



DIRECTORATE-GENERAL FOR INTERNAL POLICIES

POLICY DEPARTMENT
ECONOMIC AND SCIENTIFIC POLICY **A**



Indicators for Measuring the Performance of the Single Market

Economic and Monetary Affairs

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**Internal Market and
Consumer Protection**

**Indicators for Measuring the
Performance of the Single
Market - Building the Single
Market Pillar of the European
Semester**

Study for the IMCO Committee



DIRECTORATE GENERAL FOR INTERNAL POLICIES
POLICY DEPARTMENT A: ECONOMIC AND SCIENTIFIC POLICY

Indicators for Measuring the Performance of the Single Market – Building the Single Market Pillar of the European Semester

STUDY

Abstract

This study, prepared by Policy Department A at the request of the Committee on Internal Market and Consumer Protection (IMCO), analyses the possibility and challenges of defining a monitoring and evaluation system to measure the economic and regulatory performance of the Single Market, to be used in the context of the European Semester exercise. Based upon their research, the authors conclude that an integrated measurement system can be devised to perform this function, by combining different methodologies, including composite indicators, sets of indicators, sectoral tools and qualitative assessments. With respect to regulatory indicators, it is relatively easier to design tools that could directly result in policy recommendations addressed to the EU institutions and Member States, possibly based on the 'Single Market Gap' composite indicator proposed in this study. With respect to economic indicators, additional care and qualitative assessment would need to be employed to extrapolate policy recommendations from any set of indicators.

This document was requested by the European Parliament's Committee on Internal Market and Consumer Protection.

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LIST OF ABBREVIATIONS

BEPA Bureau of European Policy Advisers

BIS UK Department for Business, Innovation & Skills

CCS Consumer Conditions Scoreboard

CJEU Court of Justice of the European Union

CMS Consumer Markets Scoreboard

DB Doing Business

CoC Certificate of Conformity

ECB European Central Bank

ECC-NET European Consumer Centre Network

EFTA European Free Trade Association

EP European Parliament

EU European Union

FDI Foreign Direct Investment

FTAs Free Trade Agreements

GDP Gross Domestic Product

GVCs Global Value Chains

HOS Heckscher-Ohlin-Samuelson

IMCO European Parliament Committee on Internal Market and Consumer Protection

IMI Internal Market Index

LE London Economics

M&E monitoring and evaluation

MNEs Multinational Enterprises

- NACE** Statistical Classification of economic activities in the European Community (in French: *Nomenclature statistique des Activités économiques dans la Communauté Européenne*)
- n.e.c.** Not Elsewhere Classified
- OECD** Organisation for Economic Co-operation and Development
- PMR** Product Market Regulation
- PPP** Purchasing Power Parity
- PwC** PricewaterhouseCoopers
- RoW** Rest of the World
- SMEs** Small and Medium Enterprises
- SMS** Single Market Scoreboard
- TFEU** Treaty on the Functioning of the European Union
- TiVA** Trade in Value Added
- VAT** Value Added Tax
- WB** World Bank

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EXECUTIVE SUMMARY

Background

The Committee on Internal Market and Consumer Protection (IMCO) of the European Parliament recently noted that only limited policy analysis is carried out on the Single Market and called for introducing a Single Market 'pillar' in the European Semester. To this end, the Parliament would consider it appropriate to include an assessment of the Single Market integration and performance within the European Semester. Such an assessment would set evidence-based policy priorities.

Aim

This study aims at analysing the possibilities and challenges of defining a set of indicators to measure the economic and regulatory performance of the Single Market. It elaborates a previous analysis,¹ prepared by the same authors responsible for the present study, which discussed the existing tools. The present document touches upon four key areas:

1. measurement of economic performance
2. measurement of regulatory performance
3. assessment of sectoral policies
4. use of composite indicators

Main Findings

The study identifies a methodology for assessing the performance of the Single Market and provides the necessary elements for identifying the indicators, with a view of creating a monitoring and evaluation tool with an Internal Market focus in the framework of the European Semester.

The study starts by acknowledging the rather obvious, although sometimes forgotten, fact that Single Market integration is a multifaceted and complex phenomenon, being at the same time a policy project, a growing *acquis* of legal rules, and a set of economic relationships. As a consequence, any Single Market integrated measurement system faces enormous challenges in addressing this complexity. The research team proposes first to distinguish between the economic and regulatory aspects of Single Market integration, in view of their separate measurement. Secondly, the input – process – output – outcome – impact logic is used as a heuristic device to frame the subsequent analysis of Single Market integration.

Before investigating possible methodologies for measuring the Single Market economic and regulatory performance, a gap analysis of existing tools is carried out, and then the potential role of composite indicators is discussed. As far as the gap analysis is concerned, there exists a number of tools for monitoring Single Market integration, both in its economic and regulatory aspects. Not all tools, however, can be integrated in a monitoring and evaluation system fitting the request of the Parliament. While many tools exist to measure the economic performance of the Single Market, so far they have not yet been capable of triggering policy impacts. As for regulatory tools, the Single Market Scoreboard can be considered a best-practice for monitoring and evaluating compliance of Member States with Single Market obligations, in view of triggering improvements and a catch-up process among countries. Nevertheless, regulatory indicators assessing policy outputs, rather than only inputs and processes, are less widespread.

¹ European Parliament (2014b).

With regard to the role of composite indicators, they are usually considered as “magnifiers” of measurement problems, since they require a thicker layer of discretionary choices. The authors consider that this may, in principle, be true; however, any measurement methodology in the social sciences relies on a certain degree of approximation and discretionary choices. For composite indicators to be appropriate measurement tools, the key factor is to ensure that their design is transparent, backed by the relevant theory and agreed upon by their users, be they institutions or stakeholders. The research team concludes that it is not appropriate to aggregate regulatory and economic aspects of the Single Market in a single index; nevertheless, a composite indicator of regulatory performance only can be resorted to, and will be proposed later in the study.

Finally, the research team addresses the core task, that is identifying possible indicators of economic and regulatory performance of the Single Market. On the regulatory side, it is possible to move several steps in the direction of creating a performance indicator for the Single Market. For the last decade, international institutions have been studying how to better measure regulation through indicators, and it seems feasible to replicate this experience in the EU context. Based on this experience, the “Single Market Gap” indicator is proposed. It has the following features: i) it is actionable, i.e. capable of both informing policy-makers and triggering policy interventions; ii) it covers both the legal texts and the actual effects on EU citizens and companies; iii) it focuses on policy outputs, as opposed as to inputs and processes which are already sufficiently covered by existing tools; and iv) it remains focused on the performance of the Single Market, rather than analysing other aspects of the quality of EU and national regulation. Most importantly, from the indicator proposed in this study, it is possible to extract policy recommendations, both for the EU institutions as a whole and for specific Member States, which could feed into the European Semester process.

On the economic side, the analysis is considerably more complex. While many indicators and variables are currently used to assess Single Market integration in various ways, defining an indicator that is both causality-proof and sufficiently actionable is a genuine challenge. The research team has considered that a first step towards addressing this challenge is to shed some light on the economic theory of how Single Market integration is supposed to affect (or not affect) certain economic outcomes and impacts. Based on economic theory, a set of variables is screened and assessed according to three criteria: causality, significance, and feasibility with regards to data collection. Based on this analysis, price convergence may be an appropriate variable for measuring the economic performance of the Single Market, but suffers from problems of measurability. Other variables analysed (i.e. trade flows, share of foreign workers, interest rates and foreign direct investment) do capture significant aspects of the economic performance of the Single Market, but also present shortcomings preventing them from becoming the “silver bullet” indicator. It is concluded that a set of economic indicators is probably the best option to monitor and evaluate Single Market performance, but it needs to be complemented with a qualitative assessment. Aggregating this set of economic indicators into a composite index is not advisable, due to the complexity of the underlying theoretical framework.

With respect to sectoral policies, their assessment should be part of any monitoring and evaluation system for Single Market integration, since sectoral policies represent a large part of the *acquis*. However, it is not feasible to cover all sectors and policy areas within a monitoring system, which should in any case remain feasible and informative. For this reason, the research team suggests several criteria to identify which economic sectors or policy areas should undergo selected monitoring, based on two strands: economic

significance of the addressees of Single Market norms, and regulatory problems experienced by citizens and companies in certain sectors or policy areas.

In conclusion, the authors consider that there are room and possibilities to define an **integrated measurement system** to measure Single Market performance for the purpose of embedding it in the European Semester, combining different methodologies - such as composite indicators, sets of indicators, sectoral tools and qualitative assessments. With respect to regulatory indicators, it is easier to design a monitoring tool that could directly result in policy recommendations for EU institutions and Member States. With respect to economic indicators, additional care and qualitative assessment should be employed to extrapolate policy recommendations from any set of indicators. Additional pilot studies are recommended in order to test the feasibility of different indicators on the ground, i.e. based on real data collection and not only on theoretical considerations.

1. INTRODUCTION

This study analyses the possibilities and challenges of defining a set of indicators measuring the economic and regulatory performance of the Single Market. It elaborates a previous analysis prepared by the same team of researchers², where the existing indicators are discussed.

Economic and policy analysts have been assessing the regulatory and economic effects of the EU Single Market for at least the past three decades. Plenty of information is available in the public domain, or can be collected at a reasonable cost. In this light, this study attempts to address the challenge of **identifying which information is best suited as a Monitoring and Evaluation (M&E) tool for the Single Market and designing an M&E tool that is able to trigger policy changes.**

With the aim of improving the governance of the Single Market, the European Parliament has called for the Commission to include a Single Market pillar within the European Semester³. The Schwab Report⁴ requests the creation of a governance system similar to the one already in place for the economic governance of fiscal policies. The mechanism shall be based on the adoption of Single Market guidelines by the Commission – presented within the Annual Growth Survey – the formulation of National Single Market Action Plans by the Member States, and then the issuance of Single-Market country-specific recommendations. The Coffferati Report⁵ on this subject reinforces this call to the Commission, stressing that the governance of the Single Market should be focused on monitoring not only economic integration, but also the policy tools through which Member States implement, apply and enforce Single Market rules. In particular, the Coffferati Report stresses the need for a qualitative assessment of the effectiveness of measures taken, progress made and policy results actually achieved with regards to the Single Market integration process and calls for the development of an analytical tool to measure Single Market integration within the framework of the Single Market pillar of the European Semester in relation to the country-specific recommendations (§4).

Since the 2013 edition of the Annual Growth Survey, the European Commission has started to address this request. Single Market Reports have been attached to the Annual Growth Survey, focusing on key policy areas. These reports represent a step forward toward better Single Market governance, as they are comprehensive Commission-wide annual reviews of the state-of-the-art of the internal market. However, a comprehensive set of economic and non-economic indicators have not yet been developed to support this analysis. **To move one step forward, a systematic set of M&E indicators should be designed by the EU institutions**, in order to provide the Single Market governance and policy making process with an as solid as possible evidence base.

The EU institutions and Member States have managed to define indicators that have eventually changed policies and policy making, such as the Maastricht fiscal criteria or the Copenhagen accession criteria. Also in the field of the Single Market, the Single Market Scoreboard has been instrumental, if not decisive, in constraining the bad habits of

² European Parliament (2014b).

³ The European Semester is part of a yearly governance process set up by the European Commission to analyse national programmes of economic and structural reform in view of assessing and promoting compliance with the economic governance tools and the EU2020 strategy.

⁴ European Parliament, Report with recommendations to the Commission on the governance of the Single Market (2012/2260(INI)), 28.1.2013, Committee on the Internal Market and Consumer Protection, Rapporteur: Andreas Schwab.

⁵ European Parliament, Resolution on Single Market governance within the European Semester 2014 (2013/2194(INI)), 25.2.2014, Rapporteur: Sergio Gaetano Coferati.

untimely or incorrect transposition of directives. The challenge would be to define a set of indicators achieving a good trade-off between simplicity, and hence actionability, and the need to provide a realistic picture of the widest, and probably most complex, EU accomplishment so far: Single Market integration.

The study manages to identify a methodology for assessing the performance of the Single Market and provides the necessary elements for identifying the indicators, with a view of creating a monitoring and evaluation tool with an Internal Market focus within the European Semester.

By attempting to formulate the proper research question, this study introduces a differentiation between measurement tools to describe the Single Market and tools to monitor and evaluate the performance of the Single Market with a view to including them within the Single Market pillar of the European Semester. The latter goal presupposes that indicators are identified so that there is a solid and clear causal relationship between Single Market policies and the phenomena measured. Furthermore, it also presupposes that the indicators are actionable, meaning capable of triggering policy changes.

By setting the research question in this direction, some results can be achieved. First and foremost, it helps to keep the economic and regulatory performances separate. The more these aspects are considered jointly, the higher the complexity of the indicators, and so the more difficult it is to identify precise and actionable causal relations.

On the regulatory side, it is possible to move several steps in the direction of creating a possible indicator of the performance of the Single Market. International institutions have been studying for the last decade how to better measure regulation through indicators, and it seems feasible to replicate this experience in the EU context. Most importantly, out of the indicator proposed in this study, and of others that could be usefully conceived, it is possible to devise policy recommendations, both for the EU institutions as a whole and for specific Member States, and hence to feed into the European Semester process.

On the economic side, the analysis is considerably more complex. While many indicators and variables are currently used to variously assess Single Market integration, defining an indicator that is both causality-proof and sufficiently actionable is a true challenge. The research team has considered that a first step towards addressing this challenge would be to shed some light on the economic theory of how Single Market integration is supposed to affect (or not affect) certain economic outcomes and impacts. It can be dared to be said that this study tries to bring its contribution forward by demonstrating that economic relations within the Single Market are more blurred than are typically depicted in the mainstream discourse. After the theory is discussed, a set of indicators is tested to highlight its pros and cons as part of an M&E system.

Embedding a comprehensive M&E system for the Single Market is a tough challenge, which requires a combination of analytical methods and policy determination. This research study tries to identify the most significant obstacles in this field: the use of composite indicators, the measurement of economic performance, the measurement of regulatory performance and the measurement of sectoral policies. While not at all definitive, it can be hoped that this study helps to clarify the importance for Members of the European Parliament, and especially members of the Committee on Internal Market and Consumer Protection, to possess sound M&E indicators to inform policy decisions and to consequently contribute to Single Market governance.

2. UNDERSTANDING SINGLE MARKET INTEGRATION AND DEFINING THE SCOPE OF THE RESEARCH

KEY FINDINGS

- Single Market integration is a multifaceted phenomenon. It is, at one and the same time, a policy project, an *acquis* of legal rules, and a complex set of economic relationships. Single Market integration can indeed refer to two distinct aspects: the policy project integrating EU national markets (including the legal rules) and the economic outcome of this project.
- To frame the analysis of Single Market integration, it is useful to resort to a heuristic device that diagrams the input - process - output - outcome - impact logic of policy analysis.
- The study distinguishes between the assessment of regulatory performance and economic performance. Regulatory performance of the Single Market concerns inputs, processes and policy outputs; economic performance concerns economic outputs, outcomes and impacts.
- The study does not intend to assess any of the following possible objects of analysis: the “cost of non-Europe” due to Single Market non-integration, the overall quality of the EU *acquis*, and the overall quality of the EU or national legislative and regulatory systems.

2.1. Defining the scope of analysis: Single Market integration

The present study focuses on Single Market integration and its economic and regulatory performance. The Single Market is a specific example of the more general phenomenon of economic regional integration. Regional integration can be considered as a stronger form of cooperation and interaction among countries. While there is no “natural” boundary between cooperation and integration, two elements are specific to integration only: the transfer of national sovereignty to promote common objectives and the existence of an overseeing supranational institutional framework (Mattli, 1999).

While the academic literature has identified common elements of the regional integration process, it appears that no unique and clear-cut definition exists. There are two main reasons for this hindrance: first, **regional integration may inherently refer to the process of integration or to its results** (Balassa, 1961); and secondly, **this term is used in different fields, such as political science, legal studies and economics, and, consequently, it identifies the concept from different perspectives.**

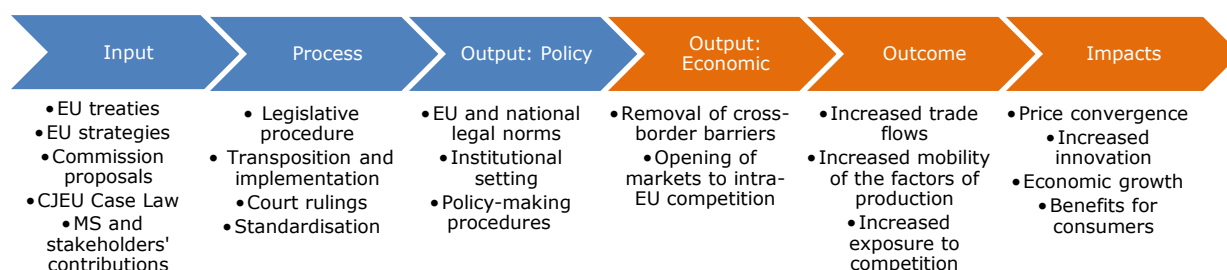
Therefore, the analysis of what “Single Market integration” is has to start from its multifaceted nature. The Single Market can hardly be defined because it is, at one and the same time, a policy project, an *acquis* of legal rules, and a set of economic relations. Its double meaning of project and outcome is evident. “Single Market integration” can indeed refer to two distinct aspects of the same phenomenon: the policy project integrating EU national markets (including the legal rules) and the economic outcome of this project.

To better visualise the various components of this complex concept, it is useful to resort to the **input – process – output – outcome – impact** logic of policy analysis⁶. The

⁶ For more on the logic of analysis, see the OECD Government at a Glance project, as discussed in Lonti & Woods (2008: 7).

relationship between regulatory and economic aspects is represented in Figure 1, with regulatory elements depicted in blue and economic elements depicted in red. Examples of inputs, processes, outputs and outcomes are also included. This logic is a heuristic device which is instrumental to a better understanding of the research question.

Figure 1: Single Market integration



Source: Authors' own elaboration.

The blue side of the scheme takes into account how the project of the EU Single Market has been brought forward through a set of norms aimed at removing or lowering first tariffs – while increasing and then finally removing quotas – and then non-tariff (e.g. regulatory) barriers among EU Member States. These norms, including founding treaties, legislative acts and Court rulings, have progressively created a legal framework for EU-wide cross-border liberalisation, mutual recognition, harmonisation of market regulation, common policies (in particular competition policy) and domestic liberalisation. This policy process has been the enabler of the economic integration having taken place in the EU from the Treaty of Rome onwards. The process has involved different government tiers, including EU institutions and national governments, national parliaments and public administrations. The blue side also includes the first layer of consequences of Single Market integration, which are policy outputs such as norms, institutions and procedures aimed at reducing regulatory barriers.

The red side of the scheme is concerned only with the consequences of Single Market integration, a large part of which is of an economic nature. While the EU Single Market must also serve other purposes – for example, supporting inclusive and sustainable growth, promoting the freedom of European citizens to live and work in another Member State or protecting European consumers' rights – it does so by creating larger and better functioning European markets (including the norms and institutions that have to underpin these markets), and, consequently, by unleashing stronger and denser economic relations in a larger space.

By adopting this modular and functional logic, the research team tries to avoid the never-ending quarrel about the definition of what components are part of the Single Market, and what economic or legal aspects should be covered by an M&E system. Rather than focusing on its components or building blocks, the attention is paid to the consequences of the Single Market. An M&E tool should thus measure these consequences, whether they take place and their magnitude.

However, consequences may be associated with many triggering causes. For this reason, it is important to stress, and this will be done throughout the study, that M&E indicators alone may not be sufficient to produce a correct analysis. **Since the Single Market is the largest and probably most complex part of the EU integration process, any indicator, single or composite, alone or jointly with others, will not be able to capture it in its entirety. Any analytical result should be tested in-depth by resorting to qualitative assessment.** In a nutshell, the figures originating from the set

of indicators discussed and proposed in the following chapters will have to be matched by a coherent narrative that can explain the causal links between Single Market policies and their outputs, outcomes and impacts.

From this construction of Single Market integration, a measure of its regulatory and economic performance can be proposed, by verifying whether Single Market policies deliver the expected results and achieve their objectives. **The performance of the Single Market is satisfactory when the Single Market works well across the steps described above**, i.e. integration processes function correctly, policy and economic outputs are delivered, and integration outcomes and impacts are triggered. In this way, “performance” is defined in a way similar to “effectiveness”, that is, the capacity of the Single Market to deliver results according to its objectives across the steps described above. **The research team distinguished between *economic* performance when the assessment concerns the economic outputs, outcomes and impacts; and *regulatory* performance when the assessment concerns inputs, processes and policy outputs⁷.**

This study is concerned with both aspects: namely, how to measure the economic performance of the Single Market, a question that is addressed in Chapter 5, and how to measure the regulatory performance, which is addressed in Chapter 6. Sectoral policies, a topic that mixes both economic and regulatory assessment, are addressed in Chapter 7. As preliminary steps to the analysis of possible M&E indicators, two additional issues are dealt with: the stock-taking exercise of existing M&E tools for Single Market policies and the consequent gap analysis, which is summarised in Chapter 3; and a discussion about the advantages and challenges of composite indicators, which is included in Chapter 4. Chapter 8 concludes the report and summarises the policy recommendations for each of the topics addressed in this study.

2.2. What is not covered by the analysis

As discussed above, this study intends to provide a definition of possible indicators of economic and regulatory performance of the Single Market, with a view to including this exercise in the European Semester. For this reason, we must ensure that the scope of the research is not so large as to produce an unfeasible and unfocused informational tool. The research question is not: “How would state-of-the-art economic and regulatory analysis measure Single Market integration?”, but rather: “How can a monitoring indicator of economic and regulatory Single Market integration be defined, such that it can be usefully incorporated in the European Semester and deliver tangible policy results?”

Monitoring indicators can be considered as atlases of policy and economic activities: the larger their scope, the bigger their scale, and hence the lower the level of detail and their usefulness for policy-makers. Hence, if an actionable monitoring tool is to be built, we should limit its scope by setting clear boundaries.

First, **a tool to assess the economic performance of Single Market integration cannot be a tool to assess or predict what is usually termed the “cost of non-Europe”**, such as GDP growth or jobs created by the Single Market (or foregone because of existing fragmentation). Serious forecasts or estimates of the impact of the Single Market on EU GDP and employment require a combination of econometric and modelling techniques, which cannot be reduced to a set of policy indicators. The latter can be an input to regressions and modelling exercises, but not a substitute for these. There is no

⁷ For an assessment of whether and how regulatory performance affects economic growth, see Parker and Kirkpatrick (2012).

indicator or set of indicators, in the theoretical literature nor in the practical policy domain, that can measure the cost of non-Europe.

Second, **a tool to assess the regulatory performance of the Single Market should not be so extended as to become an assessment of the quality of the EU *acquis*.**

The Single Market legislation represents a large part of the EU legal body and has an impact on citizens, businesses and public administrations that goes beyond the integration aspects. For example, it determines the rights of consumers even when they are not engaging in cross-border transactions, or the amount of administrative burdens that SMEs have to bear to comply with product regulation, even when they do not access foreign markets. The European Commission is aware of the multiple effects of the Single Market, and indeed the latest Single Market report attached to the Annual Growth Survey⁸ covers both integration aspects and other intra-border aspects that can be considered drivers of a business-friendly environment, especially for SMEs. Promoting a business-friendly regulatory environment is an important goal of European policies, but it is not equal to Single Market integration. The tool should remain focused on the creation and exploitation of actual and potential opportunities for cross-border market integration; otherwise, it risks covering the whole EU *acquis* and hence becoming too diluted to trigger policy actions.

Finally, although smart regulation governance principles can be part of the assessment of the Single Market regulatory performance, **the indicator should not become an assessment of the quality of the EU and national legislative and regulatory systems.** First, as above, including such aspects in the same analytical framework may result in having a set of indicators that do not focus on Single Market integration, but on other, albeit meritorious, policy objectives. Second, smart regulation is “agnostic” with regard to policy objectives, and cannot be considered automatically conducive to deeper Single Market integration.

⁸ Report from the Commission, “A Single Market for Growth and Jobs: An Analysis of Progress Made and Remaining Obstacles in the Member States - Contribution to the Annual Growth Survey 2014”, COM(2013)785, 13.11.2013.

3. GAP ANALYSIS: WHAT CAN BE LEARNED FROM EXISTING TOOLS? WHAT OTHER TOOLS ARE NEEDED?

KEY FINDINGS

- There exists a number of tools for monitoring each step of the Single Market project, although the coverage is fuller for economic aspects. Not all tools, however, nor all aspects of these tools, are fit for the purpose of this study, namely designing an M&E tool for Single Market integration.
- The Single Market Scoreboard can be considered a best-practice of monitoring and evaluating the compliance with Single Market legal obligations by the Member States. But its scope is not comprehensive. The assessment of regulatory performance could be complemented by the OECD's Product Market Regulation indicators and by resorting to a 'Doing Business'-like methodology.
- Numerous tools and indicators can be used to measure the economic aspects of Single Market integration. The issue here, however, is not whether there is a sufficient number of candidate variables to feed the economic analysis, but rather whether the economic relations measured are policy-relevant and causality-proof. The main challenge is to transport good analytical reports into a tool as effective and impactful as the Single Market Scoreboard.
- To assess the economic performance of the Single Market, most of the tools rely upon fact-based indicators; perception-based indicators, however, should not be immediately discarded, as, in some cases, they allow capturing aspects which cannot be readily inferred from available "hard" statistics and figures.
- Further to economic and regulatory indicators, the assessment of Single Market performance is likely to rely also on a number of sectoral studies.

Before proceeding further with the study in suggesting possible tools and indicators to measure the economic and regulatory performance of the Single Market, this chapter briefly summarises the main results of the analysis of existing tools⁹, which was the object of the

⁹ The sources of the tools considered are as follows:

1. *Single Market Scoreboard*. European Commission, "Single Market Scoreboard", online tool (<http://ec.europa.eu/single-market-scoreboard>).
2. *Internal Market Index*. European Commission, Internal Market Index 2002: Technical Details of the Methodology, Brussels; European Commission, The Internal Market Index 2004, Brussels.
3. *Market Monitoring Tool*. European Commission, "Market Monitoring: State of Play and Envisaged Follow-Up", SWD 16 December 2008, SEC(2008)3074, Brussels; Ilzkovitz, F., A. Dierx and N. Sousa, "An analysis of possible causes of product market malfunctioning in the EU, first results for manufacturing and services", European Economy Economic Papers, No. 336 European Commission, Brussels.
4. *Consumer Markets Scoreboard*. Commission Staff Working Document, Consumer Market Scoreboard – Making markets work for consumers, 10th edition, June 2014, SWD(2014)212, 27.6.2014.
5. *Consumer Conditions Scoreboard*. European Commission, Consumer Conditions Scoreboard – Consumers at home in the Single Market, 9th Edition, Brussels.
6. *Single Market Report in the Annual Growth Survey*, European Commission, "Remaining Obstacles in the Member States - Contribution to the Annual Growth Survey 2014", COM(2013)785, 13 November, Brussels.
7. *LE PwC BEPA Report*. London Economics and PricewaterhouseCoopers, "Study on 'The cost of non-Europe: the untapped potential of the European Single Market'", Final Report, April 2013.
8. *ECB Financial Integration in Europe*. European Central Bank, "Financial Integration in Europe", Frankfurt am Main: (www.ecb.europa.eu/pub/pdf/other/financialintegrationineurope201304en.pdf).
9. *Europe Economics for UK BIS Review*. Europe Economics (2013), "Optimal Integration in the Single Market: A Synoptic Review", Report for UK Department for Business, Innovation and Skills, London.

previous analysis (see Annex). First, in Table 1 below, the main findings of the analysis of the existing tools are reported. Then, the gap analysis to identify what additional contribution could be brought is carried out¹⁰.

The following criteria of analysis are used to assess the existing tools:

- Objectives and object of measurement:
 - Object of measurement
 - Objective pursued
- Methodological framework
 - Type of data and data collection methodology
 - Benchmark
 - Aggregation
- Reporting and communication strategies
 - Dissemination and communication strategy.

10. *OECD Produce Market Regulation (PMR)*. OECD PMR indicators, Data and background information (<http://www.oecd.org/economy/growth/indicatorsofproductmarketregulationhomepage.htm>).

