 80% of the countries that did not receive an IDR in 2012 remained in this positive area. From those with imbalances in 2012, the picture is more nuanced, yet also compatible with the polarization findings: six of those 12 countries with imbalances continued to remain in this unfavorable status. Six of these countries actually managed to move to the favorable status of No IDR, yet all of them belong to the group of core or catch-up countries.⁸ Periphery countries remained fully in their unfavorable status: all of them are classified as IDR with imbalances in 2019.

3 MIP indicators for countries with different MIP or SGP classification and no classification

⁸The countries are Belgium, Denmark, Finland (all core countries), Hungary, Slovenia (catch-up countries) and the United Kingdom.

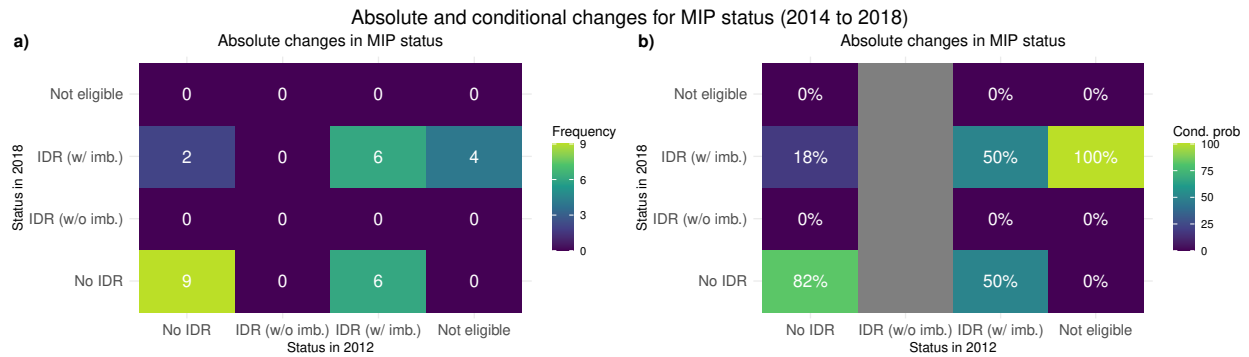


Figure 8: Number of absolute changes between MIP status in 2018 compared to 2012 (panel a) and conditional probability for the status in 2018 given the status in 2012 (panel b). The underlying data refers to all years between 2012 and 2019.

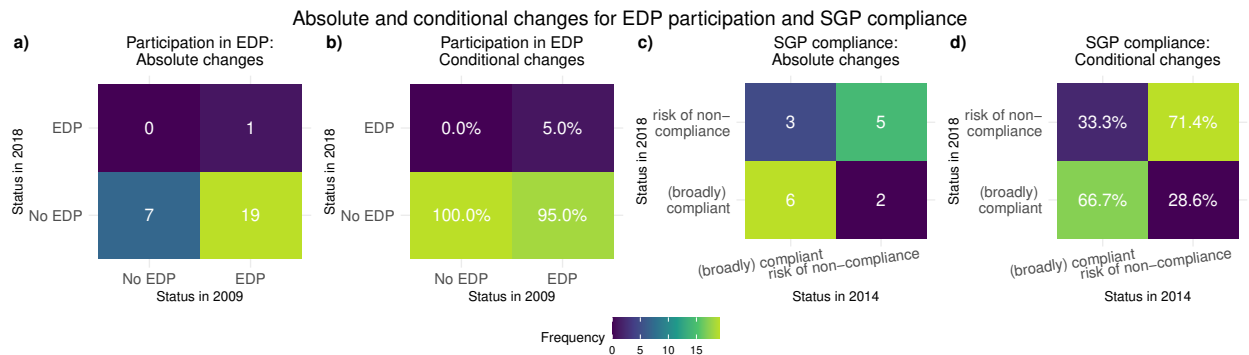


Figure 9: Number of absolute changes between SGP status (panel a) and conditional probability for the status in 2018 given the status in 2014 (panel b). Panels c and d refer to data from 2009 and 2018 and are concerned with the assessment of a country's compliance with the SGP rules.