11. *Doing Business*. World Bank, Doing Business 2014 – Understanding Regulation for Small and Medium-Size Enterprises, Washington, D.C.

¹⁰ For the full analysis, see European Parliament (2014b), Chapter 4.

Table 1: Analysis of existing tools for Single Market assessment

		Single Market Scoreboard (SMS)	Internal Market Index (IMI)	Market Monitoring Tool
Aspects of integration		Policy process and output	Economic output and outcome	All
Methodological Framework	<i>Types of data and data collection methodology</i>	Fact-based data collected by the Commission, based on public sources and Member State communication.	Fact-based data, collected from public sources (Eurostat, European Commission, European Central Bank). Missing data are imputed.	Fact-based data retrieved from secondary sources (e.g. Eurostat, OECD, trade databases).
	<i>Use of benchmark</i>	External benchmark for some indicators (1 % for the transposition deficit, 0 % for long overdue directives, 0.5 % for the compliance deficit). No relative benchmark; however, for some indicators Member States relative performance is reported (traffic-light colour scheme).	No benchmark. The IMI is not intended to evaluate relative performance of Member States, but only their progress in Single Market integration from 1992 onwards.	Sectors are ranked from best performers (i.e. where the Single Market is functioning at its best) to worst performers. Worst performers are singled out for further analysis. US data are used as a comparator.
	<i>Aggregation</i>	No aggregation.	The 12 indicators are integrated in a composite index. Weights are established via the “budget allocation” methodology by Internal Market Advisory Committee’s national members. Indicators are integrated through a geometrical mean and after normalisation.	No aggregation of the different indicators and variables.
Dissemination and communication strategy		Published twice a year from 1998 to 2013. From 2013 onwards, all information is available through an online tool. Consultation is possible in EN, FR, and DE and from three perspectives: by stage in the governance cycle, by performance per Member State, and by governance tool. The July 2014 edition introduces a new section on performance per policy area	The IMI was published in 2002 and 2004, and was then discontinued.	One-off study, followed up by in-depth sectoral reviews. This approach has since been discontinued.

		Consumer Markets Scoreboard (CMS)	Consumer Conditions Scoreboard (CCS)	Single Market Report in the Annual Growth Survey	LE PwC BEPA Report
Aspects of integration		Economic impact ¹¹	Economic output	All	Economic impact
Methodological Framework	<i>Types of data and data collection methodology</i>	Mostly perception-based data collected with a survey of European consumers.	Fact- and perception-based, collected with a survey of European consumers and sellers.	The report uses indicators already available in the public domain (secondary sources). These indicators include both fact – and perception-based data.	Fact-based data. Productivity and employment indicators have been retrieved from EU KLEMS (adjusted where necessary). Other (innovation, sustainability) have been retrieved from public sources. Missing data have been imputed (imputed value: median EU value).
	<i>Use of benchmarks</i>	No benchmark. Markets can be ranked.	No benchmarks. Markets and Member States can be ranked.	No benchmark is identified.	For each sector, the best performing Member State is identified.
	<i>Aggregation</i>	Different aspects of market performance (ease of comparison; consumers' trust; problems and complaints; consumers' satisfaction) are aggregated in a Market Performance Indicator through equal weighting.	In the first section, that is, how consumers and companies profit from the Single Market, no aggregation is carried out. For consumer condition, aggregation is carried out.	No aggregation is performed.	Indicators are aggregated in a modular structure: i) productivity; ii) innovation; iii) employment growth; and iv) sustainability. Each area has equal weight. For each area, there are a variable number of indicators. No sensitivity.
Dissemination and communication strategy		Published by the European Commission every two years.	Published by the European Commission every two years.	Yearly publication by the European Commission, attached to the Annual Growth Survey.	One-off study.

¹¹ Not strictly from a Single Market perspective.

		ECB Financial Integration in Europe ¹²	Europe Economics for UK BIS Review	OECD Produce Market Regulation (PMR)	Doing Business
Aspects of integration		Economic outcome and impact	Economic outcome and impact	Regulatory input, process, Output	n.a.
Methodological Framework	Types of data and data collection methodology	Fact-based data collected by ECB and from other data providers (e.g. Thomson Reuters).	Fact-based data retrieved from secondary sources (e.g. Eurostat, EU KLEMS, Penn tables).	Fact-based data collected via a survey of national governments (1,400 questions).	Perception-based data. For each country, the World Bank surveys professional consultants (local and international) asking for estimated times and costs of each procedure.
	Use of benchmark	No benchmark, either absolute or relative.	EU Single Market integration is compared with non-EU developed countries (US, Japan, Australia).	No benchmark. Countries are ranked from less to more competition-friendly.	No explicit benchmark, but countries are ranked according to their performance. Best reforming countries, i.e. those gaining most positions in the ranking, are also highlighted
	Aggregation	No aggregation.	No aggregation of different variables.	Different composite indicators are produced. Weights are assigned through expert judgment. Sensitivity analysis is carried out.	The ranking of the ten area indicators are integrated in the Ease of Doing Business composite indicator (equal weighting).
Dissemination and communication strategy		The ECB Financial Integration in Europe report is published each year.	One-off study.	Published every five years. PMR indicators are integrated in other OECD policy exercises, and form the basis for policy recommendations.	Published each year. Special editions for regional organisations or country studies.

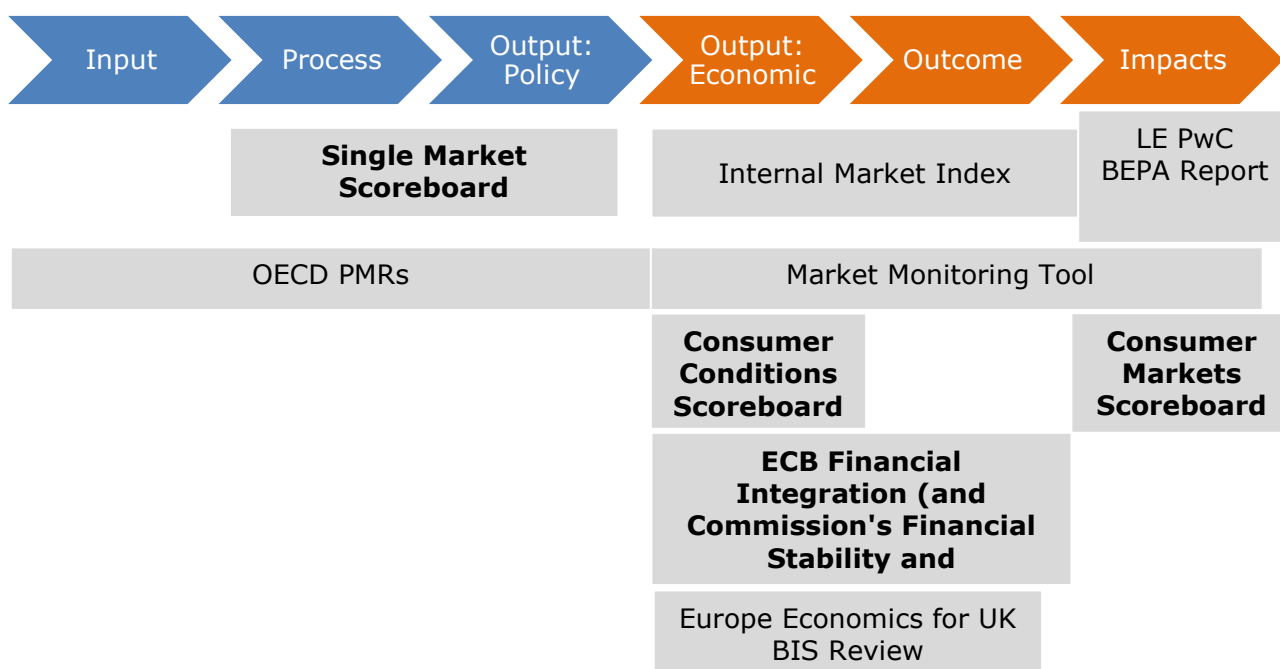
Note: n.a.: not applicable.

Source: European Parliament (2014b).

¹² The European Commission also publishes on a yearly basis a report on financial integration and stability in Europe in which the use of economic indicators in view of measuring Single Market integration are also critically discussed (Cf. European Commission (2014b), at § 7).

Figure 2 shows how the tools and indicators analysed in chapter 4 address the various steps of the Single Market project. The tools that are updated every year appear in bold¹³.

Figure 2: Existing tools for assessing Single Market integration



Source: Authors' own elaboration.

As is clear from the figure, existing tools cover all steps of the Single Market project, although the coverage is richer for economic aspects. However, not all tools and not all aspects of these tools are fit for the purpose of this study, namely designing an M&E tool for Single Market integration. Below, we describe what could be usefully taken from the existing set of tools or indicators, and what additions could be considered.

The **Single Market Scoreboard (SMS)** can be considered a best-practice of monitoring and evaluating the compliance with Single Market legal obligations by the Member States; it is recognised as effective in nudging national governments and parliaments towards a better score with regards to transposition and compliance (Saltelli, 2014). However, its scope is limited for two reasons. First, it focuses on transposition, which only concerns directives; ten years ago directives were the most important type of Single Market law, whereas nowadays regulations have gained significantly more prominence, but so far they 'escape' the monitoring of the European Commission's SMS¹⁴. Second, compliance is measured by assessing infringement cases, which are only one (less numerous and last resort) aspect of the EU compliance strategy¹⁵. The SMS was also criticised for being too superficial, as it only explores the quantity of non-compliant directives rather than the quality (EP, 2008). However, the lack of quality-oriented assessment ensures that the SMS remains clear and direct and this is the main reason why it has been an effective monitoring tool so far, as it provides hard, non-contestable and comparable data. The SMS

¹³ The Single Market Reports in the Annual Growth Survey have been excluded as they do not report additional variables and indicator, but draw from other tools. For the Internal Market Monitoring, its coverage of regulatory aspects is based on the OECD's Product Market Regulation (PMR) indicators. Indicators from other international organisations, such as the World Bank's "Doing Business", are not included, as they do not focus on aspects relevant to the Single Market and hence cannot be illustrated through the Single Market chain.

¹⁴ Since regulations are not transposed and compliance is direct.

¹⁵ This is analysed by Pelkmans and Correia de Brito (2012).

should not be tasked to deliver more, when this would reduce its effectiveness; rather, it should be complemented with additional information about other elements of the Single Market integration project.

The assessment of processes and policy outputs through the SMS could be complemented by the information included in the OECD's **Product Market Regulation (PMR) indicators**, or by a PMR-like approach for policy areas that are currently excluded from the OECD data collection. The PMR indicators monitor national norms and institutions – essentially restrictive market regulations. From 2014 onwards, the whole underlying dataset has been publicly released. This dataset, which includes consistent and comparable information, could constitute the raw material feeding into a Single Market indicator for policy processes and output concerning the legal framework for network industries, professional services and retail trade. Nevertheless, information on additional regulatory areas will need to be added, as the OECD database does not address many areas that are important from a Single Market perspective. For example, goods markets, market surveillance authorities and the standardisation process are not covered (or are only marginally covered) by the PMRs; important service industries are also not currently covered¹⁶.

While the PMR approach seems both interesting and feasible, the risk lies in the details. PMRs only look at “the law on the books”¹⁷. As demonstrated by the experience of the SMS, when it comes to the law on the books, EU Member States score fairly well. This does not always mean that goods, services, workers and companies can flow across national markets without any attrition, especially since risk regulation is not covered. **To assess the processes and policy outputs of Single Market integration, it is important to retrieve information that not only reflects the law on the books, but also the situation on the ground. “Doing Business”-like indicators could be the necessary complement** in assessing policy outputs with a factual approach, albeit this tool should be modified in order to reflect the Single Market reality. Such an approach would result in indicators that better reflect the day-to-day problems of European citizens and companies, more than only an accurate picture of the law on the books. The research team will try to address this gap in the existing M&E tools in chapter 6.

Moving from regulatory to economic aspects, tools and indicators are abundant. The issue here is not whether there is a sufficient number of candidate variables to feed the economic analysis¹⁸. Rather, it should be questioned whether economic outputs, outcomes and impacts measured:

1. are policy-relevant, i.e. fit to inform evidence-based policy making and represent the state of the Single Market integration in the European Semester exercise;
2. are causality-proof; economic theory suggests that Single Market integration has triggered certain outputs, outcomes and impacts; and
3. the causal link has a clear sign, meaning that more integration is supposed to bring about *either* a positive *or* a negative impact on the variables measured; variables linked to Single Market integration through unclear causal relationships cannot be an effective monitoring tool.

¹⁶ More in detail, the PMR indicators cover economic regulation rather than risk regulation, as the latter is not fit for this methodology. For further analysis, see Pelkmans (2010).

¹⁷ By “law on the books” is meant the black letter, or the legal text, of laws and regulations, without taking into account their actual implementation, compliance or impact.

¹⁸ Once the variables are selected, it will be possible to assess whether there are sufficient data sources for each variable, or whether any of them needs to be further researched or dropped.

There are good tools for identifying variables that are relevant and policy-significant. The **Consumer Conditions Scoreboard**, the **ECB financial integration report** and the discussion included in the Commission's European Financial Stability and Integration Report, the **Market Monitoring Tool** (although discontinued) and the **UK BIS Review** (although a one-off study) all identify a set of variables for which there is a causal link with Single Market integration policies. The issue in assessing economic aspects would be to transform good analytical reports into an SMS-like tool, in terms of policy impacts.

Other tools seem to have a less clear causal link with Single Market policy actions and its cross-border aspects. This applies to the performance indicator used by the LE PwC Report, the CMS and the IMI.

Not surprisingly, integration variables, e.g. cross-border trade and investment flows, are present in most of the reports analysed. In many cases, measures of efficiency are also included. As for efficiency, the challenge is how to identify which measure, if any, is substantially linked with Single Market integration. The impact of the Single Market on innovation is assessed only in two instances: the Market Monitoring Tool and the LE-PwC report. Here, the challenge is two-fold: determining what measures are good proxies for the impact of the Single Market on innovation, and whether there is a robust link with Single Market policies.

Most of the tools analysed ignore the issue of price convergence: only the CMS includes a partial analysis of price dispersion across Member States. From a theoretical point of view, this is striking, as increasing (albeit not absolute) price convergence is a directly attributable impact of Single Market integration, and hence a good proxy to assess its economic performance. However, price convergence is not easy to measure, as it is influenced by complex drivers such as purchasing power parity, quality variations and local demand characteristics, and given that it is demanding in terms of disaggregation.

Most of the studies and reports concerned with the economic performance of the Single Market rely on hard fact-based indicators. Only the CCS and the CMS rely, at least partly, on perception-based indicators, i.e. on data collected through surveys. Both the CCS and CMS have a point in using perception-based data, as they allow testing whether Single Market policies do deliver tangible results to European consumers and companies which are actually experienced. From this perspective, perception-based indicators should not immediately be discarded as disputable and prone to subjective biases, as they can indeed, in some cases and for some aspects, go deeper than available economic statistics.

Finally, among the tools analysed, only one has a single-sector focus: the ECB report on financial integration. The study contains detailed measurements of Single Market outcomes and impacts across different financial markets. The assessment of Single Market integration and its performance is likely to rely on a number of other sectoral studies as well, which can contribute to the set of indicators. However, the policy areas and the related variables should first be selected for inclusion, rather than including a policy area only because detailed studies already exist.

4. THE ROLE OF COMPOSITE INDICATORS IN ASSESSING SINGLE MARKET INTEGRATION

KEY FINDINGS

- Composite indicators are usually considered as ‘magnifiers’ of measurement problems, as they require a thicker layer of discretionary choices. While this may be correct in principle, any measurement tool, composite or not, relies on a certain degree of approximation and several discretionary choices.
- The challenge in designing composite indicators is to ensure a transparent and theory-backed measurement system. The composite indicator should be designed through choices that are transparent and based on the consensus of the institutions and stakeholders involved.
- The research team considers that it is not appropriate to create a composite indicator to measure the economic performance together with the regulatory performance of the Single Market for at least two key reasons: 1) the various parts of the Single Market project are not components on an equal footing, but elements of a causal chain; and 2) given its complexity, there is a risk that the selection of the components would be too partial or subjective. This does not mean, however, that we should not explore the possibility of creating a composite indicator to separately measure the economic and regulatory performance of the Single Market.

This section discusses a methodology that could be used to assess the performance of the Single Market: composite indicators. Composite indicators are relevant within this study as they are widely used to measure complex social phenomena, including Single Market integration. Indeed, several of the selected tools discussed in section 3 above are based on or comprise composite indicators.

Hereafter, the advantages that composite indicators may bring to the measurement process are discussed. Then, the challenges of using composite indicators, both in general and in the context of measuring Single Market performance, are addressed. Based on this analysis, the research team concludes that incorporating all Single Market aspects, including both economic and regulatory ones, into a single indicator is not advisable. However, this does not preclude the possibility of using composite indicators within either the economic or regulatory area. Indeed a composite indicator of Single Market regulatory performance will be proposed later in this study¹⁹.

4.1. Advantages and challenges of composite indicators

Composite indicators are usually considered as ‘magnifiers’ of measurement problems, as they require a thicker layer of discretionary choices and mathematical treatment. While this may be correct in principle, one should not compare composite indicators with a non-existing nirvana world in which measurement methods are objective representations of reality. Any measurement tool implies a certain degree of approximation and several discretionary choices. This is even truer when it comes to measuring social phenomena, which can be gauged via different and imperfect proxies. In principle, a social analyst should choose the most appropriate measurement tool on methodological and theoretical grounds. However, in many cases, issues of measurability of certain proxies and of data

¹⁹ See section 6.2 below.

availability constrain the analyst's choice more than the appropriateness of the methodology.

For this reason, **the challenge in designing composite indicators is to have a transparent and theory-backed measurement system**. Still, this is a requirement that applies also to any other measurement methodology in social science.

Although more complex, composite indicators deliver benefits that are not achievable with other measurement tools. The following benefits can be mentioned:

1. **Synthesis.** Composite indicators convey more information through a single tool.
2. **Reduction of error.** Composite indicators average out and so reduce the measurement errors of the different components, and reduce the influence of idiosyncrasies of individual data sources²⁰.
3. **Communicability.** Composite indicators can have an impact on both the stakeholders' inner-circle and the general public, and can be more effectively communicated by political actors.
4. **Cross-country comparability.** Benchmarking different countries can be easier on the basis of a composite indicator.
5. **Plurality**, that is, the inclusion of different classes of data. In the process of building an indicator, data with different characteristics, such as different units of measure or variance, may be mathematically treated as so to allow comparability and additivity. Therefore, data measuring different phenomena, or different aspects of the same phenomenon, may all converge in a single assessment.

To achieve the benefits listed above, the construction of a composite indicator requires addressing two kinds of challenges: 'statistical' and 'ontological'. The former refer to the (discretionary) application of statistical techniques, while the latter concern the capacity of an indicator to be a fair representation, and thus a fair measurement, of the object of analysis. Both statistical and ontological possible challenges are briefly reviewed below.

4.2. The definition of a methodology and the necessity of discretionary choices²¹

The quality of a composite indicator and its capacity to ensure the achievement of its advantages depend on how it is constructed. As discussed in the literature provided by the OECD and the Joint research Centre of the European Commission (Saisana & Tarantola, 2002; Nardo et al., 2005a,b), the aggregation process shall consist of the following steps:

1. Developing a theoretical framework
2. Selecting variables
3. Conducting multivariate analysis
4. Imputing missing data
5. Normalising data
6. Weighting and aggregation
7. Testing for robustness and sensitivity
8. Establishing links to other variables
9. Presenting and disseminating findings.

²⁰ Reduction of error depends on the errors not being correlated among different sources; if this condition holds, the error of the composite index is smaller than those of the underlying components. If the errors among sources are correlated, the aggregation process does not reduce the measurement errors.

²¹ See Saisana & Tarantola (2002); Nardo et al. (2005a,b).

Each of the methodological steps listed above requires taking choices about which statistical tool best fits the measurement purpose and theory. Statistical difficulties indeed relate to the application of statistical techniques in the design of the indicator. In many cases, whether a technique and which one should be applied flows from discretionary choices. This may generate two shortcomings: disagreement about which technical arrangement would best underpin the indicator; and the impact that different technical arrangements may have on final results. Depending on the options selected, different methodologies may lead to (substantially) different results. This possibility can be addressed through two means: transparency, and uncertainty and sensitivity analysis (Saisana *et al.*, 2005).

As there is no scientific method in designing a composite indicator, these challenges can be dealt with through transparency and consensus/ownership. Transparency requires that any technical choice is justified and made explicit; in particular, no choice should be presented as 'logical' or 'natural'. Consensus/ownership requires that the fundamental choices underpinning an indicator are taken not by the analysts alone (who, of course, may provide useful indications), but on the basis of the judgment of the stakeholders/institutions that intend to use the indicator.

The most demanding statistical challenges for a composite indicator of Single Market integration are:

1. **Selection of components.** Unlike physical phenomena such as 'speed', or 'heat', the Single Market cannot be directly and univocally measured: many variables can approximately measure different phenomena, which can be considered part of the Single Market project. As such, determining what is included in and excluded from a Single Market composite indicator is a discretionary choice, much more discretionary than in other contexts, which obviously exerts a large influence on final results.
2. **Measurement process and selection of proxies.** Even once it has been decided that e.g. 'competition' is an element that should be covered by the Single Market indicator, the analyst needs to define which proxy should be used to measure this component. For instance, price-cost mark-up, concentration indices and turbulence of firm rankings over time are all possible proxies of competition. However, there is no methodology to determine which measure best fits the composite indicator. Descending the ladder of complexity, once a proxy has been selected, there may be different measurement methods for the same proxy.
3. **Weighting and aggregation.** Different weighting and aggregation techniques can be adopted in an indicator, and only in very few cases does this choice not require a discretionary judgment. As such, these choices must be transparent and even seemingly 'innocuous' choices, such as equal or no weighting, should be based on theoretically-informed conjectures. A key question is whether the indicator is then robust to different weighting and aggregation techniques, namely whether the techniques have a substantial impact on the results. This can be determined through a sensitivity analysis.

4.3. Appropriateness and the informational content of a composite indicator

Other methodological challenges do not arise from the technical choices underpinning the design of a composite index. Rather, they depend on whether it is possible, appropriate and informative to measure a certain social phenomenon through a composite indicator in the first place. A composite indicator is a model of reality, and any model is only as good as its underlying theory.

As we have tried to make clear²², the Single Market project includes several layers of a causation chain which go from inputs, to processes, to outputs and outcomes. This layered causal structure may well be a major obstacle in devising a composite indicator covering the whole Single Market.

The bulk of the most widespread and relied-upon composite indicators measure different aspects, which can be traded-off against each other²³. Let us give some examples. "Doing Business" measures the ease of doing business. Countries may have an average score on the ease of doing business because they have e.g. a very efficient court system, but a low level of investor protection, or vice versa. In a way, all "Doing Business" components contribute to define the business environment, and it is conceivable that an aspect in which the country is very good compensates for another aspect in which the country scores below par. The same goes for the Product Market Regulation indicators by the OECD. Once it has been defined what good market regulation is, i.e. once the indicator's underlying theoretical model has been crafted, it is conceivable that the single components can be traded-off against each other, e.g. that a good market performance is undermined by either barriers to FDI or a burdensome bureaucracy.

Trade-offs among components would be hard to identify in an overall Single Market composite indicator. Indeed, a Member State cannot trade-off say, outcomes with inputs. The former are the ultimate objective of the Single Market project; hence having a very good score in the regulatory input side while scoring badly in the economic outcome side would not meaningfully result in an average composite score²⁴. At the same time, a trade-off between regulatory inputs and processes, to which the Member States are legally bound by the EU treaties and secondary legislation, on one hand and economic outputs/outcomes on the other, cannot be considered a realistic representation of how the Single Market works or should work.

However, this is not to say that composite indicators should not be resorted to for certain aspects of the Single Market project. Focusing only on economic outcomes/outputs or regulatory inputs/processes, it is possible to design a composite indicator which is theory-based. We shall try to do this when discussing an indicator for the Single Market regulatory performance²⁵.

Another issue concerns how a composite indicator of Single Market regulation is sensitive to countries' different institutional frameworks and legitimate political choices. The EU *acquis* indeed leaves discretion to Member States in many aspects, as far as transposition (for directives), implementation and enforcement are concerned. Even more importantly directives often imply minimum-harmonisation, purposefully leaving national discretion, even in case of perfect implementation and enforcement. The national side of regulatory performance is especially relevant for the Single Market *acquis* because EU law is for the most part not applied by a European administration, but by 28 national public administrations, each with its own rules and functioning. For these reasons, another problem arises, concerning how much an indicator can 'constrain' Member States' freedom (or, more correctly, whether a good score depends also on certain legitimate national

²² See section 2 above.

²³ 'Compensation' among different components is not a pre-requisite and there are aggregation techniques that do not presuppose it. However, they are less widespread, especially among the most prominent examples (Nardo *et al.* 2005a).

²⁴ There are many techniques that may result in a different aggregation and may give more weight e.g. to outcomes rather than inputs. However, whatever the technique, the composite score will lie in between the score in the component where the country scores best and the score in the component where the country scores worst.

²⁵ See section 6.2 below.

political choices). This is a key issue in designing a Single Market indicator for regulatory performance, especially if the indicator is to be 'owned' by the EU institutions, which are political, rather than research, bodies.

4.4. Conclusions

Albeit more complex than other measurement methodologies, sound composite indicators can deliver clear advantages in assessing a social phenomenon. However, they require a solid theoretical foundation, or otherwise the additional complexity and the unavoidable discretion risk producing blurred results.

The research team considers that it is not appropriate to create a composite indicator to measure together the economic and regulatory performance of the Single Market for at least two key reasons:

1. The various parts of the Single Market project are not components on an equal footing, but elements of a causal chain; and
2. Given the size and the diversity of the phenomena to be measured, there is a risk that the selection of the components would be too partial or subjective.

This does not mean, however, that the possibility to create a composite indicator for measuring separately the economic and regulatory performance of the Single Market should not be explored. As will be discussed in the following sections, a composite indicator of regulatory performance will be proposed; for economic performance, the underlying theory is all but clear and even controversial; hence the recommendation would be to proceed with a set of indicators rather than a composite index.

5. IDENTIFYING ECONOMIC INTEGRATION INDICATORS

KEY FINDINGS

- No (set of) economic indicator(s) is able to fully measure the depth and the characteristics of the Single Market, due to issues related to at least one of the criteria used for assessing their appropriateness, i.e. causality, significance and feasibility.
- Price convergence may be an appropriate variable for measuring the economic performance of the Single Market, but it also suffers from the inherent problem of how to identify, and thus put a price on, similar goods and, in particular, services.
- Other variables analysed in this section (i.e. trade flows, share of foreign workers, interest rates and FDI) may succeed in capturing different and important aspects of the economic performance of the Single Market, but they also present several shortcomings preventing them from becoming the “silver bullet” indicator.
- Further theoretical and methodological efforts are required in order to address the inherent dilemmas and to narrow down the choice of economic indicators that can reliably grasp the rationale of the Single Market in a XXI century perspective.
- A set of economic indicators is probably the best option to serve as a monitoring and evaluation tool, as it might compensate for the drawbacks of single indicators. The complex theoretical framework advises against proceeding with aggregating these indicators into a composite index. The set of indicators, however, should be complemented by further qualitative analysis, which may solve some of the problems with respect to issues of significance and causality.

Undoubtedly, the Single Market constitutes the ‘hard core’ of the EU. Indeed, the idea of a common market has appeared in the treaties since the creation of the European Economic Community, with the Treaty of Rome. Consequently, several of the EU’s exclusive and most of the shared competences are functional to the Single Market.

The ‘four freedoms’ of movement (goods, persons, services and capital)²⁶, together with the freedom to transfer codified knowledge and the right of establishment (both for companies and individuals) form the foundation of the Single Market, representing the so-called ‘negative integration’. Negative integration refers to the removal of barriers between national markets in the Union, whether they are tariffs or quotas, or regulatory barriers. However, national regulation may be enacted for sound reasons in the public interest, most often the prevention of market failures in safety, health, environment, consumer and investor/saver protection. Therefore, the regulatory barriers arising from such justified national regulation will have to be dealt with in common, in one form or another, because the internal market regulation should also avoid market failures. This common endeavour is called ‘positive integration’, which has deepened and widened in scope enormously over time. It also implies common institutions, with varying degrees of powers, the object of many debates among scholars and policy-makers throughout EU history.

As summarised in Figure 1 above, a large part of the direct and indirect impacts of Single Market integration are of an economic nature. While the EU Single Market must also serve other purposes – for example, supporting inclusive and sustainable growth, promoting the freedom of European citizens to live and work in another Member State or protecting

²⁶ See art. 26 TFEU.

European consumers' rights – it does so by creating larger and better functioning European markets (including the norms and institutions that have to underpin these markets), and consequently, by unleashing greater actual and potential economic activities of a cross-border intra-EU nature.

When focusing on the Single Market from a purely economic perspective, its definition also changes angle accordingly. A market is economically integrated when the economic frontiers existing within it have been eliminated. The concept of 'economic frontier' thus becomes crucial to the purpose of determining what a common market is. These frontiers consist of any physical or immaterial delimitation which hampers actual or potential flows of goods, services, capital, labour, technology and communications (Pelkmans, 2006). Nowadays, significant improvements in the Single Market structure and a few other exogenous developments (such as globalisation) have together helped the EU to overcome many old but often stubborn impediments. Nevertheless, other barriers are still a matter of concern²⁷.

The chapter proceeds as follows. First, an overview of economic theories dealing with market integration issues is provided, and then the literature is reviewed in order to identify a set of causality-proof, significant and feasible indicators capable of capturing the Single Market evolution.

5.1. What does the economic literature on Single Market effects suggest?

5.1.1. Economic analysis of Single Market integration

The economic literature has extensively analysed the consequences of economic integration, international trade and market opening. However, few academic contributions attempt to disentangle the Single Market effect from other, often simultaneous, economic and non-economic processes, globalisation being the most relevant example. This gap in the literature can be explained by the great complexity of the task, both from a theoretical and empirical viewpoint. Of course, some notable exceptions exist (see, i.a., Dorrucci et al., 2002; Egger & Pfaffermayr, 2002), but the Single Market is often merely represented in empirical studies via a dummy variable²⁸, which merely controls whether a country is or is not an EU member (e.g. Head & Mayer, 2000; Nahuis, 2004; De Santis, 2012). However, EU membership and Single Market integration are not equivalent concepts; in addition, this binary approach precludes any assessment of the depth and extent of market integration, and hence, cannot capture Single Market integration to the extent required for using it as a monitoring tool for EU policy-makers.

Shifting the attention from the empirical to the theoretical lecture, the first and foremost economic output of market integration is the lowering, up to the complete removal, of barriers between national markets, first tariffs and quotas and then regulatory barriers (see Figure 1 above). The EU Single Market programme has not been limited to removing intra-EU barriers, however, but has also opened up markets by introducing (more) competition in sectors where it was previously limited or absent. This process, which is usually called (sector) 'liberalisation', has been undertaken under the umbrella of Single

²⁷ For an extensive mapping of the costs due to the incomplete nature of the Single Market, refer to the European Parliament studies "Mapping the Cost of Non Europe" (2014), and the sources quoted therein. For a comprehensive mapping and analysis (with particular reference to barriers and policy proposals) of the very wide Single Market for services, see Pelkmans, Mustilli & Timini (2014).

²⁸ Dummy variables are variables that can assume binary values, such as 1=True and 0=False, or, as in this case, 1 for EU members and 0 for non-EU members.

Market policies, but can be logically distinguished from Single Market integration²⁹. Finally, Single Market integration also requires the removal of distortions to competition in all five market types (goods, services, labour, capital and codified knowledge), both inside the national markets and those taking place at the external borders.

Decades of studies of regional economic integration, dating back to Viner (1950), provide a tentative map of the economic outcomes of Single Market integration. Two comprehensive surveys (Baldwin & Venables, 1995; Pelkmans, 2011a) list the following economic outcomes arising from market integration:

- reduction of trade costs, which in turn results in:
 - Additional trade flows;
 - Higher benefits from existing trade flows;
- variation of the regional bloc's external competitiveness;
- reduction of price-cost mark-ups due to increased competition;
- reduction of production costs due to economies of scale and elimination of technical inefficiencies;
- increase in product variety;
- additional accumulation of human and physical capital stock;
- additional knowledge and technology spillovers.

Outcomes in turn trigger impacts, or second-order outcomes. The longer the causation chain, the more nuanced the effects and the more complex the interrelationships. Indeed, as will be shown below, the economic analysis of Single Market policies cannot always say whether the Single Market has, in theory, and has had, in practice, a positive or negative effect on many of the economic impacts listed below. This has implications for defining a set of indicators for monitoring Single Market's economic performance, as *a priori* it is not always possible to judge whether a certain trend is a sign of further or reduced market integration without some accompanying context or explanation. The most important expected impacts of market integration policies are listed below.

- **Price convergence.** While full price convergence (i.e. single prices) is an ideal which is not to be expected, even in national and local markets, in an integrated Single Market increased trade flows, arbitrage, the foreign entries, both actual and threatened, will constrain price divergence, and formerly separated markets can be expected to show a trend towards greater price convergence (Pelkmans, 2011b).
- **Locational effects.** Economic integration may result in economic activities either concentrating in already more developed areas or displaying more widespread diffusion.

²⁹ It is possible to have a liberalised yet nationally segmented market, and a market in which competition is not allowed, but cross-border competition for the market is possible also for foreign entities.

- **Convergence of wages and production factor prices.** Depending on the type of trade flows arising in a regional bloc, wages and rents may either converge or not³⁰.
- In turn, this has an impact on whether **incomes per capita** will eventually converge or diverge.
- **Long-term growth rate** (as opposed to a one-off growth increment due to the increase in trade flows) will be higher in an integrated market only if i) market integration stimulates additional investments and ii) these investments have a higher return compared to the existing physical and human capital.
- **Investment flows** (e.g. FDI). The lowering or elimination of barriers to the free circulation of capital and to the freedom of establishment stimulates an increase in investment flows. At the same time, the reduction of trade costs due to market integration acts as a countervailing force, at least for tradable good industries, as trade may become possible, or cheaper, whereas establishment in a foreign country was previously required. Although countervailing forces may be at play, investments can be expected to increase at least in non-tradable industries, such as the bulk of service industries. However, the timing of these developments are radically different: many years of FDI flows may be observed at the beginning, which would precisely exploit the comparative advantage of foreign countries, thereby often helping to increase trade. The East-West trade inside the EU nowadays is a clear and powerful example of this phenomenon. Later on, after catching-up, other types of FDI will occur, still fostering market integration with an intra-industry character, but not necessarily leading to increased trade flows;
- **Increased innovation** may result from technology and knowledge spillovers. However, as for locational effects in general, it is not possible to predict whether innovative economic activities will be more evenly distributed across regions, or will concentrate in areas where they are already strong.

Today, the proper measurement of the different impacts of the Single Market sketched above requires exploring two principal analyses, namely i) **alternative theories of economic integration** (and the **geographic level of measurement**) and ii) the **globalisation process**³¹.

With regards to the **alternative theories of economic integration**, if on one hand analysts of economic integration agree on what economic fundamentals are potentially affected by integration processes, on the other they radically disagree on how some of these elements will be influenced, and therefore on their evolutionary path. Scholars of economic integration can be classified into two major groups: one expecting economic 'convergence' (of real per capita incomes, and at times unemployment too) as a result of market integration, the other instead suggesting 'divergence' in these variables.

When arguing that convergence via market integration can be expected from the effective working of the treaties since 1957, this might be justified using two alternative but similar theories, both predicting the dispersion of economic activities across an integrated

³⁰ Convergence under market integration can also be the result of technological flows, FDI and other determinants (e.g. mobile workers). All of these factors may in turn be linked to market integration as well.

³¹ The same issues will also be analysed for each indicator discussed in the sections below.

territory, thus leading to economic convergence. The first theory is the neoclassical growth model (also known as the Solow model developed in 1957, and the second is the Heckscher-Ohlin-Samuelson (HOS) model.

Assuming perfect competition³² and technological progress (exogenous to capital and labour)³³, the Solow model demonstrates that capital – which in this case is the main driver of economic growth, as labour is undifferentiated and kept constant – will be invested more conveniently where it is scarcer, due to its 'decreasing marginal product'³⁴. In other words, the dispersion of economic activity will be automatic through the investment channel, as investment will (mainly) go where it is more productive, which corresponds to less-developed (i.e. endowed with relatively less capital) areas, thus leading to economic convergence.

On the other side, the HOS model is based on the effects of (relative) factor endowment, which means exploitation of comparative advantage, i.e. countries will export those commodities/goods characterised by a relatively more intense use of their abundant production factors. Indeed, assuming free trade, the HOS model in its pure (be it somewhat restrictive) version predicts convergence of wages and returns on capital through convergence in the price of goods driven by comparative advantages of the trading countries with different factor endowments. Typically, one would expect relatively poor countries to be relatively abundant in labour and rich countries relatively abundant in capital, so market integration would automatically turn into an income convergence machine.

However, another stream of thought developed in parallel – starting from Gunnar Myrdal's (1957) seminal work on 'circular cumulative causation'³⁵. Myrdal's theory suggested that economic development, particularly in circumstances where economies are increasingly integrated, is a self-reinforcing process, causing rapid progress in more developed countries, whilst trapping poorer economies in a vicious circle of underdevelopment, mainly due to human, capital and trade dynamics. Critical here are the observations that the initial state of development is uneven (in the 1950s called 'unbalanced', hence, the Rome Treaty's objective of 'balanced growth') and that when market integration dynamics begin to set in, both labour and capital flow away from the poor regions. Thus, whereas in the HOS model factors do not flow across borders or between regions but are seen as given 'endowments', in the Myrdal approach these factors respond to integration opportunities. This is so because labour is faced with structural unemployment in poor regions and capital can earn more in developed economies due to positive externalities, as well as better hard and soft (e.g. educational, etc.) infrastructure. Therefore, market integration will deepen the 'imbalance' between rich and poor countries/regions.

This theory was investigated further as the economic convergence theory was challenged by the increasing evidence of persistence of underdeveloped nations and regions lagging behind, respectively at the world and EU level. Other scholars responded to the

³² In economics, 'perfect competition' corresponds to a market structure where the following five conditions are met: 1) No firm can influence the price in the market, i.e. all firms are 'price takers'. 2) As a consequence, each firm has a relatively small market share. 3) There is no product differentiation, i.e. only one product is sold in the market. 4) There are no asymmetries of information, i.e. all market actors have access to all information, for example that necessary to compare all prices offered by all different firms. 5) The market has no barriers to entry and exit.

³³ Exogenous means that technological progress is considered as 'given' from outside the production system.

³⁴ In this case 'decreasing marginal product' means, in other words, that for every additional unit of one capital invested, the corresponding additional return in terms of output will be increasingly smaller.

³⁵ If not from François Perroux's growth pole model (1950).

convergence theory by calling into question the role of technology and human capital, considering them as endogenous, rather than exogenous, drivers of economic growth, more precisely the principal drivers (Romer, 1986; Lucas, 1988). These contributions argue that, due to spatial transfer costs, knowledge and innovation tend to accumulate and reinforce in the same geographical locations with superior endowment, then creating an 'agglomeration' effect, causing ever-greater divergence. The 'New Economic Geography' branch developed after 1990 arrives at the same conclusion, foreseeing increasing concentration of economic activities due to integration processes, in particular thanks to specialisation, market potential³⁶, and (falling) transport costs, all factors that will lead to structural divergences (see, i.a., Puga, 1999; Rodriguez-Pose and Fratesi, 2007).

Academics struggled during the last decades in applying those frameworks to the specifics of EU integration, but no undisputable conclusion has been drawn (Rodriguez-Pose, 1999). Indeed, economic literature presents confusing signals regarding whether or not it is possible to observe economic convergence or divergence inside the EU. Analysis at country level shows clear-cut signals of convergence, but quite the opposite seems to be true when scholars tackle data at regional level (e.g. Magrini, 2004), with consistent indications that the poorest EU regions not only missed the 'catch-up' opportunity, but even fell further behind³⁷.

This consideration brings to the **geographic level of measurement**. This contrast between convergence among countries vs. among regions, due to the spatial dimension of investigation, calls for a general planning on data gathering, management and analysis, possibly in a comparative fashion (i.e. national vs. regional), to create a better understanding of the multi-faceted dynamics engendered by economic integration. As mentioned above, results at national and regional level are contradictory. Indeed, a process of convergence between countries seems to encounter a process of divergence within countries, i.e. at regional level. Analysing these processes carefully and within a comparative framework may help policy-makers to reach an understanding of a complex and varied reality.

The second issue, the **globalisation process**, affects the analysis of whether and to what extent the Single Market is the driver of integration. It should first be noted that the last wave of globalisation is a recent phenomenon – it did not play a major role until some 25 years or so ago, and in that early period the EU was actually a frontrunner of the emerging globalisation. Nowadays, globalisation is capable of exerting a powerful influence on the EU, externally as well as – to some extent – internally. Indeed, distinguishing the effects of EU integration from other factors, including globalisation, may be difficult.

The relationship between globalisation and EU market integration is of particular interest, as both processes concern, and may be included under the overarching umbrella of economic integration. Academics devoted some effort in trying to overcome this methodological obstacle, but procedures are at best oversimplifying the question. For example, Krieger et al. (2010) classified the different driving forces and transaction costs

³⁶ The greater the size of the market reachable from one city/region/state, the smaller the incentive of opening other branches in different cities/regions/states.

³⁷ Of course, one needs to take into consideration that the EU has actively attempted to assist poor regions in infrastructure, hard and soft, and via other subsidies to counter these trends and, in any event, render such regions more interesting to attract FDI as a stimulus to local development and catch-up growth. Such policies are in themselves not market integration but active interventions. What can be observed via indicators is therefore also influenced by these interventions.

related to economic integration (such as technological progress, industrial organisation change, lowering of barriers) allocating them to either 'EU integration' or 'globalisation'. But any such classification risks being artificial, if not inappropriate, as in most cases both EU integration and globalisation impact on the variables discussed above. For instance, Krieger and his co-authors (2010) assigned ICT technology progress or industrial organisation changes to globalisation *only*; it goes without saying that EU Single Market policies also have influenced these phenomena. On the contrary, transaction cost reductions taking place between EU countries are *exclusively* attributed to EU integration, implying that regional integration is *only* about regional-driven effects. Conversely, other studies (see, inter alia, Ilzkovitz et al., 2007) carefully consider the existing interrelationship between EU integration *and* globalisation forces, acknowledging the conceptual complexities of estimating the relative magnitude of each process when using some 'integration indicators'.

5.1.2. Ex post assessment of Single Market impacts

Another stream of economic literature tried to measure *ex post* (or simulate *ex ante*) several of the above-mentioned outcomes and impacts of the Single Market (Emerson et al., 1988³⁸; European Commission, 1996³⁹; Ilzkovitz et al., 2007). For measurement purposes, and within a microeconomic framework, these studies further distinguish three classes of economic effects of Single Market integration (Baldwin & Venables, 1995)⁴⁰ :

1. **Perfect Competition effects.** Simpler models of market integration presuppose perfectly competitive markets, which are a theoretical ideal type easy to analyse, albeit detached from reality. If perfectly competitive markets are integrated, the welfare of the countries participating in the regional integration project is subject to three effects:
 - i. *Trade volume.* Since barriers between markets are removed, the cost of trade is reduced, and trade flows increase, thereby creating a net welfare gain⁴¹.
 - ii. *Trade cost.* The removal of barriers between markets also reduces the cost of trade flows that were already taking place before the integration process, hence creating a net welfare gain⁴².
 - iii. *Terms of trade.* Terms of trade represent the relative price of exported to imported goods: the higher the terms of trade, the more imports can be bought with one unit of exports, and the more competitive is a country. Variation of the terms of trade within a regionally integrated bloc cancel out each other, as intra-bloc exports and imports prices are both lowered. However, an economic bloc may experience an overall increase in its terms of trade, if the additional intra-bloc trade flows reduce extra-bloc imports, thus increasing the welfare of the countries participating in the bloc.

³⁸ The so-called 'Cecchini Report'.

³⁹ The so-called 'Monti Report'.

⁴⁰ These classes are additive, in the sense that the more complex the analysis, the more classes of effects can be included. It goes without saying that real world market integration produces all the classes of effects detailed below, and many other complex interrelationships.

⁴¹ Given that most of these studies had a Single Market, rather than world market, focus, here, the distinction between trade creation and diversion is left out. If goods or services were available in non-EU markets at lower costs, Single Market integration would not necessarily lead to net welfare gains.

⁴² More precisely, welfare gains arise from trade costs that were already not appropriated by a country's agents, such as those due to import quotas.

2. **Imperfect competition and economies of scale effects.** When imperfectly-competitive markets, i.e. where price and average costs do not coincide due to e.g. market power or economies of scale, are integrated, the following additional effects arise:
 - i. *Output effect.* Market power of firms is, in many circumstances, diluted when different markets are integrated. The reduction of market power translates into lower price-cost mark ups, and hence to a higher output.
 - ii. *Scale effect.* For products for which the minimum efficient scale is large compared to the national sales volume, firms may increase their size in a larger integrated market, and move downward along the long-term average cost curve.
 - iii. *Variety effect.* In markets for differentiated products, consumers also benefit from additional intra-industry trade flows within the regional bloc; these flows increase the variety of products for consumers.
3. **Dynamic effects.** Market integration spurs investments and presumably innovation as well. This may result in welfare gain as long as the returns on investments are higher than the social discount rate and hence increases the long-term capital stock. As for knowledge and innovation, the increase in market size may increase the amount and outreach of technological spillovers and indeed spur invention/innovation, because of higher expected profits over an eventually much larger turnover.

5.1.3. The home bias approach

Another – alternative – approach to measuring market integration is the so-called ‘home-bias’ (e.g. Delgado, 2006; Balta & Delgado, 2009; De Sousa et al., 2012). The ‘home bias’ literature assesses economic integration against an impossible counterfactual: an ideal world where no frictions exist (not even transaction costs) and, accordingly, goods, services, capital and persons circulate freely without any impediment within and across borders. Additionally, in this ideal world, economic agents act with a ‘market-wide’ attitude. A market-wide attitude means that nationally-produced (‘home’) goods and services are expected to account in a country consumption basket for a share equal to the country contribution to the ideal world economy. In simpler terms, if country A’s GNP⁴³ amounts to 10 % of the ideal world economy, then country A production would represent 10 % of its consumption. At EU level, the market-wide attitude is translated as follows: excluding extra-EU imports, if Member State A’s GNP amounts to 10 % of the EU economy, then Member State A’s production would represent 10 % of its consumption of EU products.

However, this approach presents several problems, the first being the lack of an underlying economic theory (Pelkmans et al., 2008). Moreover, the empirical indicators used to measure home bias often differ among authors (see i.a. Baele et al., 2007, for equity portfolios), and very often relies on gravity estimates, with all the limitations that they imply⁴⁴. As a result, the reasons explaining the amount and trend of the home bias are unavoidably, to some extent, arbitrary. In particular, the home bias is consistently

⁴³ Used as a measure of the size of the home economy; see Pelkmans et al. (2008).

⁴⁴ The main being the risk of misspecification of the gravity equation(s), potentially undermining the reliability of gravity results (for further explanations see, i.a., UN ESCAP, 2012)

high across studies, suggesting primary pitfalls in the Single Market. However, the extremely fragmented situation signalled by home bias analysis (even though declining over time, according to all leading studies) can hardly be matched with the state of functioning of the Single Market. The drivers of home bias and trends calculated remain also hard to unravel, and whether or not these 'market imperfections' may (and need to) be addressed by policies is difficult to say. Finally, the home bias trend has no clear direction, as divergent (and exogenous) forces may push it in one direction or the opposite. Two examples may be: i) the increasing share of the value chain that is global (or at least European), making the product nationality diffuse; or ii) FDI that, through direct commercial presence, might increase (more than proportionally) the share of home consumption, boosting internal supply.

5.1.4. Conclusion

To summarise the findings discussed in this section, Single Market integration has been the object of a large body of economic analysis. From an empirical point of view, it is hard to disentangle the impact of the Single Market from other drivers of economic integration. From a theoretical point of view, economists have identified several economic impacts of Single Market integration, from GDP growth to innovation, to effects on prices, wages and rents. However, in many instances, different contributors disagree on whether Single Market integration *per se* leads Member States to converge towards to diverge from a common economic performance.

5.2. Assessment criteria for candidate variables

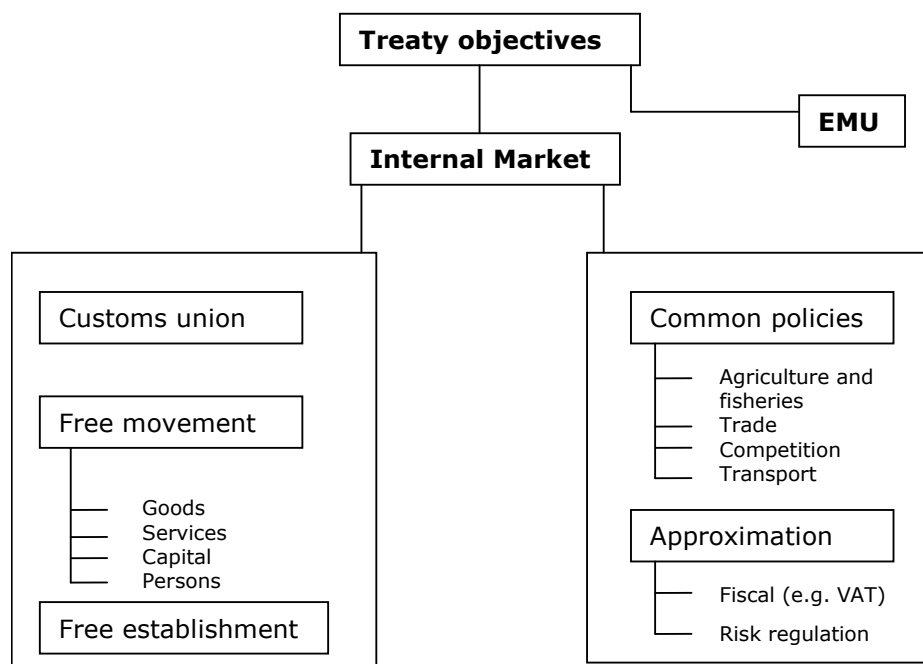
This section is dedicated to the analysis of suitable variables for measuring the Single Market economic performance, as discussed in the previous section. The research team will assess the identified set of variables using a threefold methodology, based on the following criteria:

1. **Causality**, i.e. there should be a clear causal link between the indicator and the Single Market, with an unambiguous relationship, either positive or negative. This criterion tests whether there is a clear causal link between Single Market integration policies and the economic or regulatory aspect measured. For example, while there is a consensus that Single Market policies should result in a trend towards greater (albeit not absolute) price convergence, it is not clear whether labour productivity will converge towards the level of the best performers.
2. **Significance**, i.e. the changes in the economic indicator must be driven to a significant extent by Single Market policies. This criterion tests whether the measured economic or regulatory aspect, while causally linked to Single Market policies, is mainly driven by other factors. An example of a variable which could also be driven by other factors in the short term is foreign direct investments, which are not only caused by the absence of regulatory barriers, but also, more generally, by the economic cycle.
3. **Feasibility**, i.e. underlying data collection should not be too resource-intensive. If the set of indicators is to be embedded within the European Semester, data collection should be carried out each year. For this reason, measurement methodologies must be both replicable and "doable" within such a timeframe. For example, administrative burdens, albeit partly generated by the Single Market *acquis*, are very difficult to measure consistently at two subsequent points in time.

On another side, the impact of integration policies on long-term economic variables (e.g. wage and income convergence) can hardly be assessed on a year-by-year basis.

To understand which variables best fit the purpose of measuring the economic performance of Single Market policies from an economic perspective, it is necessary to investigate the different policy components. Figure 3 provides an elementary visualisation of the Single Market policy elements and constitutes the basis for the selection.

Figure 3: Single Market Components



Note: The left side describes 'negative integration' features, and the right side 'positive integration' features.

Source: Pelkmans (2006).

The attention of the research team focused on the free movement and the right of establishment⁴⁵. The resulting building block consists of the four freedoms and the right of establishment. This set of freedoms and right is crucial for the economic performance of Single Market policies, and is directly driving market integration. Moreover, despite some intrinsic and unavoidable difficulties (that will be explained on a case-by-case basis), the four freedoms and the right of establishment appear to be a suitable ground for embedding a set of M&E indicators.

On the other side of the diagram, common policies and approximation tools are articulated both in aims and scope, concerning institutional, legal, political and economic matters. However, with some exceptions (namely, trade and competition policies), common policies are preponderantly sectoral in nature and will thus be covered in chapter 7. One should expect most of these policies to fit more ad-hoc sectoral schemes for M&E.

⁴⁵ The customs union is the first building block of the Single Market, and was the most prominent initial issue to be dealt with, after the Treaty of Rome was signed. A first implementation took until 1968, and by 1981 the Common Customs Code was accomplished, signalling the completion in great detail (with the exception of some 'minor' issues, such as some forms of enhanced cooperation).

Based on the analysis of the four freedoms and the right of the establishment, a set of indicators which consists of variables that can be gathered directly and indirectly⁴⁶ from the relevant literature discussed in this section on European economic integration (see, i.a., Pelkmans et al., 2008; Ilzkovitz et al., 2007; König & Ohr, 2013), and correspond to:

1. Price convergence (freedom of movement of goods and services)
2. Trade flows (freedom of movement of goods and services)
3. Outward and inward FDI stocks (and activity of multinational enterprises) (right of establishment)
4. EU citizens working in another Member State (freedom of movement of workers)
5. Interest rate(s) (freedom of movement of capital)

These variables will be properly defined (e.g. what exactly do 'trade flows' mean? What unit of measurement fits the purpose?) and tested against the three aforementioned facets: causality, significance and feasibility. In the tests, the readers should keep in mind the two general caveats mentioned in the previous section: which economy theory provides the best explanation; and interference in the measurement of significance of the impact of the Single Market due to the globalisation process, which indeed overlaps with European economic integration.

Further to the discussion about each single variable, in the context of M&E of long-run processes, such as the economic performance of the Single Market, the role of trends vs. absolute values should also be highlighted. Indeed, the analysis of trends should preferably be the focus of researchers and policy makers, aiming to understand the path of integration and the drivers behind it. Time-definite figures would have an erratic meaning, if presented in an isolated form (i.e. a single, de-contextualised datum): EU economic integration is evolutionary in nature and figures for a single year could be influenced by other factors, independent of Single Market policies. As discussed above in section 2.1, it can be reiterated that the analysis of trends should go in parallel with in-depth qualitative assessments, which present the narrative on the basis of which facts and figures can be interpreted (e.g. by mapping the existing economic barriers preventing the Single Market functioning and hampering further integration).

The economic indicators proposed above do not approach two issues widely that are discussed in economics and are certainly important for business ecosystems, as well for the Single Market functioning, namely innovation and competition. The reasons are diverse, and reported below.

Innovation is as important as diffuse, and its nature is difficult to capture in one (even composite) indicator. The inner complexity of innovation emerged in the attempts to measure it, even though the European Commission made considerable efforts. The Innovation Union Scoreboard⁴⁷ and the related report are probably the most concrete results. However, the Scoreboard includes three main types of indicators, and eight different dimensions of innovation, summing up a total of 25 indicators, further testifying the difficulties in 'compressing' such a nebulous notion. Indeed, the risk in 'summarising' innovation is to lose some of its variegated facets, and to blend inputs with outputs and

⁴⁶ Directly: the specific variable has been explicitly used previously in literature. Indirectly: the specific variable has not been explicitly used, but the underpinning theoretical concept has clear roots in literature.

⁴⁷ More information on the Innovation Union Scoreboard and the related (2014) report are available at: http://ec.europa.eu/enterprise/policies/innovation/policy/innovation-scoreboard/index_en.htm.

outcomes⁴⁸, which is not compatible with the general analytical framework implemented in this study.