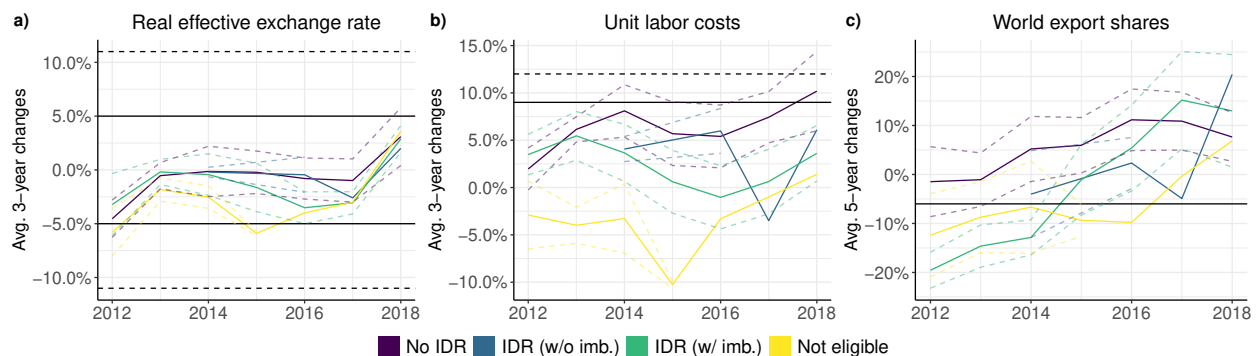


Figure 10: The three main competitiveness indicators of the MIP for countries in the different MIP categories. The complete line refers to the average, the dashed lines indicate the standard deviation of the group. The black line refers to the threshold of the MIP. If there is an alternative threshold for non-Euro countries, it is indicated via a dashed black line.

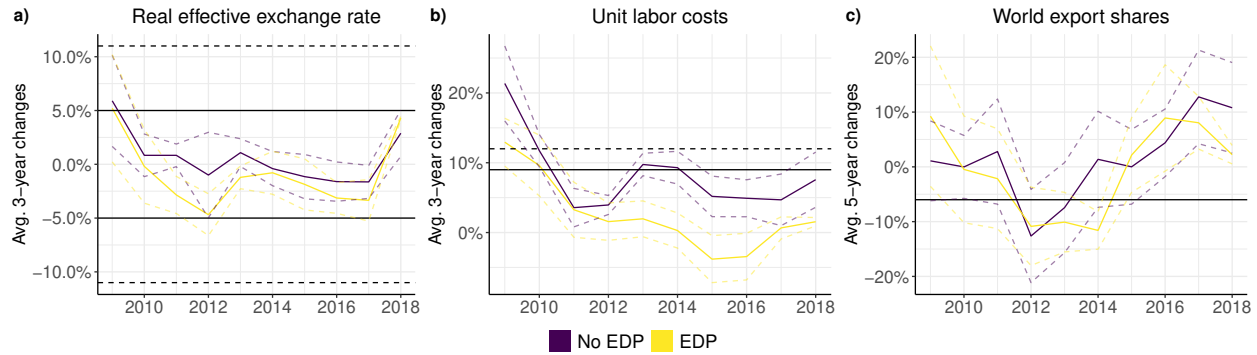


Figure 11: The three main competitiveness indicators of the MIP for countries that undergo an EDP and the rest. The complete line refers to the average, the dashed lines indicate the standard deviation of the group. The black line refers to the threshold of the MIP. If there is an alternative threshold for non-Euro countries, it is indicated via a dashed black line.