Competition is also difficult to measure; however, it also presents another drawback in view of using it to measure the economic performance of the Single Market in general terms: it is sectoral in nature. Indeed, its measurement and (economic) sense are strictly intertwined with the 'relevant market' in which competition takes place⁴⁹. From an economic perspective, a set of indicators (more precisely, indexes) are available for measuring competition in a sector, the most relevant ones being the k-firm concentration ratio ($CR_{(k)}$) and the Herfindahl-Hirschman Index (HHI).

The analysis of competition is not widespread across indicators for measuring the performance of the Single Market. As discussed in the previous analysis, only the Market Monitoring Tool explicitly covers competitive conditions. Indeed, the Market Monitoring Tool adopts a sectoral approach and as such assessing competition is a perfectly legitimate means for this goal. Other more general tools to use for Single Market M&E do not cover competition variables, which are, on the contrary, largely studied in the *ex post* assessment of Single Market costs and benefits (i.a. European Commission, 1996; Ilzkovitz et al., 2007).

5.3. Testing the selected indicators

Below, the selected set of indicators, namely price convergence, trade in goods and services, cross-border movement of workers or persons, interest rates and FDI, is analysed in the light of the threefold methodology proposed. The methodology is based on testing each indicator for the criteria of causality, significance and feasibility.

5.3.1. Price convergence

Price convergence (divergence) refers to the reduction (increase) of cross-country price differentials, taking into account, to the extent possible, differences in purchasing power and differences in the characteristics of goods and services (e.g. quality).

Causality

Single Market implementation is expected to positively affect price convergence, i.e. the higher the level of integration, the more prices will converge across Member States. This intuition is based on the famous 'law-of-one-price', postulating that in one perfectly integrated market – with no economic barriers, such as transport or information costs – arbitrage will be triggered by price disparities, levelling them to zero. However, the law-of-one-price, and therefore price convergence, would not only be triggered by enhanced competition in a more integrated market, disciplining prices, but also by other relevant drivers linked to the Single Market. Indeed, according to the Balassa-Samuelson effect (1964), price convergence may also result from a 'catching-up' process of productivity and per capita income, in combination with integrated domestic labour markets between tradable and non-tradable sectors in turn possibly resulting from Single Market policies.

⁴⁸ For example, the comprehensive PwC/LE report (presented to BEPA) on the "Cost of Non-Europe" included as measures of innovation the following indicators: 1) investment in research & development and 2) patents filed. Neither indicator is exempt from criticism. The former can be measured accurately, but it only measures inputs that may or may not lead to true innovation; the latter is influenced by many other relevant determinants, such as the national legal regimes, the nature of the entity generating innovation, the fact that other alternatives (e.g. trade secrecy) exist to protect innovation, etc.

⁴⁹ By 'relevant market', the economic literature intends the smallest group of products in which a theoretical monopolist may exercise its market power by raising the price without losing customers. Many complexities surround the legal notion of relevant market, but these are not the object of the present paper. For further information, see Motta (2004).

In addition, price controls in regulated sectors of the economy may play a counteracting role, albeit this is likely to be marginal in the current EU situation, being present only in few network industries and this is being phased out (Dreger et al., 2007).

Nevertheless, price differences should be dealt with carefully, as empirical economic literature has shown that total price convergence is not fully realised even within countries, not to mention between countries (see, i.a., Engel and Rogers, 1996). So, price differences should be regarded in perspective and the existence of differences should not be regarded as a failure. Rather, a signal that the law of one price is operating across Member States would be that the time trend of price differentials is decreasing. The Monti Report (European Commission, 1996) showed (based on national price indices) that over the 1980-1993 period evidence pointed to a price convergence trend in the old EU-12. More recently Ilzkovitz et al. (2007) confirmed those results on the basis of the 'coefficient of variation' of comparative price levels for the EU-25.

Price convergence for a certain good (or service) is expected to be directly correlated to its tradability, that is to say the more intense the tradability of a certain good (or service), the steeper its price convergence path. In general, goods show a higher and firmer trend towards convergence than services; this may be related to the low (in general) tradability of the latter (Pelkmans, 2011a)⁵⁰.

Significance

It is not an easy task to estimate the exact 'impact' of the Single Market on price convergence. Surely it plays a (significant) role, as explained above, but other relevant issues also determine price convergence. Indeed, many other EU 'integration' features may have induced price convergence. For example, a common monetary policy by the ECB (for the eurozone at least) and a higher transparency of price caused by a common currency, the euro, contain inflation to a low level. Additionally, a more 'open-Europe', i.e. a lowering in tariff levels and a reduction in non-technical barriers towards third countries, also attracted more imports from the Rest of the World (RoW), and not only from other Member States. Cheaper imports from the RoW contribute to increased competition and downward pressures, and therefore to price convergence.

However, all these factors seem to have a relatively limited impact on price convergence/divergence, with respect to the Single Market. In contrast, the Single Market appears as the main force behind price convergence in the EU, through both its major declinations, i.e. enhanced competition (driving prices downwards) and the 'catching-up' process of comparatively poorer Member States (driving prices upwards) (see Dreger et al., 2007).

On the other side, it should be noted that price disparities may persist for many other reasons, some of them completely unrelated to policy-making. As examples, the following factors can be mentioned: consumer preferences (e.g. country of origin choice, substitute goods choice, other differently perceived characteristics, e.g. branding, etc.), quality aspects, taxation, etc. (see e.g. Dreger et al., 2007; Obstfeld & Rogoff, 2000; Goldberg & Verboven, 2004).

⁵⁰ Pricing services is particularly difficult due to the nature of the underlying costs, as their quantification is more subjective than for goods.

Feasibility

Currently, price convergence is measured by Eurostat, through the 'coefficient of variation' of comparative price level index for private household consumption, at purchasing power parity (PPP) (see Figure 4). The PPP methodology has been elaborated in collaboration with the OECD⁵¹. However, to properly understand the relevance of the Single Market, price convergence would have to be checked at the individual goods and services level. An easy example can be given: the inclusion in the current PPP data set of consumer spending in housing. However, being non-tradable in nature, housing in general (and rents more specifically) seems to be solely dependent on geographical location (even inside the same city) rather than the integration due to the Single Market. Indeed, it is difficult to imagine an increase in 'rent competition' due to integration-related effects. The creation of another basket of products, more exposed to the Single Market effects, may be considered, and may be feasible.

Product-level comparability constitutes another issue. The present dataset includes different products for different countries, in order to take into account (to the extent possible) the issue of 'consumption representativeness'. In other words, the basket of products may include different products depending on country-specific consumers' tastes. For example, oil used for cooking/dressing purposes may not be the same across countries, e.g. sunflower vs. olive oil, consequently reporting (consistent) differences in prices, not necessarily related with the Single Market status. This means that the method of controlling for different preferences, surely cost-effective for cross-country PPP analysis, may be inadequate for monitoring price convergence at product level (European Commission, 2005). An accurate and comprehensive product-by-product comparison would also have to take into account these (above-mentioned) differences present in the current dataset.

Finally, the current dataset does not give any information about absolute price levels, as it compares indexes. Therefore, it is difficult (if not impossible) to establish the path of the eventual convergence. The question of whether the prices are 'catching-up' to the upper end of the distribution (or at even higher levels), or if they are driving towards the lower end, remains open.

The CMS makes use of price data to assess, i.a., the level of price convergence. It does so by relying upon Eurostat data, as described above, and other EU and national sources for network services and fuel markets.

Prices are analysed at product level, i.e. for specific instances of goods and services. The analysis is then clustered over five categories: fast-moving retail goods, (semi-)durable goods, vehicle fuels, recreational and personal care services, and network services.

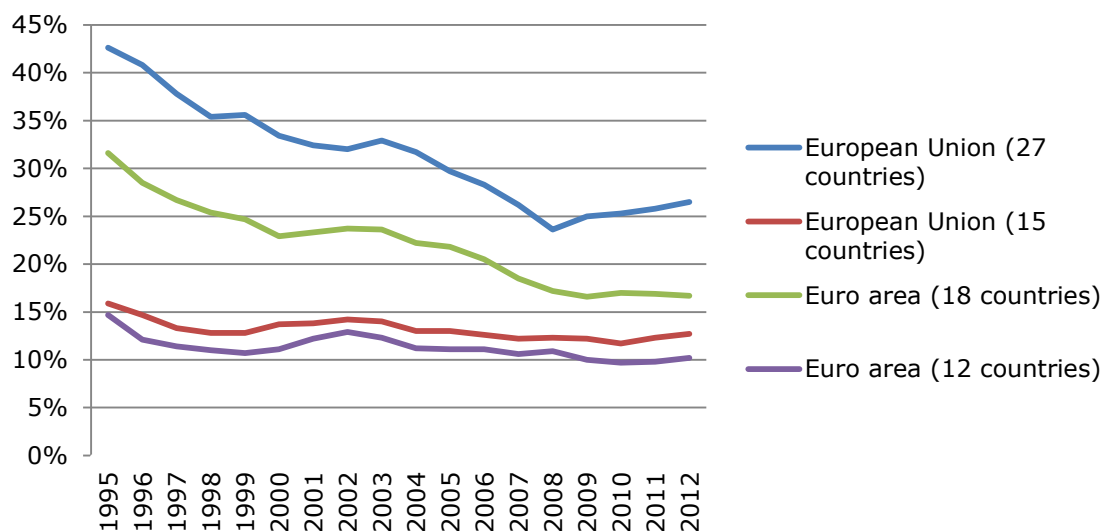
The 2012 results show that, as expected, price variation is higher in services than good markets; the lower dispersion is observed in the market for fuels. Non-tradability, again unsurprisingly, increases price variation, as taxation does as well⁵². The Commission also analyses the correlation between price variation on the one hand, and consumption and prices on the other.

⁵¹ The final product of the last 30 years of collaboration is a methodological manual on PPP, constantly updated in the framework of the Eurostat-OECD PPP Programme (<http://www.oecd.org/std/prices-ppp/PPP%20manual%20revised%202012.pdf>)).

⁵² Although indirect taxation is regulated, rates may vary among Member States within a certain range. Furthermore, Member States are free to impose other taxes e.g. for environmental purposes, which affect the price of a good, for instance on the registration of vehicles.

The Commission concludes by stressing that there is a clear need to increase data availability and country coverage with respect to price-convergence data. Data have diverse origins, e.g. datasets, reports, both at EU and Member State level, and are collected through the use of secondary sources; the coverage of Eurostat data is far from complete. The challenges faced in data collection put at stake their availability, comparability and representativeness.

Figure 4: Price convergence at the EU level, coefficient of variation of comparative price level index for final household consumption (%)



Source: Eurostat.

5.3.2. Trade flows

In broad terms, trade flows refer to the exchange of goods and services across the border of (at least) two different countries.

Causality

The greater the level of economic integration, the higher trade flows among countries. Spelled out in such general terms, this might sound like an axiom in economic theory. However, other specific issues may have much more complex answers. For instance, understanding the impact of the Single Market on intra-industry trade⁵³, as opposed to inter-industry trade (specialisation based on different factor endowments, hence, exports in different sectors than imports); or assessing its effects on variety and relocation, would require a much deeper analysis. The analytical answers in these cases would also depend on 'how' we measure trade flows (i.e. what indicator we intend to use, as discussed below). Nevertheless, generally, a positive impact – *ceteris paribus* – of the Single Market on intra-EU trade flows can be expected.

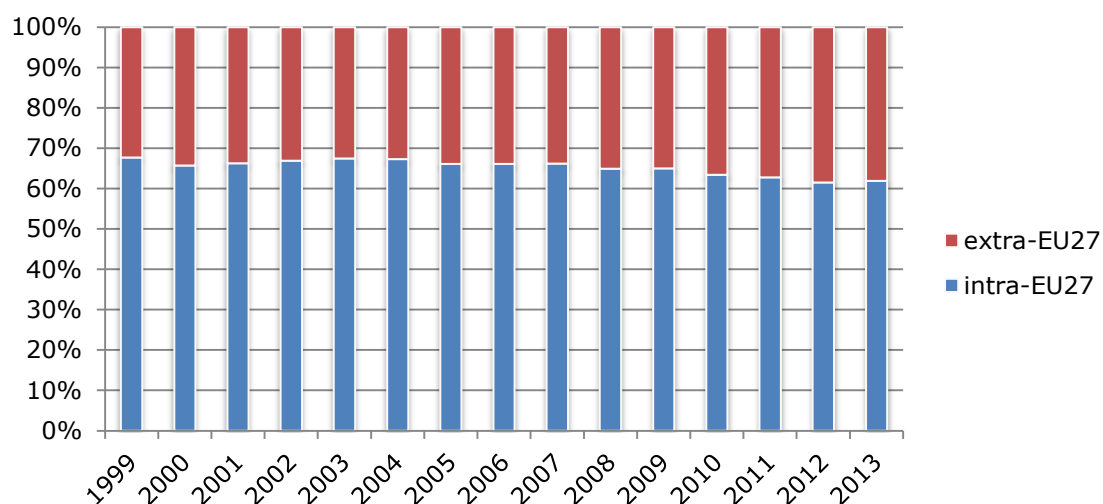
Significance

Single Market policies and their effects on trade might be expected to increase intra-EU trade, in absolute terms and as a share of total trade or GDP. However, if we decide to measure intra-EU trade as a percentage of total trade, we incur the risk of measuring EU competitiveness vis-à-vis the RoW overlapping with the impact of Single Market policies.

⁵³ Two-way trade horizontally and vertically differentiated, see CEPII, 2005. Intra-industry trade is exchange in similar goods, usually within the same subsector/market.

Therefore, an increasing (decreasing) share of intra-EU trade might be due to a decreasing (increasing) RoW competitiveness (see Figure 5)⁵⁴. In addition, a decrease in the intra-EU share of trade might also be due to the implementation of several free trade agreements (FTAs) at EU level, implying a further bilateral opening of EU and foreign markets. Logically, these FTAs might have positive effects on extra-EU trade flows, but their effects on intra-EU trade flows are less clear, and might be even negative, particularly when regarded in comparative terms, such as in Figure 5). Indeed, if interpreted only as a measure of the Single Market, this indicator might suggest misleading conclusions.

Figure 5: Intra- and extra-EU share on total trade, manufacturing

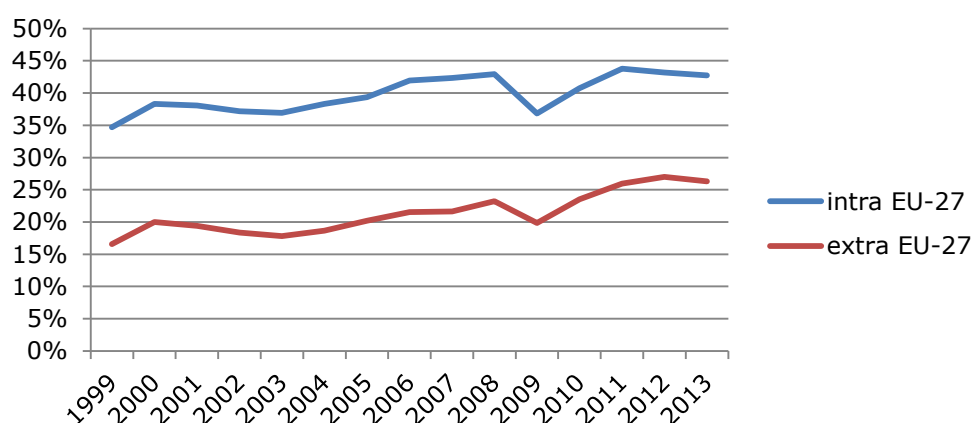


Note: Trade measured as imports + exports.

Source: Eurostat.

It might seem more appropriate to measure the trend of the ratio of intra-EU and extra-EU trade (imports+exports) to GDP (% , as in Ilzkovitz et al., 2007, manufacturing only). Indeed, the two trends permit one to check whether intra-EU trade is due to Single Market implementation only, or more generally to 'globalisation effects', as it seems to be partly the case. Indeed, if only the intra-EU trade-to-GDP ratio rises, one would suspect a greater influence of Single Market-specific measures; otherwise if both intra- and extra-EU trade-to-GDP ratio rises in parallel, it is possible to presume a potential role for 'globalisation'. It remains extremely difficult, however, to disentangle the two effects.

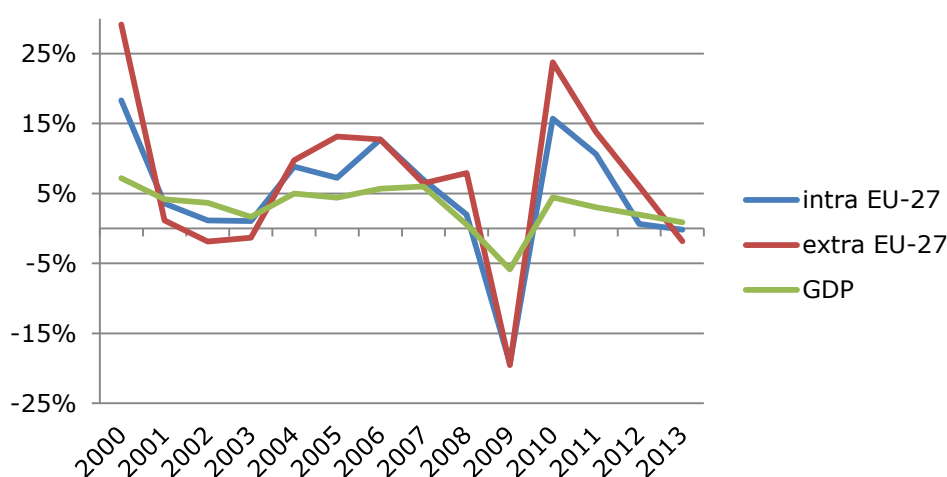
⁵⁴ Data refer to manufacturing only.

Figure 6: Ratio of intra- and extra-EU trade to GDP (%), manufacturing

Note: Trade measured as imports + exports.

Source: Eurostat.

In addition to those two factors, external competitiveness and globalisation, there are other drivers impacting on the selected indicators. The influence of other determinants – such as the business cycle or the exchange rate (mainly with respect to the RoW)⁵⁵ – appears prominent. For instance, Figure 7 points towards a clear and positive correlation between EU GDP growth and EU trade flows. In this case, it would be difficult, if not inappropriate, to attribute the drop in intra-EU trade to a deterioration of Single Market policies in the recent years rather than to the Great Recession. Indeed, trade is first of all a function of the overall level of economic activities.

Figure 7: EU GDP, intra- and extra-EU trade, annual growth rates (%)

Note: Trade measured as imports + exports.

Source: Eurostat.

⁵⁵ With regard to the euro-area, non-euro Member States are obliged to join the eurozone once they meet the "five Maastricht criteria"; for this reason, exchange rate issues in the Single Market will be less and less prominent in the medium-run. The UK and Denmark constitute exceptions, as they received exemptions from this obligation. Sweden is a *sui generis* case, but for practical purposes it enjoys a *de facto* opt-out. However, Denmark is already part of the European Exchange Rate Mechanism, which limits currency oscillations to a narrow pre-determined range.

Feasibility

Data presented above are already available, and are quite complete regarding manufacturing goods and commodities. Nevertheless, there is a lack of information concerning trade flows in the services sectors. As services represent a broad and extremely differentiated part of the economy, the measurement of trade flows in services is not an easy task. Indeed, available statistics are very aggregated (and scarce) and do not allow for detailed analysis. For example, balance-of-payments data only collect information on transactions between residents and non-residents (UNSTAT), while other important aspects of services trade, such as other modes of supply⁵⁶, are completely neglected. UN Statistics of International Trade in Services and Tourism and OECD Statistics on International Trade in Services constitute notable attempts, but they are still in their inception phases. The OECD/WTO Trade-in-Value Added (TiVA) database and other OECD/UNCTAD Global Value Chains (GVCs) indicators constitute a fresh attempt (TiVA has been released in May 2013) to provide another (and alternative) point of view on the current functioning of the trade system.

Indeed, with the surge of globalisation and outsourcing, 'classic' trade flows statistics became less accurate due to the rise of the phenomenon of 'internationalisation' of value chains. Production of goods and services spread to the most convenient locations (in terms of costs and quality of necessary skills and materials) and product 'nationality' became a puzzling concept. Therefore, interpreting trade flows under traditional assumptions, for example not taking into account the relevance of GVCs in the global market, may lead to misleading conclusions on the reality of business developments.

The EU's renewed commitment to improve these statistics and to support these projects may play a key role. The extrapolation of the exact 'Single Market' contribution to services trade flows remains far from satisfactory at the moment.

5.3.3. EU foreign workers

EU foreign workers are persons having the nationality of an EU Member State and residing or actively looking for a job in another Member State, which is not their own.

Causality

The Single Market is expected to have a clear and positive effect on EU foreign nationals living in a different Member State. The freer the market for EU workers, the greater – *ceteris paribus* – the share of employment they will account for. To lower legal and economic barriers among Member States in the context of labour markets means to lower the opportunity-cost for EU workers to move to another Member State for job purposes. Indeed, thanks to the Single Market, more job opportunities have arisen, the costs of hiring EU foreign nationals have decreased substantially (particularly administrative procedures), and relocation costs for workers have decreased as well.

Significance

Despite the fact that the Single Market has a clear impact on the share of EU foreign nationals, many other factors play a role in its evolution. Determinants may be divided into long and short run, as well as in 'push' and 'pull' factors⁵⁷, influencing the economics

⁵⁶ The four modes of supply of services under the GATS are the following: cross border trade (Mode 1), consumption abroad (Mode 2), commercial presence (Mode 3) and presence of natural persons (Mode 4).

⁵⁷ 'Pull' factors are related to the characteristics of the destination country, whereas 'push' factors concern the home country situation.

of migration. In the long run, agglomeration may boost migration, attracting sector-specific skilled workers (pull). On the other hand, (factor price) convergence will tend to reduce migration flows due to income differences.

However, a myriad of elements concur in determining migratory movements in the short-to-medium run, being either 'negative' or 'positive' in nature (Pelkmans, 2006). Negative elements include:

1. costs, such as transaction costs or housing;
2. other immaterial barriers, such as language and culture, creation of social networks and linkages with family;
3. restrictions (few in cases of EU nationals); and
4. staying-put incentives. For instance, the opportunity cost of leaving may change whether considered in the short, medium or long term. Other incentives include risk aversion, fear of discrimination in the host country and perceptions of higher competition – particularly true for unskilled workers – in the host country.

Positive elements include:

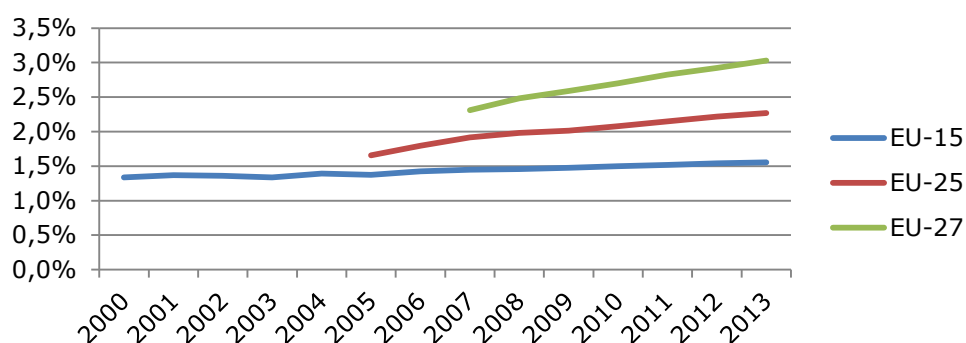
1. 'push' factors, such as low wages and no perceived future potential for increases, and high unemployment in the sending country and other regional differences; and
2. 'pull' factors such as high wages and low unemployment in the host country, and network presence (e.g. family, friends, etc.).

Undeniably, EU nationals enjoy a degree of freedom that is not comparable to that of third-country nationals already residing in the Member States or, even less, to migrants coming from third countries. However, long-run structural problems, such as EU demography (i.e. ageing) and skills and labour shortages, highlight the present and future relevance of those workers (see i.a. Pascouau, 2013). Migration issues, whether concerning EU or non-EU nationals, remain of highly political concern across the EU Member States (see, i.a., Guild, Carrera & Eisele, 2013). It is hard to predict to which extent the share of foreign workers over the working population will consist of EU or non-EU nationals. At the moment non-EU nationals constitute the majority (Eurostat, 2012). However, it would be extremely interesting to reinforce data collection programmes on this issue.

Feasibility

Statistics regarding EU foreign nationals are already collected in the framework of the European Union Labour Force Survey. Quarterly data are publicly available on Eurostat (see Figure 8), both at EU and national level. Investigating further on the determinants of intra-EU migration will require a coordinated effort across European and other public and private institutions. Indeed, statistics are available for working, active and total population. Each of these groups has its own advantages and drawbacks.

The annual report on "Employment and Social Developments in Europe" issued by the European Commission (European Commission, 2014a) is comprehensive and rich in data. The report allows the analyst to separate flows and stock of foreign workers present in the Member States, the latter being the relevant variable to take into consideration. Data presented in the report also distinguishes between recently and non-recently established foreign workers. Data are supported by in-depth qualitative assessments of the main drivers behind the registered developments.

Figure 8: Average of EU-15, EU-25 and EU-27 foreign nationals in EU territory

Note: The average of foreign nationals is calculated over the working age population (15-64), to approximate for 'potential workers'.

Source: Eurostat.

5.3.4. Interest rates

The interest rate is one of the determinants of money and financial asset flows among actors in the market: in a nutshell, it is the price of money. More specifically, it consists of the rate of repayment that an actor (borrower) faces when borrowing a certain amount of money in the market from another actor (lender).

Causality

Financial markets integration relies – essentially – on the condition that all participants have equal access to all markets. This equal access will eventually lead interest rates faced by participants to depend only on “objective indicators of creditworthiness”, for example those describing their financial position and credit history (Pigott, 1993). With particular reference to a single currency environment, financial markets integration allows arbitrage across markets. In other words, financial markets integration implies the elimination of (at least some of) the existing barriers, which contribute to create distortions and interest rate misalignment. Nevertheless, the barriers are entirely related to the internal market – trust, perceptions and confidence being prominent examples (ECB, 2014). In this framework, *ceteris paribus*, market integration – and therefore the Single Market which consistently over time constituted the basis for the bulk of interventions – will support interest rate convergence, in the long run.

Significance

Despite the clear contribution of the Single Market to interest rate convergence, a large number of other factors also play a major role in determining interest rates across such a set of diverse countries. Underlying determinants of interest rates, and of cross-country interest rate differentials, are widely studied by academic and non-academic literature. Indeed, the alignment of interest rates largely depends on inflation rates, GDP growth rates and other macroeconomic determinants, households' disposable income, borrowers' risk profile (including political and 'sovereign' risks), customers' preferences, the distribution of firms (in terms of size), the competition and general situation in the banking market, including the (extent of the) foreign banks' presence in the national market, tax laws (see i.a.: Eurostat; OECD, 1986; Pigott, 1993; Herwartz & Roestel, 2011). Then, to extrapolate the extent to which the Single Market affects interest rates evolution seems extremely difficult, if at all possible.

Feasibility

Eurostat collected and published (only until December 2013)⁵⁸ an indicator of 'convergence of interest rates', measured as the coefficient of variation of interest rates within the euro area and among the EU Member States⁵⁹. It was a composite indicator, with three sub-indicators measuring the interest rate on: i) loans to households for house purchases, ii) loans to non-financial corporations up to one year and iii) loans to non-financial corporations over one year. Other relevant interest rate series could be the interest rate of loans between financial institutions and of sovereign bonds, in order to have a more inclusive frame of analysis, without incurring, in particular, additional costs.

The ECB (2013) publishes a yearly report on the evolution of interest rates across the EU, with details about the following financial markets: money markets, bond markets and banking markets. It would be of particular relevance to provide access to Member State data and also to – now five – sub-indicators. However, even if the indicator were supposed to measure the "trend towards integration of financial markets", by no means could a rising coefficient of variation of interest rates over time be interpreted as an incontrovertible signal of financial market de-integration or disintegration, as its development may be due to other causes, such the ones enumerated above.

5.3.5. Foreign direct investment – Outward and inward (stocks and flows)

Foreign Direct Investment (FDI) represents a crucial element in international economic integration, and it is defined, by the OECD (2014), as a:

cross-border investment by a resident entity in one economy with the objective of obtaining a lasting interest in an enterprise resident in another economy. The lasting interest implies the existence of a long-term relationship between the direct investor and the enterprise and a significant degree of influence by the direct investor on the management of the enterprise.

Causality

The theory of regional integration suggests that the Single Market should have a positive and significant impact on FDI growth, mainly by reducing costs of access to a larger market, including the reduction of non-technical barriers, favouring economies of scale, higher returns on investment and competition. FDI can be of two types: horizontal, when firms decide to set up an affiliate or subsidiary in another country in order to have access to different markets; or vertical, when firms decide to relocate segments of their production processes in other countries due to comparative advantages.

These definitions are functional to the purpose of this analysis, because whereas the first type is often considered as a 'trade substitute', therefore replacing exports, the second is often regarded as a 'trade complement' (HM Treasury Services, 2005). The literature suggests possible negative effects of Single Market integration on horizontal FDIs, particularly in goods (as in services, commercial presence is still relevant in many cases), due to the lower trade costs in a more integrated market. However, the overall effect of economic integration in general, and of the Single Market in particular, on FDI is estimated as largely positive, even though its effect may vary considerably between different

⁵⁸ It has being discontinued since then. See http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/documents/information_to_users_irt.pdf.

⁵⁹ See http://epp.eurostat.ec.europa.eu/portal/page/portal/structural_indicators/documents/CONVERGENCE%20OF%20INTEREST%20RATES.pdf.

industries (see i.a. Blomstrom & Kokko, 2003). Accordingly, FDI should be considered as having a clear causal link with Single Market integration; the overall impact is estimated to be clearly positive, up to an 85% increase in less than a decade (see Flam & Nordström, 2007).

Significance

FDI depends not only on economic integration, as stocks and flows within and between nations may depend on a considerable variety of other factors. The economic literature identifies the following main theoretical drivers of FDI: transport costs and other costs of market access (inverse relation [-]); size of the host market (direct relation [+]); costs related to factors of production, such as labour and capital (-); trade openness (-); fiscal incentives (+); general business climate (+). It is evident that the Single Market is intertwined, in different ways, with many of these determinants. Nevertheless, many limitations arise when trying to estimate the Single Market's direct impact, not least because of its parallelism with a global rise in FDI activities, and its link with the global process of financial liberalisation. In any case, the indicator, whether or not focused only on EU FDI between EU countries, will also be affected by the business cycle (especially with respect to FDI flows) and the macroeconomic situation, including competitiveness between regions (intra- and extra-EU). Certainly, as an example, even if the Single Market were progressing, this would not avoid a hypothetical decline in FDI (either stocks or flows) if EU global competitiveness were in relative decline.

Feasibility

Statistics concerning FDI are available at EU level. Nevertheless, they mainly concern FDI in manufacturing activities, and do not take into account other activities (e.g. internal transactions) of multinational (or transnational) enterprises (MNEs). The OECD dedicated serious efforts to data collection and database construction concerning cross-border activities of MNEs, including the service sector. The AMNE (Activity of Multinational Enterprises) database presents the results of their work, focusing on the foreign affiliates' activities (inward and outward), and includes 17 different variables. Data collection is based on OECD and Eurostat programmes, mostly annual surveys. AMNE is composed by AFA (Activities of Foreign Affiliates), which collects performances of foreign affiliates active in the manufacturing industry, and by FATS (Foreign Affiliates Statistics, see UN et al., 2012), which includes data pertaining to the services sector. These databases and the OECD-Eurostat, due to its 'initial' phase of implementation, may serve as the basis for a better and more comprehensive data collection strategy.

5.4. Conclusions

In this chapter the research identified candidate variables and assessed the identified sets of indicators (i.e. price convergence, trade in goods and services, cross-border movement of workers/persons, interest rates and FDI) using a three-fold methodology. The sets of indicators have been assessed on the basis of the causality, significance and feasibility criteria.

The results present several complexities as no (set of) economic indicator(s) is able to measure the depth and the characteristics of the Single Market without incurring some difficulties related to at least one of the criteria synthesised above. For this reason, the research team observed the lack of a *passe-partout* indicator or a 'perfectly fit for purpose' set of indicators.

Not surprisingly, price convergence may be the variable that best fits the aim of measuring the economic performance of the Single Market. Indeed, EU institutions made efforts in improving data collection systems and activities, within an M&E framework. This brought more than satisfactory results (the Consumer Markets Scoreboard being the best example). Nonetheless, some criticalities are also enumerated, such as the inherent problem of pricing services.

Within this analytical framework and highlighting the main areas of interest from a Single Market perspective, the main qualities and criticalities of other indicators are also described. Trade flows, however measured, are an obvious candidate to assess the economic performance of the Single Market; however, they are also very sensitive to the economic climate and other factors, and as such they may result in a spurious assessment. The same can be said for the share of foreign workers. Since interest rates can be interpreted as the price of capital, their convergence should also be a symptom of Single Market integration; nevertheless, not all the barriers to interest rate convergence are entirely related to the Single Market, with trust, perceptions and confidence being prominent examples. Any measurement of stocks and flows of FDI presents significant problems of data availability. Further theoretical and methodological comprehensive efforts are required, in order to soften those conundrums, and to narrow down the choice to economic indicators indisputably able to grasp the rationale of the Single Market in a 21st century perspective.

The main conclusion of this chapter is that many economic indicators may provide useful information to monitor and evaluate the Single Market, price convergence being slightly preferable to others. A set of economic indicators is probably the best option for an M&E tool, as it might compensate for the drawbacks of single indicators. The complex theoretical framework advises against proceeding with aggregating these indicators in a composite index. It also strongly requires that any economic indicator is complemented by further analysis of a qualitative nature, which may solve some of the problems with respect to significance and causality that any set of indicators would not be able to fully overcome.

6. INDICATORS FOR MEASURING REGULATORY PERFORMANCE

KEY FINDINGS

- The regulatory performance of the Single Market can be defined as the effectiveness of its regulatory inputs, processes and outputs. From a functional perspective, a good regulatory performance is a necessary, but not sufficient, condition for the overall effectiveness of Single Market policies;
- The research team proposes a composite indicator ("Single Market gap indicator") that has the following characteristics:
 1. It is actionable, i.e. capable of both informing policy-makers and triggering policy interventions.
 2. It covers both the 'law on the books' and the 'law on the ground', i.e. the actual effects of Single Market policies on citizens and companies.
 3. It focuses on policy outputs, that is, non-discrimination among nationals and foreign EU nationals, rather than only on policy inputs and processes.
 4. It remains focused on Single Market Performance, rather than evaluating other aspects of the quality of EU and national regulation

As discussed in section 2.1 above, **the project of the EU Single Market has been brought forward through a set of norms aimed at first removing or lowering tariffs and quotas, and subsequently non-tariff (e.g. regulatory) barriers among EU Member States.** These norms, including founding treaties, legislative acts and court rulings, have progressively created a legal framework for EU-wide cross-border liberalisation, mutual recognition, harmonisation of market regulation, common policies, including a single competition policy, and internal liberalisation. This policy process has been the enabler of the economic integration that has taken place in the EU from the Treaty of Rome onwards. The process has involved different government tiers, including EU institutions and national governments, national parliaments and public administrations⁶⁰.

In this context, **the regulatory performance of the Single Market can be defined as the effectiveness of its regulatory inputs, processes and outputs.** In a functional perspective, a good regulatory performance is a necessary, but not sufficient, condition for the overall effectiveness of Single Market policies. Moreover, in a legal perspective, compliance with regulatory obligations under the Single Market *acquis* is an obligation for EU Member States. Having an M&E tool of regulatory performance would thus inform policy-makers for both functional and legal purposes.

As discussed in the gap analysis in chapter 3, there are already two good examples of indicators in the area of regulatory performance. One is the SMS, which focuses on the timely and correct implementation of Single Market directives; the other is the OECD PMR indicators which, although lacking a Single Market focus, cover several inputs, processes and policy outputs connected with the regulatory performance of the Single Market.

⁶⁰ For a more detailed discussion of regulatory inputs, processes and output, see European Parliament (2014b), Chapter 2.2.

The main strength of the SMS is actionability, which is its proven capacity of triggering improvements in the monitored areas; the main limitation is that it only focuses on process-legal compliance, rather than on the situation on the ground. As discussed in the literature (i.a. Pelkmans & Correia de Brito, 2012), Single Market fragmentation may exist even in a scenario of perfect transposition; at the same time, a limited degree of imperfect transposition need not result in a fragmented Single Market. Conversely, the PMR indicators have a greater analytical depth and do not only cover process-legal compliance. However, they were not designed with an EU focus in mind, and therefore are more a complementary source of information than an M&E tool for the regulatory performance of the Single Market.

Profiting from the experience on the ground and from the literature on regulatory indicators, the research team proposes below a tool that has the following strengths:

1. It tries to replicate the SMS's main strength, that is, the new tool is **actionable**, i.e. capable of both informing policy-makers and triggering policy interventions.
2. It tries to overcome the SMS's main limitation, that is, **it covers both the 'law on the books' and the 'law on the ground'**, i.e. the actual effects of Single Market policies on citizens and companies.
3. **It focuses on policy outputs**, that is, non-discrimination among nationals and foreign EU nationals, rather than only on policy inputs and processes.
4. It remains focused, that is **it primarily assesses the regulatory performance of the Single Market**, measured as stronger integration, rather than other aspects such as the quality of EU legislation and legislative processes; however, it also leads to the creation of a database for monitoring the performance of EU rules as such.

This tool is a composite indicator built on the experience of the World Bank's 'Doing Business' (DB) project. Rather than focusing on how burdensome a legal system is for companies, the tool proposed below assesses **the 'Single Market Gap', i.e. the extent to which citizens and companies involved in cross-border activities bear additional burdens compared to citizens and companies operating within national borders**. Section 6.1 discusses in depth the methodology of DB and the lessons that can be learned; and section 6.2 discusses how the DB methodology can be applied to monitoring and evaluating the regulatory performance of the Single Market.

6.1. The Methodology of Doing Business

Doing Business (DB) (World Bank, 2014) is considered the most influential publication produced by the World Bank, and one of the most influential contributions ever on the issue of law and development. It was first published in 2004 and currently covers 189 countries with respect to 11 different aspects of the regulatory environment.

DB aims at measuring and tracking changes of several regulations applicable to companies across their life cycle. The underlying theoretical idea is that economic operators need sound regulation and solid institutions to flourish. Measuring these regulations and institutions is essential to their improvement, and as such it can trigger additional economic growth.

More in detail, the latest version of the DB report assesses 10 different areas of company regulation: starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting investors, paying taxes, trading across borders, enforcing contracts, and resolving insolvency. For each regulatory area, DB measures the number of procedures and the time and costs that a company needs to bear.

The 10 areas are subsequently aggregated into an overall 'ease of doing business' composite index. Moreover, DB also measures an index on employment restrictions, which however is not included in the composite indicator.

Attempts to measure institutions⁶¹ through quantitative indicators pre-date DB. Indeed, international institutions, donors, private companies and scholars have been interested in assessing the so-called 'business climate' of a country, mainly to steer investments and aid flows, and to understand which country needed what reforms. However, compared to the pre-existing tools, DB possesses several innovative features, which turned out to be fundamental improvements in the assessment of a country's business environment and of institutions more generally:

1. DB ensured a truly worldwide coverage. This was made possible by the initiative being launched by the WB itself, which could leverage its financial and human resources.
2. It focuses on specific legal transactions, or case studies, as opposed to general assessments of 'the' business climate or institutions.
3. It is based on objective rather than subjective data. Conversely, most investment climate indicators, such as the Global Competitiveness Index published by the World Economic Forum, rely upon subjective assessment by experts or foreign investors (Davis & Kuse, 2007).

The methodology of DB results in a composite indicator that features four key strengths:

1. It reflects not only the 'law on the books', but also the situation as it is on the ground.
2. It ensures comparability of results across countries.
3. It is easy to understand and therefore can be used for powerful communication.
4. It is effective in triggering reforms, as specific suggestions for specific countries can be derived from the indicators.

Different aspects of the DB methodology, which are relevant to define an indicator to measure the regulatory performance of the Single Market, are described in detail.

6.1.1. Case study approach

DB does not attempt to measure a country's legal system as a whole. Nor does it attempt to measure entire legal or policy areas, such as the efficiency of courts or the strength of property rights in general. By way of example, DB does not measure how easy or difficult it is to enforce a contract in a country. It assesses the number of procedures, time and costs of enforcing a specific contract for a specific kind of company operating in a specific location of each country (many more hypothetical details are defined in the methodology whenever relevant). In a nutshell, DB defines an ideal-typical case study for each regulatory area covered and assesses how each country performs in these case studies.

Table 2 shows the case studies covered by each sub-indicator.

⁶¹ In North's (1990) meaning of 'constraints', both norms and institutional settings are included.

Table 2: Case study for DB sub-indicators

Sub-indicator	Case study
Starting a business	Incorporation of a limited liability company (including the payment of any minimum capital). The company operates in the country's largest business city and performs general industrial or commercial activities (i.e. are not covered by special tax regimes, are not heavily polluting and do not involve international trade). The company is 100% domestically owned by five natural persons, has a start-up capital of 10 times the country's income per capita, and has between 10 and 50 employees.
Dealing with construction permits	Construction of a warehouse. This sub-indicator takes account of the documents that need to be submitted by a construction company; the clearances, licences, permits and certificates that need to be obtained; the notifications required; and the inspections that need to be undergone. Furthermore, the sub-indicator reports the procedures necessary to obtain connections for water, sewerage and a fixed landline; and the procedures necessary to register the property. The construction company has the same parameters as the one described in the "starting a business" case study, but for having 60 employees, including a licensed architect or engineer.
Getting electricity	Connection to the electricity grid of a standardised warehouse. This includes submitting an application to and entering into a contract with electricity utilities, any inspection and clearances, and the external and final connection works. The company owning the warehouse has the same parameter as the one described in the "starting a business" case study. If there is more than one electricity utility, the one serving the largest number of customers is chosen.
Registering property	Purchase of a property and transfer of the property title. This sub-indicator accounts for producing the necessary documents by the seller, the buyer and from any public registry, and for conducting due diligence if required. Procedures undertaken by both the buyer and the seller are counted. The property to be sold is a standardised warehouse. The seller and the buyer are both limited liability companies as described in the "starting a business" case study.

Sub-indicator	Case study
Getting credit	<p>This sub-indicator covers two different aspects:</p> <ul style="list-style-type: none"> • Legal rights of borrowers and lenders with respect to secured transactions. The sub-indicator measures the existence of certain legal features in the commercial, collateral and bankruptcy laws. Two equivalent case scenarios are assessed, involving a secured borrower and a secured lender. The borrower provides the lender with a security interest (or its legal equivalent) as collateral for a loan. • Sharing of credit information. The sub-indicator measures the depth of credit information rules, their coverage, scope and its accessibility through either public or private registries.
Protecting investors	<p>Protection of minority shareholder against directors' misuse of corporate assets for personal gain. The sub-indicator assesses three distinct dimensions: i) transparency of related-party transactions, ii) liability for self-dealing and iii) shareholders' ability to sue officers and directors for misconduct. The business at stake is a publicly traded corporation listed on the country's most important stock exchange (if any, otherwise it is assumed to be a large private company with multiple shareholders). The transaction involves another company partly owned by the former company's controlling shareholder (who is a natural person residing in that country).</p>
Paying taxes	<p>Payment of taxes by a medium-size company. This sub-indicator covers both the procedures to pay taxes and the overall tax rate (including mandatory contributions). Taxes and contributions include profit or corporate income taxes, social contributions and labour taxes paid by the employer, property and property transfer taxes, dividend taxes, capital gains taxes, transaction taxes, waste collection taxes, vehicle and road taxes, and any other small taxes or fees. The company is similar to the one described for the "starting a business study", but having 60 employees, a start-up capital of 102 times the national income per capita, a turnover of 1,050 times the national income per capita and a gross margin of 20%.</p>
Trading across borders	<p>Exporting and importing a standardised cargo of goods by sea transport. The sub-indicator takes account of the time and cost necessary for completing official procedures for imports and exports. Logistical times and costs (e.g. port and terminal handling) are included; sea transport is not. Payment is made by letter of credit, and the time and costs required for its issuance are also covered. The shipment concerns a non-special good worth USD 20,000. The company is similar to the one described for the "starting a business study", but having 60 employees and exporting more than 10 % of its sales.</p>

Sub-indicator	Case study
Enforcing contracts	Recovering an unpaid amount due to a sale transaction. Two limited liability companies engage in a sale of goods worth 2 times the national income per capita. The buyer refuses to pay alleging quality defects; hence the seller sues the buyer before the competent court and wins the judgment. After that, the buyer proceeds with judicial recovery. The sub-indicator covers the times, costs and procedures from the moment the plaintiff decides to file the lawsuit in court until the payment.
Resolving insolvency	The handling and outcome of an insolvency proceeding. The sub-indicator takes into account the outcome of an insolvency proceeding involving a domestic entity. The outcome is measured in terms of recovery rate, which takes into account the hypothetical value of the recoupment minus the time and costs borne by creditors during the proceeding. The bankrupt entity is a large (201 employees and 50 suppliers) enterprise located in the country's largest business city, 100% domestically owned, with a market value of 100 times the national income per capita (or USD 200,000, whichever is greater), and the company assets are worth 70 % of the claims.

Source: World Bank (2014).

As discussed above, DB was the first governance indicator adopting a case study approach, as opposed to more macro measurements of the quality of the regulation or the business environment. DB does not explicitly assess in macro terms the ease of DB or the quality of e.g. contract and insolvency law. However, DB's composite indicator is significantly correlated with other assessments of the business environment, such as the World Economic Forum's competitiveness index (WB, 2014). Hence, DB creates narrower, and thus more precise, information, which can still be extrapolated beyond its specific methodological focus.

The advantage of the case study approach consists of ensuring comparability across countries (David & Kruse, 2007). The specific transactions analysed are equivalent across all countries, and this ensures that the comparison is not affected by the common hurdles faced by comparative law (Kerhuel & Fauvarque-Cosson, 2009)⁶². Furthermore, the case study approach delivers two additional advantages. First, it allows focusing on quantifiable aspects of the legal transactions, which are costs, time and the number of procedures, thus avoiding quarrels about how to quantify unquantifiable legal or governance aspects (David & Kruse, 2007). Secondly, it allows assessing the business environment not through perception-based data, but through objective, and thus quasi-replicable, observations, based on the law in the books and the experience of practitioners.

However, the adoption of a case study approach makes the choice of which legal transaction is relevant and representative a thorny one. Indeed, there is no consensus and no scientific methodology with which to identify the 10 typical moments in the life of a

⁶² For instance, it is not necessary to establish equivalence between legal norms and institutions of different legal frameworks, or to understand how similar norms and institutions operate in practice in different socio-economic contexts.

company that affect the business environment to the largest extent. For example, DB does not include any indicator of bookkeeping obligations, although they cause registered firms to spend a significant amount of resources⁶³. Descending the ladder of details, once several (but how many?) typical moments have been chosen, again there is no consensus about the specific transaction. For example, it can be debated whether the rules about protection from directors' misbehaviour play a similar role in protecting investors in developed and less developed countries, or whether other norms should be considered. Finally, at the very lowest level of detail, any decision about e.g. the location, size or other variables of the company at stake remains discretionary, even if grounded on sound theoretical arguments. For this reason, the final choice about the content of the sub-indicators should remain in the hands of the owning institutions, not of external experts.

6.1.2. Data and data collection

Doing Business uses two types of data: information about the law as it appears 'on the books', and information about its application, that is, the law as it works on the ground. Information about the law on the books is used for all the 11 sub-indicators, while information about the law on the ground is used in 8 out of 11 sub-indicators.

The law on the books is used to determine what procedures a company needs to undertake in each of the transactions analysed. The knowledge of the procedures, besides being a relevant piece of information *per se*, is necessary to estimate how many steps a company needs to go through to perform the transaction.

However, DB not only assesses the efficiency of a rule in terms of procedural steps prescribed, but also in terms of its application, assessed by estimating time and costs of compliance. This task is more difficult, because how a rule is applied in practice cannot be usually inferred from legislative texts or other primary sources.

Besides the number of procedures, time and costs, for some sub-indicators DB also gathers transaction-specific information, e.g. the paid-in minimum capital requirement for 'starting a business' or the recovery rate for 'resolving insolvency'.

DB relies on four main sources of information: i) the analysis of relevant laws and regulation, ii) survey respondents, iii) public administrations of the countries covered and iv) the WB Group regional staff. Relevant law and regulation are assessed by the DB team starting from information provided by surveyed experts. Once certain laws and regulations are identified as relevant for a sub-indicator, the DB team extracts the information needed to analyse each legal transaction (e.g. number of procedures, scheduled fees and capital requirement). Some 72 % of the DB data are extracted from the legal analysis of norms and regulations.

The remaining 28 % of data refer to the application of norms and regulations on the ground, e.g. to the time and costs borne by companies. This information is extracted from surveyed experts, which vary across sub-indicators (not only to legal practitioners, but also other professions)⁶⁴. All in all, 10,200 experts are involved in the survey. Obviously, experts may provide different estimates about time and costs; when this happens, the median value is used. It is worth underlining that experts are not consulted about their

⁶³ Accounting obligations are estimated to generate in the EU about EUR 23 billion in administrative burdens, over a total of EUR 124 billion estimated for the EU *acquis*. See European Commission Staff Working Document, Action Programme for Reducing Administrative Burdens in the EU, Final Report, SWD(2012)423, 12.12.2012; see also Final Report on the Measurement of Administrative Costs for Priority Area Annual Accounts/Company Law (available at: http://ec.europa.eu/smart-regulation/refit/admin_burden/docs/enterprise/files/abst09_companylaw_en.pdf).

⁶⁴ For instance, architects and engineers are consulted for 'construction permits', accountants for 'paying taxes'.

opinions on how the legal system works in general, but only about facts and figures related to each specific transaction.

In a second phase, preliminary results are shared with WB regional staff and national governments to double check the plausibility of the findings (World Bank, 2014). Only after this second check, where conflicts within the World Bank and between the World Bank and national governments could also emerge, are data considered definitive and can thus populate the indicators.

Such a methodology requires a very considerable effort to build the first version of the database of the relevant laws and regulations and therefore to define the prescribed legal procedures. Once this is done, and the soundness of the information included therein is confirmed by national governments, regional staffs and peer review (all WB data points are indeed available for public scrutiny and research purpose), the data collection becomes incremental, and only legal changes and reforms are to be scrutinised each year in each country to keep the database up-to-date.

6.1.3. Aggregation methodology

The ease of DB is a composite indicator resulting from the aggregation of 10 sub-indicators, one for each regulatory area covered. Also, most of sub-indicators are composites themselves, as they combine information about the number of procedures, time and costs for each legal transaction⁶⁵.

DB adopts a very simple aggregation methodology. This is an important asset in ensuring that the index can be understood and communicated effectively. As a caveat, however, 'simple' should not be equated with 'natural' or 'logical': even a simple methodology is a discretionary choice that possibly has an impact on the results. Correctly, the WB reports that the index is sufficiently robust to changes in the aggregation methodology: the choice to keep it simple does not have a large influence on the results.

In a nutshell, the aggregation methodology is based on two strands:

1. **Ranking aggregation.** For each sub-indicator, DB does not aggregate country data over each component, as measured in number of procedures, USD (for costs), or days (for time). Rather, it aggregates the rankings of each country over each component. That is, countries are ranked for each component and then the resulting rankings, not the underlying values, are aggregated. This avoids additional mathematical treatment (e.g. normalisation) that would be required to aggregate components with different units of measurement. Analogously, the ease of DB indicator results from the aggregation of the country's ranking across the 10 sub-indicators. Aggregating rankings rather than a country's performance over each component/sub-indicator implies that information about the absolute performance is lost. In simpler words, it is possible to know whether a country performs better or worse than another, but not how much better or worse. However, this drawback is mitigated i) by the fact that information about each component is available in a public database and ii) by an additional indicator provided by the WB, which measures the distance from the efficiency frontier, hence measuring absolute distance from best performers.

⁶⁵ This is not valid for all sub-indicators, some of which have a specific structure: 'getting credit' results from aggregating an index assessing the depth of credit information and an index assessing the strength of the secured lender's legal rights; 'protecting investors' results from aggregating three indexes about the conditions and enforcement of redresses for liability-related party transactions; 'resolving insolvency' only assesses the recovery rate (and as such is not a composite sub-indicator).

2. **Equal weighting.** In the ease of the DB composite indicator, each policy area has the same weight. Analogously, in each sub-indicator, each component, such as the number of procedures, time and costs, has the same weight. In simpler words, aggregation among the different rankings is done through an unweighted average⁶⁶. In a way, equal weighting avoids endless debates about which component/sub-indicator is more or less important. However, again, equal weighting is itself a choice which presupposes that all information in the indicator has the same importance (and as such, this assumption is open to criticism).

6.1.4. Actionability

While the ingeniousness and transparency of its methodology should not be underestimated, DB has become one of the stars among composite indicators because of its effectiveness in triggering reforms. According to WB data, more than 350 reforms throughout the world have been undertaken in regulatory areas covered by DB since its inception. While, obviously, reforms have several drivers, DB is unquestionably acknowledged as a push factor in many countries' reform attempts (Kerhuel & Fauvarque-Cosson, 2009; Acemoglu et al., 2013).

DB has two aspects in particular that make it fit to underpin reforms:

1. First and foremost, DB produces a **ruthless ranking** of all countries covered. Countries do not like to find themselves in a very low position in a ranking that receives such widespread coverage, especially when their score is below that of their regional peers. Such a 'naming and shaming' creates a push to reform the regulations falling within the scope of DB. At the same time, the DB ranking provides not only a stick, but also a carrot: 'good pupil' countries can see their efforts recognised in an 'objective' ranking.
2. Secondly, but not less importantly, DB creates **specific information** about where to intervene with reforms (Channell, 2007). Other business climate indicators usually let country leaders know that 'business trust' in their economy is low. This information is of course valuable, but does not give clear indications about what policy intervention would restore trust. On the contrary, DB can tell country leaders that the waiting time for a construction inspection is 5 days, while in a neighbouring country it requires only 3 days; or that paying taxes requires 55 procedures, while it takes 30 procedures for companies in similar countries. Indeed, DB gives precise information about which regulation imposes a comparatively higher burden on companies, and where intervention should then be considered.

Clearly, such a high level of actionability may create perverse incentives: countries may reform only the narrow slice of their regulatory *acquis* that is considered by the DB exercise; or countries may cut procedures, time and costs even when this would result in a drawback for the society (e.g. more inspections mean more red tape, but should also ensure the attainment of public goals, e.g. a higher level of safety at work).

6.1.5. Criticism of Doing Business

Statistical criticism of DB, i.e. of its methodology, is nowadays rather uncommon. After many years of refinement, and given the degree of transparency about its methodology, DB is considered a robust indicator of the regulatory environment. Sometimes DB is accused on grounds of its narrow focus, i.e. it purports to measure the business environment based on a set of case studies which may possibly not be its most important

⁶⁶ More correctly, it is the unweighted average of the ranking percentiles.

determinants. In this case, however, the criticism is addressed to the use that analysts, donors and policy-makers make of DB, which may go beyond what DB claims to be its well-defined scope.

More ferocious streams of criticism have focused on the political economy of DB. DB would not measure the quality of the regulatory environment, but its attachment to a neoliberal, or an Anglo-Saxon economic and governance model. In a nutshell, DB has been accused of being biased towards this governance model, and of being used as a tool to promote a one-size-fits-all recipe for business regulation, which would be inherently pro-business. While taking a position on this question does not fall within the scope of this study, the stream of criticism is solid and the WB (2008) itself has acknowledged some of it and, as a consequence, reformed DB.