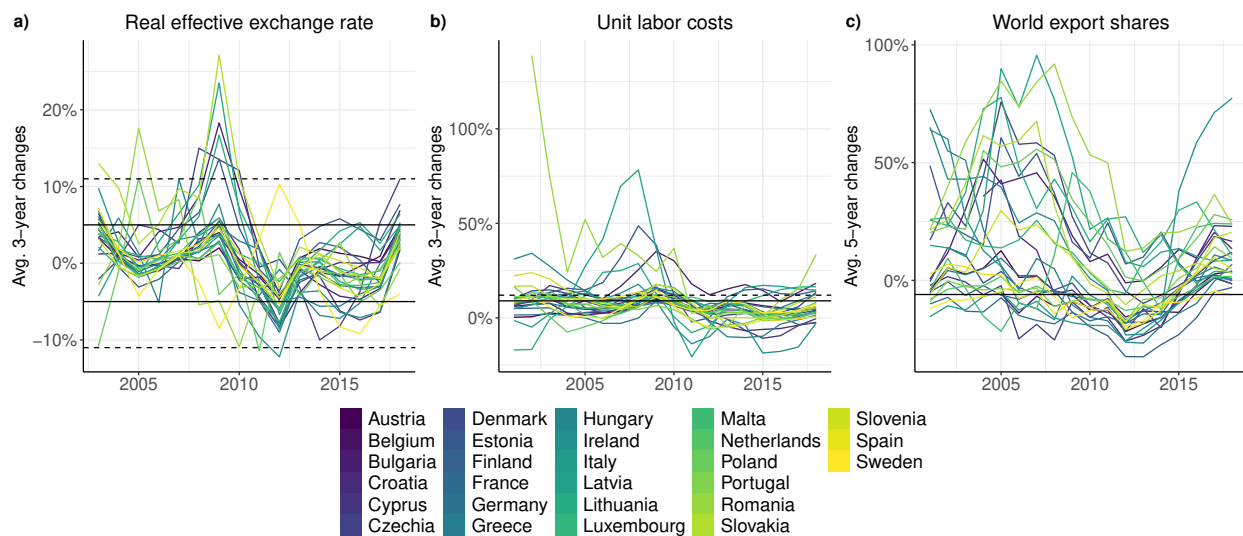


Figure 12: The three main competitiveness indicators of the MIP for different countries. The complete line refers to the average, the dashed lines indicate the standard deviation. The black line refers to the threshold of the MIP. If there is an alternative threshold for non-Euro countries, it is indicated via a dashed black line.

4 Details about the implementation scores

One important element of the European Semester are the CSRs. The extent to which countries adhere to their specific recommendations gets assessed by the European Commission using the so called *implementation scores*. The evaluation is conducted internally, and the progress countries make with implementing their CSRs is classified as (1) *no*, (2) *limited*, (3) *some*, (4) *substantial* or (5) *full* progress. To quantify this qualitative assessment into the final implementation scores, each label is given a numerical value, i.e. 0 (for no progress), 0.25, 0.5, 0.75, and 1 (for full progress). Since 2013 the often rather long and complex CSRs are broken down into sub-parts that are evaluated separately. The scores as such are not used as direct measures for the compliance of the countries with their respective CSRs. Nevertheless, considering the implementation scores might be useful to better understand how national efforts are perceived by the Commission. To this end, more details about the implementation scores are provided below.

Therefore, the following presentation of the implementation scores has to be interpreted with care. More precisely, they will not be considered as measures of effectiveness of the European Semester, but rather as indication of how vigilant the Commission acts on Member States exhibiting low implementation scores.

Figure 13 represents this composition of CSRs as well as their implementation scores. The shares and scores are computed for each year from 2011 to 2019 and then averaged over the whole time period. It shows that while the different policy areas receive very different attention in the CSRs (see the discussion in the main text), there is no clear relationship between the share of a policy area in CSRs and perceived compliance.