Nevertheless, this study tries to apply DB methodology in a completely different context. In particular, the object of the analysis is different: not the business environment, but the regulatory performance of the Single Market. Unlike the countries analysed by the WB, EU Member States have indeed committed through various legal mechanisms to comply with a set of rules. The tool proposed aims at measuring compliance with these previously-agreed rules. As such, there is no risk of 'indicator colonialism' in a regional area that has already decided to pursue a common regulatory model and to lower or eliminate cross-border barriers.

6.2. Applying the Doing Business methodology to Single Market integration: a possible methodology

Following the analysis of DB, the research team proposes an indicator to measure the regulatory performance of the Single Market based on its methodology.

As anticipated above, the proposed indicator does not aim at measuring regulatory inputs and processes, but regulatory outputs, for two reasons. First, indicators already exist for measuring these aspects of Single Market integration, such as the SMS and the PMR⁶⁷. Secondly, measuring regulatory inputs and processes presupposes that those are sufficient conditions to trigger outputs and outcomes, which is, at the end of the day, what matters for European citizens and companies. In some cases this causal link is solid and in others more tenuous, as we have shown in the analysis of the SMS.

Measuring regulatory outputs is more complex, however, both from a theoretical and practical point of view. The main theoretical difficulty consists in identifying an output that is to a significant extent driven by Single Market policies. On the practical side, measuring outputs requires, in addition to desk research, a certain degree of empirical field work, while measuring inputs and processes can usually be done through desk research and secondary sources.

The indicator proposed below aims at answering the following research question, which lies at the core of the Single Market endeavour: **To what extent do citizens and companies involved in cross-border activities bear additional costs, including regulatory costs, compared to citizens and companies operating within national borders?**

The goal of such an indicator is to measure the Single Market Gap in each Member State and in several policy areas. This Single Market Gap represents how much EU citizens and companies are at a disadvantage when operating cross-border. From a policy perspective, the Single Market Gap is a proxy to test how well Single Market integration is performing, and thus where additional policy intervention is needed; at the same it also

⁶⁷ As far as the PMR data points that assess norms falling within the Single Market *acquis* are concerned.

measures which Member States, and in which regulatory areas, are less efficient in enforcing and applying the Single Market *acquis*.

The reduction of the Single Market Gap can be considered a *necessary output* triggered by Single Market policies, which indeed aim at reducing cross-border barriers and hurdles. If Single Market policies are not capable of delivering this goal, they are falling short of their main objective.

The comparative element enshrined in the concept of gap, as opposed to the assessment of the burdens on cross-border activities in absolute terms, is needed to identify a quantifiable measure that is driven by Single Market integration policies. Indeed, the absolute amount of burdens on cross-border activities depends not only on Single Market policies and how they are implemented by individual Member States, but also by other country-related variables, such as the quality of national regulatory systems and the efficiency and effectiveness of public administrations. By measuring what additional burdens are borne in the context of cross-border operations, country-related fixed effects are kept constant.

In this section, the methodology to create the indicator is described step by step and finally represented as a flowchart in Figure 9. It is worth noting that this methodology is based on DB experience and the research team's *ex ante* judgment. A pilot phase, e.g. on a single sub-indicator, is advisable in order to refine the methodology, and in particular to identify which actions are (un)necessary and the sequence of actions.

The first step is, obviously, **the identification of the regulatory areas to be covered by the indicator**. Unlike DB, which only concerns companies, it is proposed that the selected policy areas concern both citizens and companies. Different criteria, or a combination of them, could be used to identify which issue should be part of the indicator, such as:

1. number of addressees of regulation: selecting Single Market provisions affecting a large number of citizens or companies;
2. perceived burdensomeness/level of complaint: selecting the Single Market regulatory issues that are most referred to by citizens and companies through the various complain systems (e.g. Solvit). DG Internal Market and Services compiles statistics which could populate this criterion;
3. political relevance: selecting the areas of Single Market regulation where the European institutions have just intervened, for M&E purposes, or are considering interventions, to test whether there is any regulatory or implementation problem that needs to be addressed;
4. imperfect regulatory inputs/processes: selecting Single Market regulatory areas where other indicators (e.g. the SMS) have identified shortcomings.

Since there is no scientific methodology to specify which criteria should be used to identify how many regulatory areas, the institutions, as opposed to experts, are better suited to decide how and what areas should be selected. Ideally, this should be done through an open and transparent process. Openness requires that public and private stakeholders are consulted about their priorities. Transparency requires that choices are justified on any criterion (or combination of criteria), including political relevance where appropriate (Saisana & Tarantola 2002; Nardo et al., 2005a,b).

Within each area, a case study (in DB jargon, 'legal transaction') should be identified, e.g. the registration of a citizen at the municipality or the repossession of a good. The case studies should allow for comparing the time, cost and number of

procedures borne by a citizen or company in a within-border context and those borne in a cross-border context. The legal transactions should be to the greatest extent possible equivalent in the two contexts, but for their cross-border nature. As has been discussed above, comparability is necessary to ensure that only the impact of Single Market integration policies is measured, and not that of other spurious variables. For this reason, it is possible, in theory, that a regulatory area is considered important, but no suitable case study is identified.

We provide below possible instances of regulatory areas and case studies. This is only an illustrative list, which is based on the Monti (2010) report on Single Market integration. Please note that other areas, or other transactions within each area, could be identified. Pending further verification, it is also possible that for some transactions there is no real difference between within-border and cross-border procedures; if this becomes apparent from the legal analysis, either another transaction can be sought or the regulatory area has to be dropped.

Table 3: Illustrative list of regulatory areas and legal transactions

Regulatory Area	Within-Border Transaction	Cross-Border Transaction
Freedom of movement	Registration of a national moving from another municipality	Registration of a citizen of another EU Member State moving from his/her origin country
Cross-border disputes	Execution of a repossession of goods by a national towards a national	Execution of a repossession of goods by a national towards an EU citizen resident in another Member State
Car Registration	Re-registration of a car originating from the same Member State	Re-registration of a car originating from another Member State
Consumer Protection	Obtaining redress from a service/good provider located in the same Member State	Obtaining redress from a service/good provider located in another Member State
Retail banking	Opening of a bank account by a national	Opening of a bank account by a citizen of another EU Member State
Public procurement	Participation in a public procurement procedure by an SME located in the same Member State	Participation in a public procurement procedure by an SME located in another Member State
Rail freight	Transport of goods by X km within national borders	Transport of goods by X km crossing a national border
Cross-border health care provision	Non-urgent treatment for a national (distinguishing between hospital and extra-mural)	Non-urgent treatment for a citizen of another EU Member State (distinguishing between hospital and extra-mural)
Professional Qualification	Access to a regulated profession by a national with a study title from the same Member State	Access to a regulated profession by a foreign EU citizen with a foreign EU study title
Right to pension	Application for a pension by a national	Application for a pension by a citizen of another EU Member State

Regulatory Area	Within-Border Transaction	Cross-Border Transaction
Financial Services	Purchase of a financial product provided by an institution located in the same Member State	Purchase of a financial product provided by an institution located in another Member State
Services Directive	Establishment of an enterprise in the wholesale or retail trade business by a national	Establishment of an enterprise in the wholesale or retail trade business by a foreign EU national
E-commerce	Online supply of a good or service by a firm to customers located in the same Member State	Online supply of a good or service by a firm to customers located in another Member State
VAT declaration	VAT refund to a company located in the same Member State	VAT refund to a company located in another Member State
Other modes of transport	<i>An indicator similar to the one described for rail freight can be used, to also ensure comparability across modes</i>	

Source: Authors' own elaboration.

Finally, it is worth underlining that the list should be adjustable, meaning that areas or transactions can be dropped in case the gap has become negligible, while other areas or transactions can be added in case they gain political salience or are subject to EU policy intervention.

From this step onwards, the institutions may resort to the use of external experts, since once the content of the indicator is decided, the number and significance of discretionary choices is reduced. It goes without saying that for any significant discretionary choice that should arise, the experts should refer back to the institutions.

Once the case studies are selected, **the provisions in the Single Market *acquis* should be identified that determine the rights and duties of citizens, companies and Member States in each specific situation.** The legal analysis should determine the procedures to be followed and by whom; the documentary requirements and costs associated with these procedures; the parameters determining the procedural, documentary and pecuniary requirements; and the details set by the EU law and those left to national discretion. Here, institutions/experts should also decide whether other variables should be measured, in addition to the number of procedures, time and costs, as is done in some of the DB sub-indicators.

For the following methodological steps, the re-registration of a car will be used by way of illustration, to clarify the description of the process to build the indicator⁶⁸. The legal analysis of the provisions of the EU *acquis* applicable to the re-registration of motor vehicles already registered in the same or another EU Member State is reported in Box 1 overleaf.

⁶⁸ CEPS, together with other partners, has drafted an Impact Assessment study of a new initiative to eliminate obstacles to the re-registration of vehicles previously registered in another Member State. This study, which is on file with the authors and the European Commission, is the source of the information related to this specific legal transaction.

Box 1: Legal analysis of the EU *acquis* for re-registration of motor vehicles

As enshrined in the treaties, EU secondary legislation and case law, individuals and companies are entitled to move their motor vehicles for private or business use across the Single Market. No quantitative restrictions or measures equivalent to quantitative restrictions may limit this right, if not justified according to the necessity and proportionality principles. Any instance of double taxation is forbidden. In force of national requirements and in accordance with the EU *acquis*, individuals and companies must register their motor vehicles in the Member State where they have their normal residence.

The primary EU legal act on registration of motor vehicles and on re-registration is Council Directive 1999/37/EC on the registration documents for vehicles. Its main objective is to harmonise registration certificates, and to provide for their mutual recognition across Member States.* In 2007, the European Commission spelled out in more details the procedure for re-registration in a non-binding Communication on procedures for the registration of motor vehicles originating from another Member State.** This Communication sums up and clarifies the binding legal provisions and the existing case law. However, since it has no binding force, it can be disregarded by the national legal frameworks.

According to the Communication, Member States in which re-registration of a motor vehicle is sought should only request the following documentation:

1. The registration certificate.
2. In specific cases, the EU or national Certificate of Conformity (CoC). The CoC is a document stating that the motor vehicle complies with the EU provisions on type-approval.*** The possession of an EU or national CoC is a *condicio sine qua non* for first registration. Therefore, the first registration certificate is already a proof that the motor vehicle has a valid CoC. Accordingly, the Communication allows for requiring the CoC only when i) the motor vehicle has a non-harmonised registration certificate (i.e. a certificate issued before the entry into force of Directive 1999/37); or ii) the non-harmonised registration certificate does not allow a sufficiently precise identification of the motor vehicle.
3. A roadworthiness certificate, if roadworthiness is mandatory for all re-registrations.
4. Proof of payment of VAT if the vehicle is new according to the VAT legislation.
5. An insurance certificate.

* The legal framework is currently under revision, as the Commission put forward in 2012 a proposal for a Regulation on the transfer of motor vehicles registered in another Member State within the Single Market. The proposal is currently awaiting first reading approval by the European Parliament. See Proposal for a Regulation of the European Parliament and of the Council on simplifying the transfer of motor vehicles registered in another Member State within the Single Market (COM(2012)164) and the related Impact Assessment (SWD(2012)81).

** See Commission interpretative communication on procedures for the registration of motor vehicles originating in another Member State (2007/C 68/04).

*** Directive 2007/46/EC of the European Parliament and of the Council establishing a framework for the approval of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles.

Once the relevant norms from the EU *acquis* have been screened, **the institutions and experts may proceed with designing the case studies**, through fixing the parameters of each legal transaction, to the extent necessary to determine exactly the procedure, and thus the time and costs borne by citizens and companies. While certain parameters will prove to be as necessary from the analysis of the EU legal framework, the full definition of

the details of the case studies will require feedback from the subsequent analysis of national legislation, as in some Member States additional parameters could be relevant in determining the procedures, time and costs borne. However, it would not be advisable to define the specific details only after the analysis of national regulation is carried out, as the experts and the survey respondents will need to know at least to a certain degree what norms they should investigate.

Box 2: Parameters for the case studies on vehicle re-registration

When investigating the Single Market Gap in re-registering a car originating from within or outside a Member State, based on the legal analysis of the Single Market *acquis*, at least the following elements have to be specified for this case study:

1. Whether the registrant is a private citizen or a company.
2. Whether the registrant intends to register the car for his/her/its own use, or for resale.
3. Where the re-registration procedure takes place (e.g. in the country capital, or in the economically most important city).
4. The characteristics of the car, such as year of first registration, power, fuel, CO2 emissions, weight.
5. In case of the cross-border transaction, the country of origin. It could be a specific country, e.g. Germany;* two or more countries, e.g. Spain for Member States from A to M and France for Member States from N to Z; or a generic criterion, e.g. the largest neighbouring country.
6. The language of the first registration documents, for countries where more than one language is official.
7. When and where the last roadworthiness test was undertaken.

* Of course, but for Germany itself.

On the basis of the analysis of the EU *acquis*, **the institutions and experts should proceed in drafting the questionnaire for surveying national experts.** The questionnaire should be based on the case study as defined in the previous step. Submission of the questionnaire requires the pre-identification of which categories of experts are relevant for each regulatory area. As a rule of thumb, the national or local public administration in charge of the procedure should always be surveyed, together with any category of practitioners that regularly gets involved in the procedure. Consumer or business associations may also be among the respondents, to the extent that they are familiar with the specific transaction rather than on the general conditions. European networks, such as the European Consumer Centres and the European Enterprise Network, could provide valuable information about the cross-border transactions.

The survey should be tailored to identify the following information:

1. The relevant national or local provisions, both substantive and procedural, governing the procedures described in the within-border and cross-border case studies.
2. The exact steps to carry out the procedures.
3. The time to carry out each step.
4. The costs associated, including both official fees and other costs.
5. Information about other variables that have been included in specific sub-indicators.

On the basis of the survey, **the detailed procedural steps in each Member States should be identified, and for each step the time and costs associated should be estimated.** Box 3 below reports the procedural steps for the re-registration of motor vehicles.

Box 3: Procedural steps for the re-registration of motor vehicles

From desk research and surveys, the following detailed steps have been identified within the re-registration procedure, for both citizens and companies.

1. Collecting the required documents (mainly: registration certificate, proof of roadworthiness, proof of insurance payment, proof of VAT payment where required, Certificate of Conformity where required; required documents vary from country to country).
2. Applying for a temporary register document, if the citizen or company so wishes, and if the national legal framework provides for it.
3. Visiting the competent office.
4. Submitting personal and motor vehicle data (e.g. proof of ownership, registration document, chassis number, Certificate of Conformity).
5. Applying for plates.
6. Settling any tax issue (e.g. paying the vehicle registration tax)⁶⁹ *
7. Payment of the fee for de-registration, if so required.
8. Applying for insurance and paying the related fee.
9. Undertaking technical inspection of the vehicle, if the Member State so requires.
10. Receiving the registration documents and the plates.

* There is no harmonised legal framework for taxes on car registration. Member States are free to require registration taxes and to set the tax base and rate. The Commission has issued a non-binding Communication to clarify the EU rules that Member States must respect when car registration and circulation taxes are applied. Cf. Communication from the Commission, Strengthening the Single Market by removing cross-border tax obstacles for passenger cars (SWD(2012)429).

The collection of data should result in a table similar to the one below.⁷⁰ In the last line, **aggregation of the sub-components** is carried out. As done by the WB, both the procedural steps in each Member State and the values estimated for time and costs should be subject to cross-checks and validation by experts and Member States. Please note that the table below, albeit apparently objective, also includes discretionary choices. In the example shown below, it has been fictitiously decided that the applicant does not apply for a temporary register document; with regards to the settlement of any tax, the procedural cost related to the payment has been accounted for, but not the amount of taxes paid, reflecting the existing case law which gives Member States large freedom in levying registration taxes on motor vehicles originating from another EU country.

⁶⁹ There is no harmonised legal framework for taxes on car registration. Member States are free to require registration taxes and to set the tax base and rate. The Commission has issued a non-binding Communication to clarify the EU rules that Member States must respect when car registration and circulation taxes are applied. Cf. Communication from the Commission, Strengthening the Single Market by removing cross-border tax obstacles for passenger cars (SWD(2012)429).

⁷⁰ Data are fictitious.

Table 4: Re-registration of motor vehicles: Number of procedures, time and costs

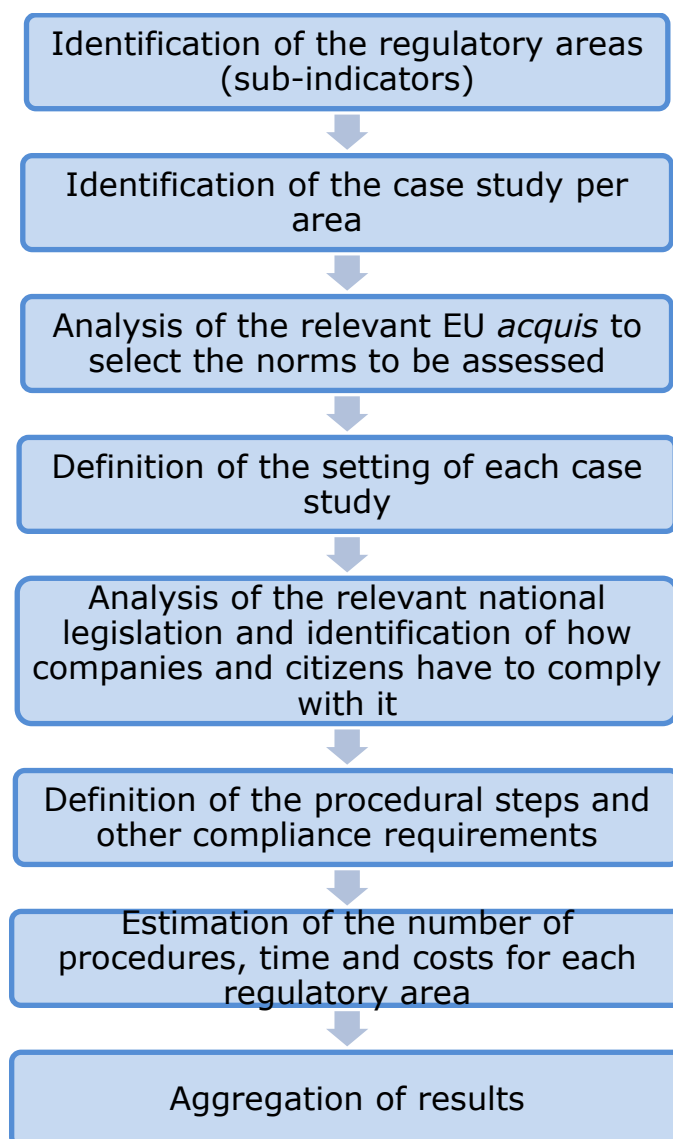
Within-Border Transaction									
	MS A			MS B			MS C		
	Procedures	Time (days)	Cost (€)	Procedures	Time (days)	Cost (€)	Procedures	Time (days)	Cost (€)
<i>Collection of the required document</i>	0	0	0	1	1	0	2	2	64
<i>Applying for a temporary register document</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>
<i>Visiting the competent office</i>	1	1	0	1	1	0	1	1	0
<i>Submitting personal and motor vehicle data</i>	<i>included in the step above</i>			<i>included in the step above</i>			1	1	75
<i>Applying for plates</i>	<i>included in the step above</i>			1	1	120	1	1	0
<i>Settle any tax issue</i>	0	0	0	1	1	0	2	2	32
<i>Payment of the fee for de-registration</i>	1	1	50	1	1	12	0	0	0
<i>Applying for insurance and paying the related fee</i>	1	1	0	1	1	0	1	1	0
<i>Undertaking technical inspection</i>	0	0	0	1	5	150	1	12	80
<i>Receiving the registration documents and the plates</i>	1	7	0	1	14	0	1	30	0
Total	4	10	50	8	25	282	10	50	251

Cross-Border Transaction									
	MS A			MS B			MS C		
	Procedures	Time (days)	Cost (€)	Procedures	Time (days)	Cost (€)	Procedures	Time (days)	Cost (€)
<i>Collection of the required document</i>	0	0	0	2	5	0	2	8	125
<i>Applying for a temporary register document</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>
<i>Visiting the competent office</i>	1	1	0	1	1	0	1	1	0
<i>Submitting personal and motor vehicle data</i>	<i>included in the step above</i>			<i>included in the step above</i>			1	1	200
<i>Applying for plates</i>	<i>included in the step above</i>			1	1	120	1	1	0
<i>Settle any tax issue</i>	1	1	0	2	15	180	3	2	32
<i>Payment of the fee for de-registration</i>	1	1	50	2	7	208	0	0	0
<i>Applying for insurance and paying the related fee</i>	1	1	0	1	1	0	1	1	0
<i>Undertaking technical inspection</i>	1	7	120	1	15	150	1	18	80
<i>Receiving the registration documents and the plates</i>	1	7	0	1	14	0	1	30	0
Total	6	18	170	11	59	658	11	62	437
Single Market Gap	2	8	120	3	34	376	1	12	186
Single Market Gap Ranking	2	1	1	3	3	3	1	2	2
Sub-Indicator Aggregated Ranking	1			3			2		

Source: Authors' own elaboration.

Figure 9 summarises all the steps described in a flow chart.

Figure 9: Methodological steps to construct the Single Market Gap indicator



Source: Authors' own elaboration.

6.3. Conclusions

From the methodology discussed above, the information content of the Single Market Gap indicators becomes clearer:

1. The **Single Market Gap depends on the disparities between national and EU nationals; however, it does not depend on the absolute level of efficiency**, i.e. on the regulatory quality of the EU and national legislation. For example, in terms of number of days, Member State C is less efficient than Member State B, with regards to both within-border and cross-border transactions. However, in terms of the number of days, its Single Market Gap is smaller, meaning that national and EU citizens face fewer differences in the procedure.
2. The disentanglement between the absolute level of efficiency and the Single Market Gap indicator has two significant consequences. First, **this indicator does not call**

into question discretionary and lawful policy choices of each Member State, as long as they are compatible with EU law and non-discriminatory. In this sense, it does not promote a one-size-fits-all approach to Single Market integration. For instance, a Member State may prefer to impose stricter safety checks on a re-registered car; as long as this policy choice applies equally to both nationals and EU citizens, its Single Market Gap indicator would not deteriorate.

3. Furthermore, **the Single Market Gap would test how Member States transpose, enforce and apply the Single Market *acquis* without having to assess the quality of their national norms.**
4. Secondly, and crucially in view of the aim of this study, **the Single Market Gap is actionable and can be used as a basis for both policy interventions and country recommendations.** EU institutions would receive clear information about what gaps are still present across Member States and across different policy areas. This may result either in country-specific recommendations, in case the gaps are specific to a few Member States, or in European policy interventions, in case the gaps are widespread in a certain policy area.
5. The research team maintains that it is important to focus the proposed M&E tool on Single Market integration, rather than on the overall performance of EU measures. This remains valid for methodological and policy reasons.⁷¹ However, **the information collected to construct the Single Market Gap indicator also provides new material to assess more generally the performance of the EU Single Market *acquis*, also in specific Member States.** While the indicator focuses on disparities between nationals and other EU nationals, the underlying data also show the efficiency (in terms of days, procedures and out-of-pocket costs) of the various provisions. For example, the EU institutions may notice that in a certain regulatory area the Single Market Gap is low across Member States, signalling that there is not a problem of discrimination. However, the underlying indicator tables may also signal that e.g. the time and cost of a procedure are excessive across the EU, as well as identify which exact procedural steps can be cut, and what is the currently attainable best practice among Member States. The information collected also reflects the situation at national level. Each Member State can compare not only its overall Single Market Gap ranking, but also the efficiency of its public administration across the different procedures covered by the analysis, in comparison with the other national administrations. It is plausible to expect a catch-up effect similar to the one triggered by DB.

All in all, the Single Market Gap can be considered fit to trigger EU policy interventions and country-specific recommendations, similarly to the WB's original DB. However, compared to DB, it does not interfere with national legitimate political preferences as long as they are non-discriminatory. While this could in principle represent a hindrance, given that the absolute level of burdensomeness is obviously relevant for European citizens and companies, the information collected for building the indicator also allows policy-makers to design policy interventions aimed at reducing burdensomeness *tout court* and at improving national performance across the selected areas.

⁷¹ See section 2.2 above.

7. MONITORING AND EVALUATING SECTORAL POLICIES

KEY FINDINGS

- Sectoral legislation represents a key component of the Single Market project. Consequently, the sectoral dimension should not be neglected when exploring M&E tools for the Single Market, as assessing only the two horizontal dimensions, i.e. the economic and the regulatory, would result in a partial representation of its performance.
- Given that the Single Market project touches upon most economic sectors and numerous policy areas, monitoring all Single Market sectoral policies through a single instrument would be neither feasible nor informative. To better select what policy interventions may be most beneficial for citizens and companies, this section provides a list of carefully considered criteria about how to identify economic sectors and sectoral policies that are of particular relevance to the socio-economic welfare of the EU.

Sectoral legislation represents a key component of the Single Market project. Together with horizontal regulation – such as the ‘new approach’ to technical regulation or the norms about consumer protection – the Single Market *acquis* includes many policies that are sectoral by nature. Consequently, the sectoral dimension should not be neglected when exploring M&E tools for the Single Market, as assessing only the two horizontal dimensions, i.e. economic and regulatory, would result in a partial representation of its performance.

Before discussing in detail how to monitor and evaluate certain sectoral interventions rather than others, the two-fold meaning of ‘sectoral’ should be clarified. First, sectoral may concern one or more economic (industrial) sectors, that is, a subsection of the economy producing sufficiently homogeneous goods and services. In this meaning, a sectoral intervention would consist of a regulation addressed to operators carrying out similar economic activities. In this case, the M&E activity would concern one, or possibly several, acts insisting on certain economic operators⁷². Generally, and throughout this chapter, the taxonomy of economic sectors is based upon the NACE classification, which is used to classify each economic operator into a specific division of similar operators⁷³. For instance, the regulation of telecommunication services is an example of a sectoral policy targeting one industrial sector; the Services Directive⁷⁴ constitutes an example of a sectoral policy targeting several industrial sectors.

⁷² The Commission is exploring the possibility of assessing the cumulative impact of large parts of the EU *acquis* on a single sector through the Cumulated Cost Assessment. See Communication from the Commission on Regulatory Fitness and Performance Programme (REFIT): State of Play and Outlook, SWD(2014)192, 18.6.2014. So far, two studies have been carried out on the steel and aluminium sectors. See CEPS & EA (2013 a,b).

⁷³ NACE stands for “Nomenclature statistique des Activités économiques dans la Communauté Européenne”. For more information on NACE, particularly on the last Revision (2) and its structure, see Eurostat (2008). The NACE classification follows a top-down, hierarchical method. Higher levels of classification are ‘general’, and become more precise the lower the level. Four degrees of classification are available, starting from the higher one, the so-called ‘section’, through ‘division’, ‘group’, until reaching ‘class’, the lower and more precise level of classification, widely referred to as ‘NACE four-digit’ level of specification. In the report, the analysis is done at the level of ‘divisions’, i.e. NACE two-digit level of specification (e.g. C24), both because they are fit for defining ‘macro-categories’ for policy intervention, and due to the higher risk of lack of data at lower hierarchical levels.

⁷⁴ Directive 2006/123/EC of the European Parliament and the Council on services in the internal market.

Secondly, sectoral policies may also refer to the regulation of specific regulatory areas. In this case, the addressees of a given sectoral policy would not be identified on the basis of their economic activity. Indeed, the focus would be moved to the object of sectoral policies: i.e. specific entities or transaction. Examples of sectoral policies that are not linked to a specific economic sector would be the Directives on public procurement⁷⁵, which apply to certain transactions between public entities and economic operators; or the Regulation on the European Company (*Societas Europaea*),⁷⁶ which would apply to any firm incorporated with that legal status⁷⁷. In this meaning of sectoral policies, the M&E activity would concern a limited number of acts, insisting on different classes (possibly many) of economic operators.

7.1. Analytical framework

Given that the Single Market project touches upon most economic sectors and numerous policy areas, monitoring all Single Market sectoral policies through a single instrument would be neither feasible nor informative. This is even truer given that many sectors already have in place satisfactory M&E indicators based on sound data. For this reason, a focus on certain areas is needed. However, to better select what policy interventions may be most beneficial, EU policy-makers should have a toolbox of criteria to decide the economic sectors or policy areas that are worthy of specific attention at any given time. **This section provides a list of carefully considered criteria about how to identify economic sectors and sectoral policies that are of particular relevance to the socio-economic welfare of the EU**, both in terms of economic performance and fulfilment of citizens' expectations.

For structural or historical reasons, some sectors and policies are more likely to have M&E indicators. For example, the Commission regularly publishes data-rich reports on public procurement, thanks to the data-mining of the Tender Electronic Daily database.⁷⁸ Other sectors and policies have only recently increased the availability of data and indicators in the public domain, possibly due to institutional changes; e.g., comparable EU-wide statistics on the telecoms sector have blossomed following the liberalisation and the coordination of national regulatory authorities in the Body of European Regulators of Electronic Communications (BEREC). Nonetheless, data availability is still a problem for some other sectors and policies such as, for example, cross-border rail freight⁷⁹. While it is theoretically possible to build an *ad-hoc* set of indicators for each industry or policy area, the idiosyncratic nature of sectoral indicators implies that they would significantly differ from case to case, adapted to the features of the economic activities or policies that they measure.

Given the extreme degree of specificity, this section does not, and could not include a compendium of existing sectoral indicators. First of all, that would not be of much use, given that any sectoral expert or publication would provide more up-to-date information about sectoral M&E indicators. Secondly, this task would absorb the whole study. Similarly,

⁷⁵ Directive 2014/24/EU of the European Parliament and of the Council on public procurement and repealing Directive 2004/18/EC; Directive 2014/25/EU of the European Parliament and of the Council on procurement by entities operating in the water, energy, transport and postal services sectors and repealing Directive 2004/17/EC; and Directive 2014/23/EU of the European Parliament and of the Council on the award of concession contracts.

⁷⁶ Council Regulation (EC) No 2157/2007 on the Statute for a European company (SE).

⁷⁷ This section is concerned with and will discuss both kinds of sectoral policies. When not specified otherwise, sectoral policies mean a policy targeted at a specific economic sector or policy area.

⁷⁸ Available online at: <http://ted.europa.eu/TED/main/HomePage.do>. See also the extremely data-rich report by PwC *et al.* (2011).

⁷⁹ See Pelkmans & Luchetta (2013) on the Single Market for Network Industries; Pelkmans, Mustilli & Timini (forthcoming, 2014) on the Internal Market for Services.

this section does not include a list of the most pressing issues on Single Market sectoral legislation and of the existing barriers. While this falls outside the scope of the study, the reader may refer to another series of Reports published or forthcoming by the European Parliament on the 'cost-of-non-Europe'⁸⁰.

Consistent with the analytical approach adopted in this study, the list of reasoned criteria has two strands: economic and regulatory. The former criteria are discussed in section 7.2 below; the latter in section 7.3.

The economic criteria assess the significance of a certain industry or policy area for the European economy. The underlying rationale is that policy interventions on sectors that represent a larger share of e.g. added value or number of workers will produce larger benefits for the EU society as a whole. Regulatory criteria should not be intended as opposed or hierarchically inferior to economic criteria. The Single Market endeavour is expected to deliver tangible benefits to European citizens and companies, and legal and policy barriers may prevent these benefits from becoming real. The key issue here is how to make sure that legal and policy considerations do not arise from particular interests or anecdotal evidence; rather, the regulatory criteria suggested below try to give an additional evidence basis to legitimate policy interventions.

Before turning to discussing in detail economic and regulatory criteria, a last remark concerns how to interpret them in the context of the double meaning of economic sectors vs. policy areas. In the sections below, for the sake of more clarity, economic sectors will be referred to, although the analysis would apply equally to policy areas. Indeed, the significance of a policy area can be reconstructed either through specific indicators or by indirectly using those discussed for economic sectors. The economic significance of the Directives on public procurement can be estimated based on the economic value of the transactions covered, or by the number of enterprises concerned, or the number of employees of the enterprises concerned. When specific indicators are not readily available, the significance of a policy area can be measured by analysing the economic sectors that it touches upon; e.g. the significance of the norms on professional qualifications may be proxied by the size of the economic sectors regulated by these norms (e.g. providers of engineering, architectural, legal or medical services).

7.2. Economic criteria for sectoral analysis

What economic indicators are crucial to define the importance of one sector? In other words, **which economic aspects should policy-makers focus on when preparing normative or legislative actions?**

Within a sectoral framework, we identify four elements that are relevant to underpin policy intervention, and they impact the economic aspects of the markets and the actors involved. The four elements concern:

1. economic size
2. economic contribution to the GDP
3. level of employment
4. number of firms

The economic size of a sector and its contribution to the GDP, together with the number of employers and employees, are four economic indicators that define the socio-economic

⁸⁰ See Pelkmans, Mustilli & Timini (2014), focusing in particular on the service market, and European Parliament (2014).

context of policy interventions, whose full comprehension, in turn, should constitute the basis for an informed decision, or the start of an informed policy-making process.

Taking into account data availability and feasibility constraints, one indicator is proposed for each of the dimensions enumerated above.

7.2.1. Economic size

In order to clearly identify and define the size of the sector, which may constitute a proxy of its importance within the EU economy, the research team considers the sectoral turnover, as reported by Eurostat, to be an adequate indicator. In a nutshell, the variable turnover measures the total value of goods and services supplied by an enterprise. Eurostat defines this indicator as “the totals invoiced by the observation unit during the reference period, and this corresponds to market sales of goods or services supplied to third parties; it includes all duties and taxes on the goods or services invoiced by the unit with the exception of the VAT invoiced by the unit to its customers and other similar deductible taxes directly linked to turnover; it also includes all other charges (transport, packaging, etc.) passed on to the customer⁸¹”. The rank of economic sectors according to their turnover is reported in Table 5 below.

7.2.2. Contribution to the GDP

In order to grasp the economic potential of a specific sector, i.e. to understand the capacity of attracting new investment, to be competitive – including better facing international competition – and/or more in general to increase the welfare of the society, the research team suggests using the ‘value added at factor cost’, as reported by Eurostat. Value added measures the increase in the value of goods or services due to their ‘passage’ through the production process of a specific enterprise in every sector. In other words, the value added represents the difference between the value of production of a certain good/service and the value of the intermediate goods/services necessary for its production. Eurostat defines the value added at factor cost as “the gross income from operating activities after adjusting for operating subsidies and indirect taxes. Value adjustments (such as depreciation) are not subtracted⁸²”. The rank of economic sectors according to their added value is reported in Table 6 below.

Level of employment

Employment is also important from a socio-economic perspective, in order to understand the approximate number of persons directly involved in the sector, and thus directly affected by sectoral policy actions⁸³. The research team considered the ‘number of persons employed’, as reported by Eurostat. The variable aims to measure the number of persons employed by an economic entity, such as an enterprise, in each sector, regardless of their type of contract. It is defined by Eurostat as “the total number of persons who work in the observation unit (inclusive of working proprietors, partners working regularly in the unit and unpaid family workers), as well as persons who work outside the unit who belong to it and are paid by it (e.g. sales representatives, delivery personnel, repair and maintenance

⁸¹ Eurostat metadata, available on its website (http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/EN/sbs_esms.htm).

⁸² Ibid.

⁸³ The indirect number of persons involved in the sector may potentially be of interest to policy-makers, e.g. the number of households related to a specific sector, but these statistics are not available, and their very difficult calculation methods would contribute to making their meaning erratic. The research team considers the “number of persons employed” rather than the “number of employees”, because it is more inclusive (i.e. it includes every type of person working in a certain sector, and does not discriminate among workers on the basis of their type of contract) and less sensitive to sectoral variation (i.e. some sectors and type of enterprises – big firms – are more prone to recruit workers as “employee”).

teams)⁸⁴". The rank of economic sectors according to the level of employment is reported in Table 7 below.

Number of Firms

As a complementary indication, in order to understand the extent to which a sectoral entrepreneurial system is being diffused, is growing or is declining, the research team decided to include the number of enterprises active in each sector, as reported by Eurostat. It includes the enterprises "active during at least a part of the reference period"⁸⁵. The ranking of economic sectors according to the number of firms is reported in Table 8 below.

⁸⁴ Eurostat metadata, available on its website (http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/EN/sbs_esms.htm).

⁸⁵ Ibid.

Table 5 : Economic size, EU-27 (2011, million EUR)

	Sector	Turnover		Sector	Turnover
1	Wholesale trade, excluding motor vehicles and motorcycles	5,753,373	35	Travel agency, tour operator reservation service and related activities	150,606
2	Retail trade, excluding motor vehicles and motorcycles	2,671,806	36	Repair and installation of machinery and equipment	149,969
3	Electricity, gas, steam and air conditioning supply	1,360,000	37	Waste collection, treatment and disposal activities, materials recovery	145,183
4	Wholesale and retail trade and repair of motor vehicles and motorcycles	1,077,152	38	Manufacture of beverages	145,000
5	Manufacture of food products	871,400	39	Accommodation	143,438
6	Specialised construction activities	751,434	40	Extraction of crude petroleum and natural gas ¹	142,705
7	Manufacture of motor vehicles, trailers and semi-trailers ¹	740,587	41	Services to buildings and landscape activities	137,000
8	Manufacture of machinery and equipment n.e.c.	619,144	42	Publishing activities ³	134,689
9	Construction of buildings	545,527	43	Air transport	126,580
10	Manufacture of coke and refined petroleum products ¹	500,187	44	Manufacture of wood and of products of wood and cork, excluding furniture, manufacture of articles of straw and plaiting materials	123,000
11	Land transport and transport via pipelines	500,000	45	Other manufacturing	112,063
12	Manufacture of chemicals and chemical products ¹	490,000	46	Water transport	111,948
13	Manufacture of fabricated metal products, except machinery and equipment	471,000	47	Postal and courier activities	106,540
14	Warehousing and support activities for transportation	459,000	48	Printing and reproduction of recorded media	92,000
15	Real estate activities ²	432,920	49	Manufacture of furniture	90,000
16	Telecommunications	411,000	50	Other professional, scientific and technical activities	83,000
17	Computer programming, consultancy and related activities	400,000	51	Manufacture of textiles	80,000
18	Manufacture of basic metals	393,042	52	Manufacture of wearing apparel	76,103
19	Food and beverage service activities	347,678	53	Motion picture, video and television programme production, sound recording and music publishing activities	66,512
20	Activities of head offices; management consultancy activities	327,063	54	Programming and broadcasting activities	65,219
21	Manufacture of electrical equipment	302,779	55	Water collection, treatment and supply	61,600
22	Manufacture of rubber and plastic products	300,000	56	Information service activities ⁴	60,667
23	Manufacture of computer, electronic and optical products	300,000	57	Scientific research and development	56,000
24	Architectural and engineering activities; technical testing and analysis	296,344	58	Manufacture of leather and related products	47,411
25	Civil engineering	263,028	59	Manufacture of tobacco products ¹	44,763
26	Legal and accounting activities	255,212	60	Security and investigation activities	44,000
27	Manufacture of basic pharmaceutical products and pharmaceutical preparations	231,609	61	Other mining and quarrying	36,613
28	Manufacture of other non-metallic mineral products	220,000	62	Repair of computers and personal and household goods	24,591
29	Office administrative, office support and other business support activities	190,000	63	Sewerage	24,169
30	Manufacture of paper and paper products	178,000	64	Mining of coal and lignite ¹	15,541
31	Employment activities	163,760	65	Mining support service activities ¹	14,603
32	Advertising and market research	161,529	66	Veterinary activities	13,426
33	Manufacture of other transport equipment	161,037	67	Mining of metal ores ⁵	5,857
34	Rental and leasing activities	156,555	68	Remediation activities and other waste management services	3,924

Notes: ¹2010 ²No data for EL, FI, MT. ³No data for EL, IE, MT. ⁴No data for EL, FI, IE, MT. ⁵2009.

Source: Authors' elaboration based on Eurostat data.

Table 6: Contribution to the GDP, EU-27 (2011, million EUR)

	Sector	Value added		Sector	Value added
1	Wholesale trade, excluding motor vehicles and motorcycles	592,476	35	Repair and installation of machinery and equipment	55,580
2	Retail trade, excluding motor vehicles and motorcycles	453,333	36	Advertising and market research	50,353
3	Specialised construction activities	282,350	37	Extraction of crude petroleum and natural gas ¹	50,010
4	Real estate activities	240,000	38	Manufacture of other transport equipment	47,124
5	Electricity, gas, steam and air conditioning supply	214,000	39	Waste collection, treatment and disposal activities; materials recovery	44,786
6	Land transport and transport via pipelines	200,000	40	Other manufacturing	42,539
7	Manufacture of machinery and equipment n.e.c.	191,880	41	Manufacture of paper and paper products	42,267
8	Computer programming, consultancy and related activities ²	183,704	42	Manufacture of beverages	38,000
9	Legal and accounting activities	176,193	43	Other professional, scientific and technical activities	37,600
10	Telecommunications	173,771	44	Printing and reproduction of recorded media	34,000
11	Manufacture of food products	167,613	45	Manufacture of wood and of products of wood and cork, excluding furniture; manufacture of articles of straw and plaiting materials	31,500
12	Warehousing and support activities for transportation	165,344	46	Water collection, treatment and supply	31,000
13	Manufacture of fabricated metal products, excluding machinery and equipment	158,000	47	Information service activities	30,836
14	Wholesale and retail trade and repair of motor vehicles and motorcycles	147,605	48	Security and investigation activities	30,519
15	Architectural and engineering activities; technical testing and analysis	147,269	49	Manufacture of furniture	29,000
16	Construction of buildings	143,754	50	Air transport	28,084
17	Food and beverage service activities	141,496	51	Programming and broadcasting activities	28,058
18	Manufacture of motor vehicles, trailers and semi-trailers ¹	141,063	52	Motion picture, video and television programme production, sound recording and music publishing activities	24,870
19	Activities of head offices; management consultancy activities	138,704	53	Travel agency, tour operator reservation service and related activities	24,360
20	Employment activities	111,972	54	Scientific research and development	23,600
21	Manufacture of chemicals and chemical products	110,000	55	Manufacture of coke and refined petroleum products ¹	23,514
22	Manufacture of electrical equipment	86,323	56	Manufacture of textiles	22,000
23	Manufacture of basic pharmaceutical products and pharmaceutical preparations	85,725	57	Manufacture of wearing apparel	20,480
24	Services to buildings and landscape activities	84,122	58	Water transport ³	19,696
25	Manufacture of rubber and plastic products	80,000	59	Sewerage	14,561
26	Rental and leasing activities	78,044	60	Manufacture of leather and related products	12,405
27	Manufacture of computer, electronic and optical products ¹	77,679	61	Other mining and quarrying	12,176
28	Office administrative, office support and other business support activities	76,700	62	Mining of coal and lignite ¹	10,507
29	Civil engineering	73,475	63	Repair of computers and personal and household goods	10,000
30	Accommodation	66,640	64	Veterinary activities	6,966
31	Manufacture of other non-metallic mineral products ¹	64,256	65	Manufacture of tobacco products ¹	6,949
32	Manufacture of basic metals	63,797	66	Mining support service activities ¹	6,152
33	Publishing activities	60,000	67	Mining of metal ores ¹	3,171
34	Postal and courier activities	58,820	68	Remediation activities and other waste management services	1,219

Notes: ¹2010. ²No data for EL, FI, MT. ³No data for BE, EE, EL, LV, LU, MT, PL, SK.

Source: Authors' elaboration based on Eurostat data.

Table 7: Level of Employment, EU-27 (2011)

	Sector	N. of pers. employed		Sector	N. of pers. employed
1	Retail trade, except of motor vehicles and motorcycles	18,614,100	35	Manufacture of wood and of products of wood and cork, excluding furniture; manufacture of articles of straw and plaiting materials	1,020,000
2	Wholesale trade, excluding motor vehicles and motorcycles	10,552,500	36	Manufacture of basic metals	1,000,000
3	Food and beverage service activities	7,853,700	37	Manufacture of furniture	1,000,000
4	Specialised construction activities	7,804,900	38	Other professional, scientific and technical activities	990,000
5	Land transport and transport via pipelines ²	5,645,900	39	Publishing activities	900,000
6	Employment activities	4,600,000	40	Other manufacturing	890,000
7	Services to buildings and landscape activities	4,260,000	41	Waste collection, treatment and disposal activities; materials recovery	829,500
8	Manufacture of food products	4,075,400	42	Printing and reproduction of recorded media	814,300
9	Wholesale and retail trade and repair of motor vehicles and motorcycles	3,848,200	43	Manufacture of other transport equipment	696,400
10	Manufacture of fabricated metal products, excluding machinery and equipment	3,624,400	44	Manufacture of paper and paper products	651,200
11	Construction of buildings	3,617,900	45	Manufacture of textiles	635,000
12	Legal and accounting activities	3,315,900	46	Rental and leasing activities	617,300
13	Architectural and engineering activities; technical testing and analysis	2,935,100	47	Manufacture of basic pharmaceutical products and pharmaceutical preparations	538,400
14	Manufacture of machinery and equipment n.e.c.	2,896,200	48	Scientific research and development	500,000
15	Computer programming, consultancy and related activities	2,700,000	49	Information service activities	492,600
16	Real estate activities	2,600,000	50	Travel agency, tour operator reservation service and related activities	484,700
17	Warehousing and support activities for transportation	2,500,000	51	Manufacture of leather and related products	425,200
18	Accommodation	2,366,300	52	Manufacture of beverages	422,600
19	Manufacture of motor vehicles, trailers and semi-trailers ¹	2,171,800	53	Motion picture, video and television programme production, sound recording and music publishing activities	409,900
20	Activities of head offices; management consultancy activities	2,092,700	54	Repair of computers and personal and household goods	386,300
21	Office administrative, office support and other business support activities	2,047,200	55	Water collection, treatment and supply	380,500
22	Postal and courier activities	1,843,700	56	Air transport	373,600
23	Manufacture of rubber and plastic products	1,649,000	57	Programming and broadcasting activities	245,300
24	Civil engineering	1,591,900	58	Mining of coal and lignite ¹	233,000
25	Manufacture of electrical equipment	1,482,700	59	Water transport	212,600
26	Security and investigation activities	1,387,800	60	Other mining and quarrying	209,700
27	Manufacture of other non-metallic mineral products	1,330,000	61	Veterinary activities	199,000
28	Electricity, gas, steam and air conditioning supply	1,210,000	62	Sewerage	141,700
29	Manufacture of chemicals and chemical products	1,200,000	63	Manufacture of coke and refined petroleum products ¹	129,400
30	Repair and installation of machinery and equipment	1,194,300	64	Extraction of crude petroleum and natural gas ¹	73,200
31	Advertising and market research	1,124,800	65	Mining support service activities ¹	52,500
32	Manufacture of computer, electronic and optical products	1,100,000	66	Manufacture of tobacco products ¹	45,200
33	Telecommunications	1,100,000	67	Mining of metal ores ²	42,000
34	Manufacture of wearing apparel	1,029,700	68	Remediation activities and other waste management services ²	38,200

Notes: ¹2010. ²2009.

Source: Authors' elaboration based on Eurostat data.

Table 8: Number of Firms, EU-27 (2011)

	Sector	Number of enterprises		Sector	Number of enterprises
1	Retail trade, except of motor vehicles and motorcycles	3,645,687	35	Publishing activities	90,000
2	Specialised construction activities	2,315,461	36	Veterinary activities	68,338
3	Wholesale trade, excluding motor vehicles and motorcycles	1,790,111	37	Employment activities	68,304
4	Food and beverage service activities	1,535,685	38	Manufacture of rubber and plastic products	63,837
5	Real estate activities	1,185,234	39	Electricity, gas, steam and air conditioning supply	62,800
6	Legal and accounting activities	1,074,101	40	Manufacture of textiles	60,300
7	Architectural and engineering activities; technical testing and analysis	957,981	41	Security and investigation activities	53,642
8	Land transport and transport via pipelines	900,000	42	Postal and courier activities	52,557
9	Construction of buildings	831,627	43	Manufacture of electrical equipment	51,000
10	Wholesale and retail trade and repair of motor vehicles and motorcycles	793,967	44	Scientific research and development	47,215
11	Activities of head offices; management consultancy activities	756,738	45	Waste collection, treatment and disposal activities; materials recovery	42,044
12	Other professional, scientific and technical activities	588,478	46	Manufacture of computer, electronic and optical products	41,900
13	Computer programming, consultancy and related activities	530,000	47	Telecommunications	40,851
14	Office administrative, office support and other business support activities	477,192	48	Manufacture of leather and related products	36,583
15	Manufacture of fabricated metal products, excluding machinery and equipment	387,317	49	Manufacture of chemicals and chemical products	27,881
16	Services to buildings and landscape activities	377,337	50	Manufacture of beverages	23,100
17	Advertising and market research	276,214	51	Water transport	20,632
18	Accommodation	271,183	52	Manufacture of motor vehicles, trailers and semi-trailers	20,000
19	Manufacture of food products	262,816	53	Manufacture of paper and paper products	19,800
20	Repair of computers and personal and household goods	183,324	54	Manufacture of basic metals	18,173
21	Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	183,000	55	Other mining and quarrying	17,000
22	Repair and installation of machinery and equipment	173,548	56	Water collection, treatment and supply	14,400
23	Rental and leasing activities	163,151	57	Manufacture of other transport equipment	14,100
24	Other manufacturing	144,726	58	Programming and broadcasting activities	11,663
25	Warehousing and support activities for transportation	134,033	59	Sewerage	11,034
26	Manufacture of wearing apparel ¹	129,374	60	Air transport	4,000
27	Manufacture of furniture	125,000	61	Manufacture of basic pharmaceutical products and pharmaceutical preparations	4,000
28	Printing and reproduction of recorded media	124,020	62	Remediation activities and other waste management services	2,650
29	Motion picture, video and television programme production, sound recording and music p.a.	111,672	63	Mining support service activities	1,512
30	Information service activities	110,000	64	Manufacture of coke and refined petroleum products	1,098
31	Manufacture of other non-metallic mineral products	100,351	65	Extraction of crude petroleum and natural gas	378
32	Civil engineering	97,654	66	Mining of metal ores	262
33	Manufacture of machinery and equipment n.e.c.	95,829	67	Manufacture of tobacco products	262
34	Travel agency, tour operator reservation service and related activities	90,173	68	Mining of coal and lignite	211

Note: ¹2010.**Source:** Authors' elaboration based on data from Eurostat.

When using multiple indicators for a similar phenomenon, in this case the economic significance of a sector, one needs to test whether the indicators convey similar information or are independent of one another. This can be tested by measuring the degree of correlation, i.e. whether and to what extent these four different indicators are related to each other or, in other words, move together. For instance, it is likely that the number of persons employed increases together with the turnover, as, roughly speaking, more workers generate more revenues. This test can be carried out through the Spearman's rank correlation coefficient⁸⁶ comparing the ranking of each sector between couples of different indicators.⁸⁷ The results of the test are reported in Table 9. As expected, it appears that turnover and value added are highly correlated, and so are value added and number of persons employed. The indicator that is less correlated with the others is "number of enterprises", due to the different size of companies across different sectors.

Table 9: Correlation among economic categories

	Turnover	Value added	Number of persons employed	Number of enterprises
Turnover	1	0.897	0.756	0.475
Value added		1	0.878	0.624
Number of persons employed			1	0.778
Number of enterprises				1

Source: Authors' own elaboration.

Using this set of indicators, policy-makers can decide, on an *ad-hoc* basis, to stress a specific element of their agenda, e.g. employment rather than mere economic size. As a consequence of this high correlation, when choosing a single indicator, the risk that policy-makers will neglect or penalise other economic facets is low. However, due to the high correlation registered among the different indicators, it is not advisable to create a unique (composite) ranking based on the four listed below (Nardo et al., 2005a).

As a final caveat, it is worth mentioning that any ranking based on the four indicators selected would have to be interpreted with a certain degree of flexibility, due to some approximations on (or lack of) data. For the very same reasons, some sort of sensitivity analysis should, in any case, be conducted, before validating these results, coupled with a qualitative narrative when necessary. By way of illustration, the top 15 sectors across the four variables are reported in Table 10 below.

⁸⁶ Known also as Spearman's ρ [rho], its value ranges from 0, no correlation, to 1, perfect correlation, i.e. the sectors have the same ranking in the two categories.

⁸⁷ The research team decided to retain as four final categories the above-mentioned: economic size, measured by the turnover; economic contribution to the GDP, measured by the value added; the level of employment, measured by the number of persons employed; the population of firms in a sector, measured by the number of enterprises present in that sector. The research team decided to not include the variable "production value", as it showed a Spearman's correlation of 0.989 with "turnover"; and the variable "number of employees", as it showed a Spearman's correlation of 0.995 with "number of persons employed".

Table 10: Top 15 sectors, by economic category

Rank	Turnover	Value added	Number of persons employed	Number of enterprises
1	Wholesale trade, excluding motor vehicles and motorcycles	Wholesale trade, excluding motor vehicles and motorcycles	Retail trade, excluding motor vehicles and motorcycles	Retail trade, excluding motor vehicles and motorcycles
2	Retail trade, excluding motor vehicles and motorcycles	Retail trade, excluding motor vehicles and motorcycles	Wholesale trade, excluding motor vehicles and motorcycles	Specialised construction activities
3	Electricity, gas, steam and air conditioning supply	Specialised construction activities	Food and beverage service activities	Wholesale trade, excluding motor vehicles and motorcycles
4	Wholesale and retail trade and repair of motor vehicles and motorcycles	Real estate activities	Specialised construction activities	Food and beverage service activities
5	Manufacture of food products	Electricity, gas, steam and air conditioning supply	Land transport and transport via pipelines	Real estate activities
6	Specialised construction activities	Land transport and transport via pipelines	Employment activities	Legal and accounting activities
7	Manufacture of motor vehicles, trailers and semi-trailers	Manufacture of machinery and equipment n.e.c.	Services to buildings and landscape activities	Architectural and engineering activities; technical testing and analysis
8	Manufacture of machinery and equipment n.e.c.	Computer programming, consultancy and related activities	Manufacture of food products	Land transport and transport via pipelines
9	Construction of buildings	Legal and accounting activities	Wholesale and retail trade and repair of motor vehicles and motorcycles	Construction of buildings
10	Manufacture of coke and refined petroleum products	Telecommunications	Manufacture of fabricated metal products, excluding machinery and equipment	Wholesale and retail trade and repair of motor vehicles and motorcycles
11	Land transport and transport via pipelines	Manufacture of food products	Construction of buildings	Activities of head offices; management consultancy activities
12	Manufacture of chemicals and chemical products	Warehousing and support activities for transportation	Legal and accounting activities	Other professional, scientific and technical activities
13	Manufacture of fabricated metal products, excluding machinery and equipment	Manufacture of fabricated metal products, excluding machinery and equipment	Architectural and engineering activities; technical testing and analysis	Computer programming, consultancy and related activities
14	Warehousing and support activities for transportation	Wholesale and retail trade and repair of motor vehicles and motorcycles	Manufacture of machinery and equipment n.e.c.	Office administrative, office support and other business support activities
15	Real estate activities	Architectural and engineering activities; technical testing and analysis	Computer programming, consultancy and related activities	Manufacture of fabricated metal products, excluding machinery and equipment

Source: Authors' own elaboration.

7.3. Sources to define regulatory criteria for sectoral analysis

Consistent with the analytical framework of the report, regulatory criteria concern the legal and policy aspects of Single Market integration⁸⁸. This section proposes various indicators to identify areas of the Single Market *acquis* that appear more troubled from a legal point of view, or that may be policy significant due to the persistence of barriers constraining European citizens and companies. Unlike the economic variables described above, these indicators provide more a suggestion of where the regulatory obstacles to Single Market integration may still lie, rather than an assessment of the significance of each economic sector or policy area.

Several European institutions produce, collect and report information that may be useful to identify the areas of the Single Market that are worth political attention and where an intervention may remove existing difficulties or barriers. For this reason, a large amount of information is available with respect to the regulatory performance of the Single Market in specific policy areas. However, this information is usually aggregated in tools which are then used for purposes other than Single Market M&E, and hence it may not be appropriate to feed such information into the policy process. In these cases, it is crucial to ensure that open access to the underlying data is granted, so that the information can be framed in a way as to become relevant for the Single Market policy process.