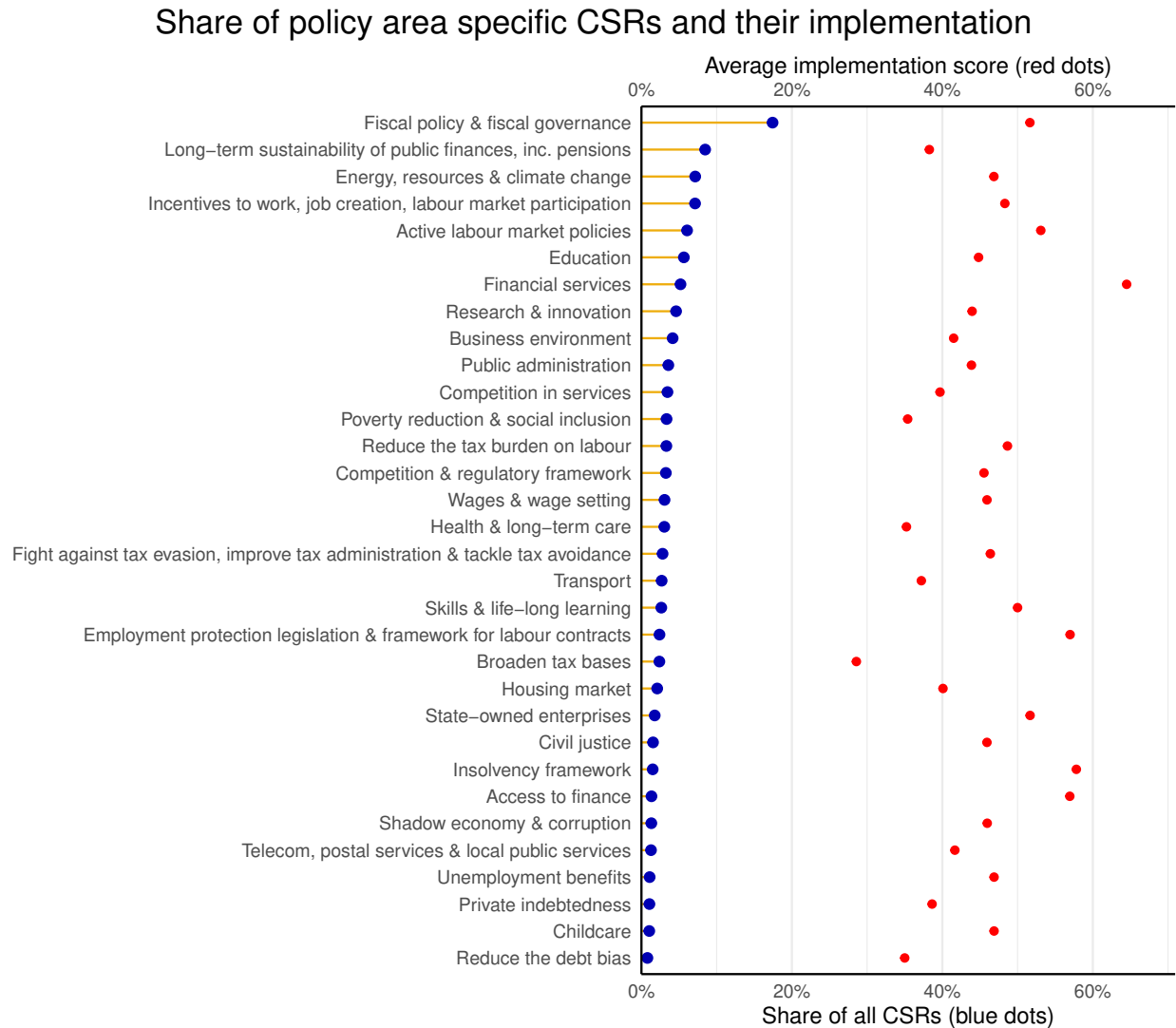


Figure 13: The share of policy area specific CSRs in the overall number of recommendations (panel a) and average implementation scores for policy areas averaged over 2011 to 2019 (panel b).

Figure 14a shows implementation scores per MIP status, calculated as averages per group for the years 2011-2019. Scores are generally decreasing, as discussed in the literature on the effectiveness of the MIP (Efstathiou & Wolff, 2019, 2018; Darvas & Leandro, 2015; Deroose & Griesse, 2014; Hradisky, 2017; Hradisky *et al.*, 2016). The compliance of countries with (excessive) imbalances is, according to Commission opinion, highest. This is in stark contrast to the argument of Efstathiou & Wolff (2019), according to whom one reason for the overall decrease of implementation scores lies in the poor compliance of countries with excessive imbalances.

Results regarding the SGP status are presented in Figure 14b. The trend in implementation scores is the same as in the MIP categories as well as the overall trend with falling implementation scores. Usually, implementation of countries

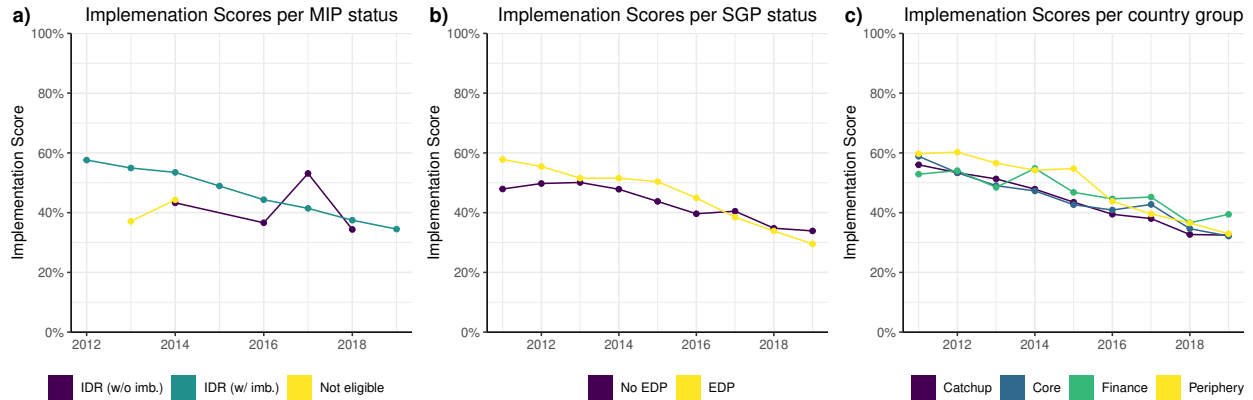


Figure 14: Implementation scores according to MIP status (panel a), SGP status (panel b), and structural development trajectories (panel c). All data covers the period from 2011 to 2019.

being in an EDP was evaluated slightly better than the implementation of countries not in an EDP. This, however, changed in the last couple of years.

Figure 14c shows the same statistics for country groups according to the taxonomy of Gräbner *et al.* (2020b) used in the main text. According to Commission opinion periphery countries seem to do slightly better in implementing than the other groups.

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