In particular, six sources of information have been identified as including either suitable indicators to underpin sectoral interventions, or informational material that could be used to build an indicator. Four of these sources already have an Internal Market focus, while the remaining two cover the whole EU *acquis*; hence information about Single Market topics should be drawn out of a larger pool. They are represented in Table 11 below and described further in this section.

Table 11: Sources to define regulatory criteria for sectoral policies

Source	Single Market focus	Ready-to-use indicators vs. further refinement
Solvit	✓	Ready to use
Committee on Petitions of the European Parliament	X	Further refinement
European Consumer Centres Network	✓	Ready to use
SMS Priority Areas	✓	Ready to use
EU Pilot	✓	Further refinement
Infringement Procedures	X	Ready to use

Source: Authors' own elaboration.

7.3.1. Solvit

Solvit is an alternative dispute resolution mechanism on Single Market issues that was set up by the European Commission in 2002 and has been in operation since. It can be

⁸⁸ See Figure 1 above.

invoked in case of cross-border disputes between citizens or businesses and public administrations and works as an online network to facilitate settlements. A citizen or company of country A experiencing problems with a national administration in country B may lodge a complaint to country A's Solvit centre. If the complaint is appropriate, country A's Solvit centre contacts country B's Solvit centre, which verifies whether a breach of EU law has taken place. If this is the case, the two centres work together to solve the case through non-legislative means (Pelkmans & Correia De Brito, 2012).

Given the workings of the Solvit mechanism, national centres, located in each EU and EEA Member State, act as sentinels spotting problems with the implementation of the Single Market *acquis* before more formal proceedings (e.g. legal claims or infringement procedures) are started. Working on the input of citizens and companies, they may be used as a thermometer to assess which areas of the Single Market present significant problems. It is worth mentioning that Solvit is not meant to be exhaustive, meaning that there is no duty to use Solvit before other dispute resolution methods; hence, an assessment based on Solvit cases could only provide an indication of areas where problems exist, but it is not an assessment of **all** areas where problems exist.

In 2013, Solvit centres handled 1,430 cases that fell within their mandate and passed the home centre pre-screening; this means that they monitor a large batch of incidents of possible Single Market malfunctioning. The Commission publishes an annual breakdown of cases per policy area. These are reported in Table 12 below. Business cases are much less common than citizens' cases (about 9 % of the total).

Table 12: Solvit Cases per policy area (2013)

Policy Area	Share
Social security	40 %
Residence permits and visas	25 %
Professional qualifications	12 %
Taxation	6 %
Vehicle registration and driving licences	6 %
Other	5 %
Goods	2 %
Free movement of workers	2 %
Services	2 %

Source: European Commission, Online Single Market Scoreboard.

Available indicators about Solvit focus on policy areas rather than on economic sectors. By accessing the underlying raw data, however, it should be possible to also analyse which economic sectors generate the largest number of complaints.

7.3.2. Committee on Petitions of the European Parliament

The Committee on Petitions is a permanent investigative committee of the European Parliament. Based on Art. 227 of the TFEU, EU citizens may lodge a petition to the European Parliament in case they perceive that their rights under the treaties have been

breached. In case the claims are substantiated, the Committee may attempt to solve the issue through non-judicial and non-legislative remedies.

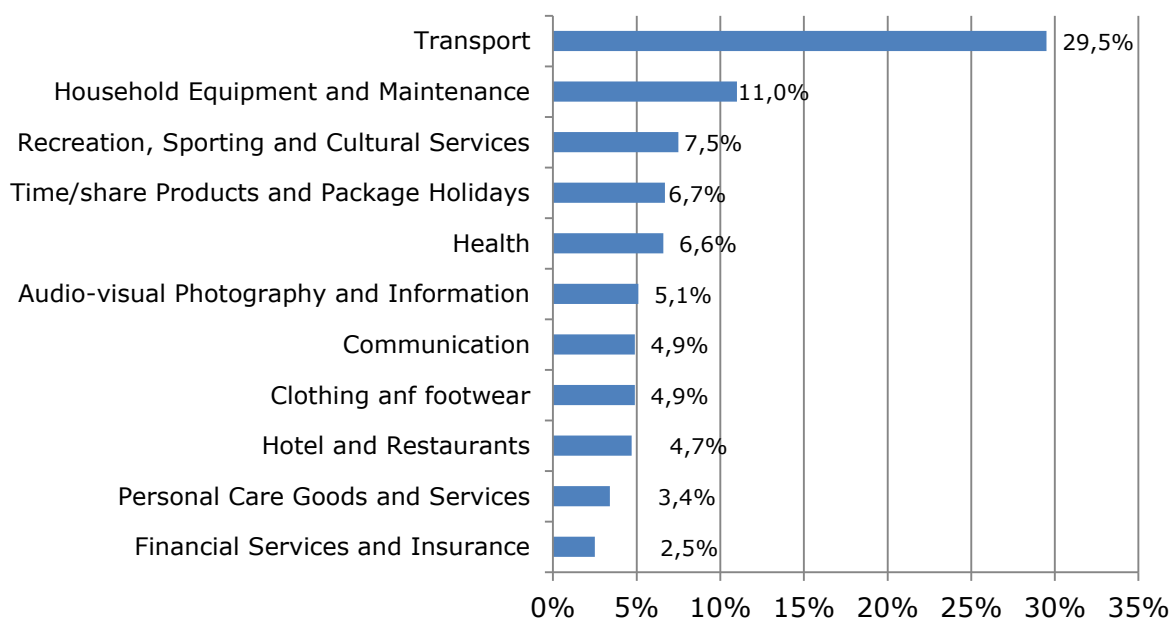
Each year, the Committee reports on its activities and on the areas on which it has heard and discussed petitions⁸⁹. Petitions may also concern the alleged breach of rights and freedoms linked with the Single Market. In 2013, the following areas of the Single Market *acquis* were mentioned: property rights, environmental regulation, the right of free movement including the portability of pensions, the mutual recognition of civil status documents and consumer rights. However, no statistics could be found on petitions submitted, substantiated and processed per policy area or economic sector. If disaggregated data were available, it could be possible to spot whether certain areas of the Single Market *acquis* generate a significant number of petitions and might thus be worthy of further monitoring or policy intervention.

7.3.3. European Consumer Centre Network

The European Consumer Centre Network (ECC-NET) consists of 29 centres in the EU Member States, Norway and Iceland. Their work concerns consumer rights and their alleged violations in cross-border cases. Their function is three-fold: providing information to consumers, advising consumers, and assisting them with complaint handling, including finding an amicable solution with the trader or suggesting resolution mechanisms.

In 2013, the ECC-NET handled more than 32,000 cross-border disputes, and it is thus in a privileged position to assess which class of cross-border disputes are more problematic from the point of view of consumers. The Commission publishes yearly the number of cases per product or service concerned. Data for 2013 are reported in Figure 10 below.

Figure 10: Complaints received by the ECC-NET per product/service (2012)



Source: European Commission, Online Single Market Scoreboard.

⁸⁹ The latest document is the Report on the Activities of the Committee on Petitions, 2013, T7-0204/2014, 2014/2008(INI), 11.03.2014.

7.3.4. Single Market Scoreboard Priority Areas

From 2012 onwards⁹⁰, the Commission has identified five priority areas of the Single Market where swift progress was to be made to achieve the most growth potentials; these priority areas were given more demanding targets in terms of transposition and implementation of EU norms. The five priority areas are services, financial services, transport, the Digital Single Market and energy.

For these priority areas, the SMS analysis has been adapted and organised on sectoral basis. Therefore, it is possible to know the transposition and implementation deficiencies in each sector and to immediately spot delays and problems, including information about the Member States in which delays and problems are happening.

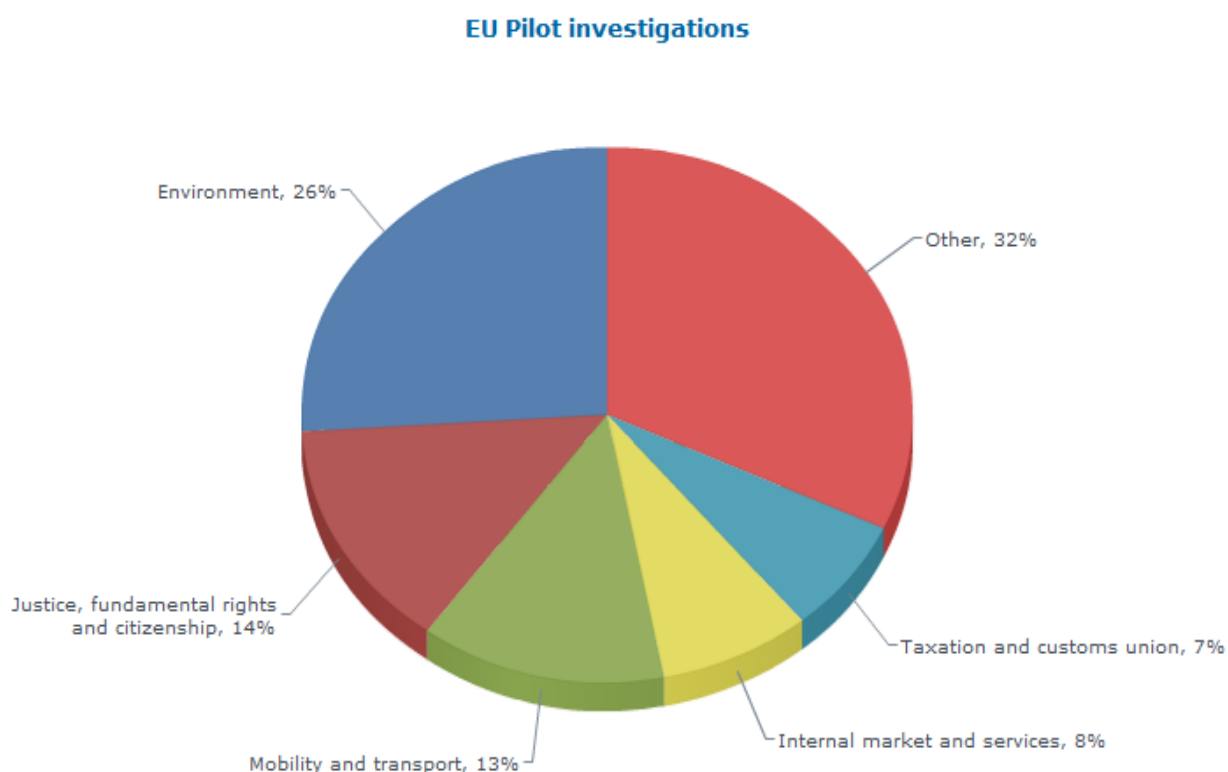
The Commission has so far limited this sectoral assessment to the five priority areas mentioned above. With access to the SMS underlying data, however, this exercise could be replicated for any policy area. Should other economic or regulatory indicators suggest that a certain economic sector or policy area may present problems that deserve regulatory intervention, a pre-screening of the transposition and compliance deficiencies in that area could be carried out.

7.3.5. EU Pilot and Infringement Procedures

The EU Pilot is an alternative resolution mechanism between the European Commission and Member States in cases of allegedly incorrect application of EU law. After having been launched in 2008 among a group of early-adopters, it now covers the whole EU. Through EU Pilot, the Commission tries to clarify the background of alleged misapplication of EU law, and thus convince the Member State in question to comply voluntarily with the Commission's position. The EU Pilot-solution can be attempted before the formal infringement proceeding is triggered, but there is no legal duty to invoke this mechanism before launching a formal proceeding.

The EU Pilot proceeding can cover any area of EU law, including Single Market legislation. In 2013, 1,502 files were open by the Commission on the Pilot platform. The Commission publishes yearly a breakdown of EU Pilot investigations by the competent DG. Data for 2013 are reported in Figure 11 below. The classification per DG is not sufficient to spot which economic sector or policy area of intervention of the Single Market *acquis* appears to be the most problematic. However, having access to disaggregated data about Pilot cases could provide the raw material to build another indicator capable of signalling areas of Single Market legislation with a possibly low regulatory performance.

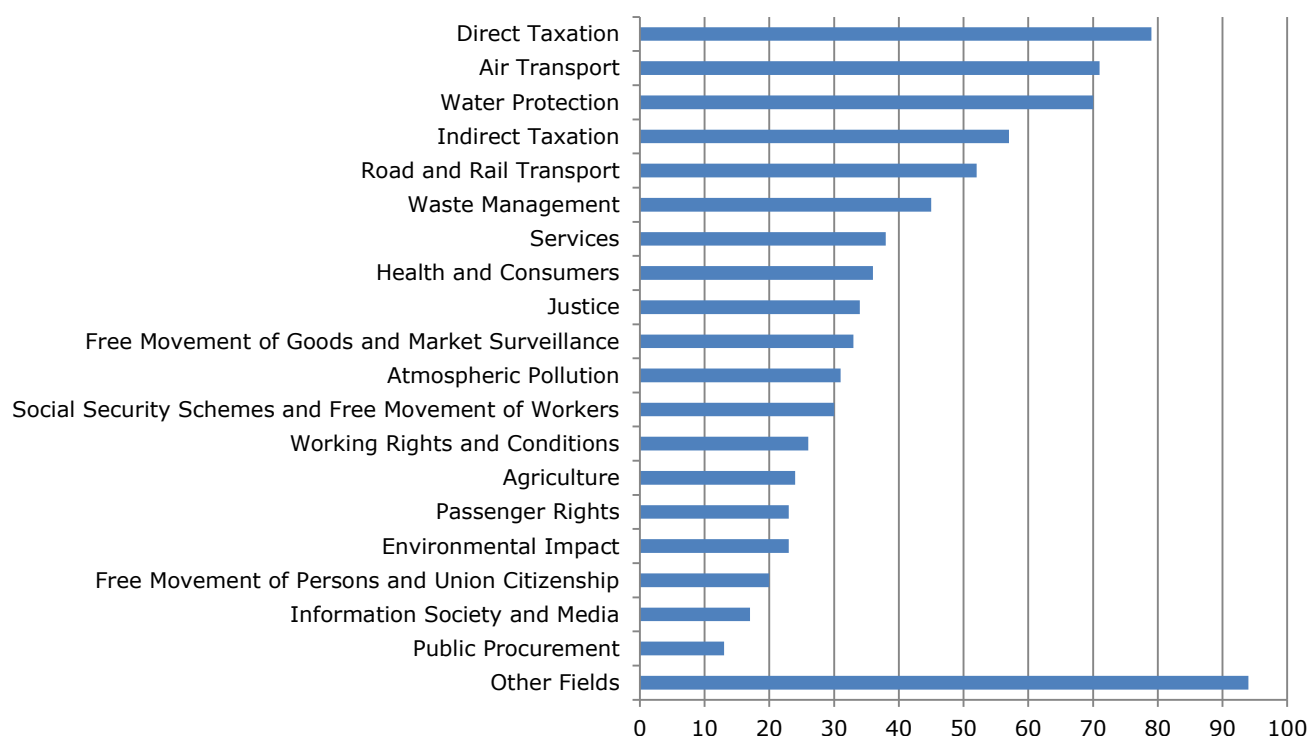
⁹⁰ Communication from the Commission, Better Governance for the Single Market, COM(2012)259, 8.6.2012. See also the SMS, available at: http://ec.europa.eu/internal_market/scoreboard/performance_by_governance_tool/priority_areas/index_en.htm.

Figure 11: Investigations opened on the EU Pilot platform (2013)

Source: European Commission, Online Single Market Scoreboard.

The same reasoning that applies to data from the EU Pilot platform can be applied to data about formal infringement proceedings. In particular, infringement proceedings obviously have a scope larger than the Single Market legislation alone. However, unlike for EU Pilot, the Commission publishes data about infringement proceedings per policy area rather than per DG, which make them more ready-to-use as an input indicator into the Single Market policy process. The latest data available, referring to 2013, report the number of pending infringement cases and are shown in Figure 12 below⁹¹.

⁹¹ Each year the Commission also publishes an annual report on the implementation of EU law, which is extremely rich in data. The latest edition refers to 2012 and is available at: http://ec.europa.eu/eu_law/infringements/infringements_annual_report_en.htm

Figure 12: Pending infringement proceedings (May 2014)

Source: European Commission, Online Single Market Scoreboard.

7.4. Conclusions

Sectoral policies represent a significant part of the Single Market *acquis*. While monitoring and evaluating sectoral policies is a necessary building block of the Single Market policy process, it is not possible to compile a comprehensive set of indicators. Rather, each sector, whether it is a specific industry or a policy area, has its own indicators and variables for M&E purposes, which should be resorted to once policy-makers have decided where the attention is worth focusing. Rather than compiling an open-ended list of indicators, **this section discusses how to identify which economic sectors or policy areas should be the object of specific analysis** concerning the impact of Single Market legislation and its possible improvement.

Consistent with the analytical framework of the whole study, the analysis is based on two strands: economic and regulatory. Broadly speaking, the economic criteria assess the significance of a certain industry or policy area for the European economy. The underlying rationale is that policy intervention in sectors that represent a larger share of e.g. added value or number of workers will produce larger benefits for the EU society as a whole. To assess the economic significance of economic sectors or policy areas, four criteria are proposed⁹²:

1. Economic size, measured by the turnover
2. Economic contribution to the GDP, measured by the value added
3. Level of employment, measured by the number of persons employed
4. Number of firms

⁹² When the analysis concerns an economic sector, the information to populate these criteria can be directly extracted from Eurostat databases; when the analysis concerns a policy area, these criteria should be measured on the direct targets of legislation rather than on NACE economic divisions.

All these criteria measure a slightly different aspect of the economic relevance of an economic sector or policy area; as such, they can be used either in isolation or jointly, but not by creating a composite indicator.

Moving to regulatory criteria, they should not be intended as being opposed or hierarchically inferior to economic criteria. The Single Market endeavour is expected to deliver tangible benefits to European citizens and companies, and legal and policy barriers may prevent these benefits from becoming a reality. Addressing these barriers is an important and legitimate political goal *per se*. The key issue here is how to ensure that legal and policy considerations are not introduced on the basis of particular interests or anecdotal evidence; rather, the criteria suggested above try to give an additional evidence basis to legitimate policy interventions.

When it comes to regulatory criteria to identify economic sectors or policy areas for further M&E, six sources of information have been identified:

1. Solvit
2. Committee on Petitions of the European Parliament
3. European Consumer Centre Network
4. SMS Priority Areas
5. EU Pilot
6. Infringement procedures

All these tools, information and mechanisms act as 'alert sentinels' over possible malfunctioning of the Single Market. Given the number of problematic issues that are handled or monitored every year through these channels, they possess a rich and valuable stream of information that could be used to help spot areas of legislation that create the largest problems to European citizens and companies.

8. CONCLUDING REMARKS

Throughout this study, the research team has explored the opportunities and constraints in defining a set of indicators to measure the economic and regulatory performance of the Single Market. The main conclusions and policy recommendations for the various topics addressed in this study are summarised below:

1. The gap analysis of existing tools assessing Single Market integration shows that many indicators, reports and studies exist in the public domain, but not all of them are appropriate for the purpose of this study, which is to design an M&E tool with the aim of embedding it in the European Semester.
2. With regards to assessing the regulatory performance, two sets of indicators appear particularly suitable for M&E of the Single Market: the Single Market Scoreboard, published by the European Commission; and the Product Market Regulation indicators, published by the OECD. Both, however, concern mainly legal-process compliance and focus on the 'law on the books', rather than on the situation on the ground experienced by European citizens and companies.
3. With respect to defining an indicator **to assess the regulatory performance of the Single Market, the research team proposes a composite indicator to measure the Single Market Gap**, i.e. the additional burden borne by citizens and companies in cross-border activities. This indicator has the following advantages:
 - i. It focuses on policy outputs rather than inputs and processes, filling a gap left open by existing tools.
 - ii. It covers both the law on the books and the law on the ground, thus better assessing the actual experience of European citizens and companies.
 - iii. It is actionable, and as such it can form the basis on which to lay down recommendations for policy interventions, both at EU level and at specific national levels.
 - iv. It creates a novel basis of data to assess both the Single Market Gap, but also the performance of significant parts of the Single Market *acquis*.
4. With regards to assessing the economic performance, plenty of indicators and studies are available. The issue here is not whether there is a sufficient number of candidate indicators to feed the economic analysis of Single Market integration. Rather, it should be questioned whether the variables measured by those indicators are fit for M&E purposes.
5. With respect to defining an indicator **to assess the economic performance, the research team believes that there is no 'silver bullet' indicator**, either in simple or composite form. Any attempt to define a set of indicators for this purpose has to start by clarifying the underlying theory about the economic outputs, outcomes and impacts of Single Market integration. On this basis, **a set of candidate variables** is tested to check whether they are: i) causality-proof, ii) significant and iii) feasible in terms of data collection. The analysis suggests that:
 - i. Price convergence scores best across the three criteria; however, significant measurement problems still exist, the majority of which could be addressed by additional efforts by the Commission and the Member States together.
 - ii. Intra-EU trade flows are another variable that could serve for M&E purposes, but they are also very sensitive to the economic climate and other economic factors, which could make it difficult to disentangle the effect of Single Market policies.

- iii. Foreign direct investment presents similar features, but the measurement challenges are more acute.
 - iv. Convergence of interest rates and the movement of EU workers present serious problems in differentiating the impact of Single Market integration from other economic and policy factors; hence additional research would be needed before they could be used as M&E indicators for policy-making purposes.
6. In order to possibly capture the complexity of the Single Market endeavour, which is the largest and probably most complex achievement of the European integration process, policy-makers should resort to a **set of economic indicators**. Hence, any quantitative assessment should be matched with in-depth qualitative evaluation, in order to test and verify whether the correlations identified correspond to causal links.
 7. **With respect to sectoral policies, their assessment should be part of any M&E system for Single Market integration**, since they represent a large chunk of the Single Market *acquis*. However, it is not feasible to cover all sectors and policy areas within an M&E system, which should in any case remain feasible and informative. **The research team suggests several criteria to identify which economic sectors or policy areas should undergo selected M&E of Single Market legislation**, based on two strands: economic significance of the targets of the Single Market *acquis* and regulatory problems experienced by citizens and companies in certain sectors or policy areas. Eurostat and other tools published by the European institutions produce sufficient materials to establish the economic or regulatory significance of certain policy areas. In some cases, access to the underlying raw data, however, is necessary to ensure that information is appropriate to steer the governance of the Single Market.
 8. The research team has also explored the possibility of using a composite indicator to assess the overall Single Market performance. Based on the analytical framework suggested in this study, **we do not recommend putting both economic and regulatory performance in the same composite indicator**. Such a composite indicator would suffer from at least three deficiencies: i) higher complexity, ii) lower actionability and iii) imperfect fit with the underlying theoretical construction of the Single Market.

Finally, the research team considers that there are room and possibilities to define an **integrated measurement system**, combining different methodologies - such as composite indicators, sets of indicators, sectoral tools and qualitative assessments - to measure Single Market performance in view of embedding it in the European Semester. With respect to regulatory indicators, it is easier to design M&E tools that could directly result in policy recommendations for the EU institutions and Member States. With respect to economic indicators, additional care and qualitative assessment should be employed to extrapolate policy recommendations from a set of indicators. Additional pilot studies are recommended to test the feasibility of the indicators analysed throughout this study on the ground, i.e. based on real data collection and not only on theoretical considerations.

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ANNEX: ANALYSIS OF EXISTING TOOLS

Methodology for assessing Single Market indicators

This section proceeds as follows. First, a set of descriptive and assessment criteria for indicators of regulatory and economic integration is drawn up. Then, these criteria are used to describe a set of indicators representing an exhaustive sample of tools measuring Single Market implementation, integration and performance.

The selected tools include composite and non-composite indicators, periodical and one-off studies of Single Market integration, and inputs from international institutions. Previous studies assessing the costs and benefits of Single Market integration, from the “Cecchini report” onwards (Emerson 1988), are left out, as they only partially overlap with the aim of this study.⁹³

To analyse the existing tools, first one needs to look at “what” is measured, and “for what purpose”. The indicators reviewed in this section are designed to measure one or more aspects of Single Market integration, that is, they have a specific **object of measurement**. Based on the policy cycle classification described above in Section 2, **indicators may measure inputs, processes, outputs, outcomes or impacts related to the Single Market, or a combination of these**.

At the same time, indicators are constructed for an **objective**, which can be merely informative or can serve a specific political goal. In a regional bloc, integration indicators may serve two different purposes: i) by increasing knowledge about the impact of different policies, they facilitate coordination on the best rules for the group based on output/outcome evaluations; and ii) by increasing the information about Member States’ behaviours, they help in detecting deviations from the collectively agreed targets, thus facilitating enforcement and creating incentives for compliance.

In addition to the object of measurement and objective, indicators of market integration can be analysed according to several other criteria, including the following:

- **The type of data used.** Indicators may be based on *objective* (fact-based) data, such as existing legislation or quantifiable inputs or outputs; or they can rely on *subjective* (perception-based) data, such as expert assessments, consultations or surveys, which in turn may involve either the general population or selected categories (e.g. households or firms). It is also possible to construct indicators based on both types of data. In connection to this aspect, it is also important to assess **the data collection methodology** and the institution in charge of the collection, as these factors have an impact on the possibility to replicate the exercise at regular intervals, and thus on the possibility to use a certain indicator as a M&E tool for Single Market policies.
- **Whether a benchmark is used.** Indicators may or may not rely on a benchmark. The use of a benchmark allows expressing the indicator in relative terms compared to either the best performer (internal benchmark) or a certain goal (external benchmark).
- **Level of aggregation.** Indicators of Single Market integration may be constructed either in simple or composite form. Composite indicators are based on several sub-indices, which are calculated separately and are later aggregated through a technical rule and certain weights.

⁹³ See Section 5.1 above.

Further to the technical features of the indicators, their impact on the governance process depends on **whether and how results are disseminated and communicated** to policy-makers and the public at large.

The criteria discussed above can be grouped according to three pillars of analysis.

- Objectives and object of measurement:
 - Object of measurement
 - Objective pursued
- Methodological framework
 - Type of data and data collection methodology
 - Benchmark
 - Aggregation
- Reporting and communication strategies
 - Dissemination and communication strategy

Here below, the existing tools used to monitor Single Market integration and its performance are discussed, with a specific focus on the object and objective of measurement. The assessment is summarised in Table 1 above (in Section 3).

Single Market Scoreboard

The Single Market Scoreboard (SMS), previously known as the Internal Market Scoreboard, was proposed by the European Council in 1997 as a monitoring tool to address the issue of timely and correct transposition of EU legislation. It was published twice yearly, from 1997 to 2013, by the DG for Internal Market and Services. From 2013 onwards, periodical publication has been substituted by an online tool, and the coverage of the SMS has been enlarged to cover policy areas which were previously not included⁹⁴. The SMS covers 31 EEA countries.

The objective of the SMS is to monitor how well the EU and EFTA states comply with their obligations to ensure timely and correct transposition of internal market directives. **As such, it assesses the policy processes and outputs of Single Market integration.** The SMS is a monitoring and evaluation tool *stricto sensu*, as its purpose is not informative, but evaluative. Although no enforcement mechanisms are based on SMS, it provides a targeted assessment of the behaviours of the Member States vis-à-vis their procedural obligations concerning the EU Single Market.

Focusing on the “classical” (i.e. pre-2013) features, the SMS assesses the regulatory and legal integration of the EU Single Market by measuring the timely and correct implementation of EU legislation. Specifically, it measures whether directives on Single Market issues are transposed correctly and in a timely manner, and the number and length of infringement proceedings on Single Market issues brought before the Court of Justice of the European Union (Costea *et al.*, 2008). The following indicators are assessed:

- **Transposition.** Under this heading, the SMS measures: i) the transposition deficit, i.e. the number of overdue directives; ii) the number of directives overdue by two years or more; iii) the average transposition delay; and iv) the compliance deficit, i.e. the number of directives “incorrectly transposed”, where incorrectness is defined as resulting in the opening of an infringement proceeding.

⁹⁴ The SMS is available at <http://ec.europa.eu/single-market-scoreboard>.

- **Infringements.** Under this heading, the SMS measures: i) the number of pending infringement proceedings per Member State; ii) the duration of infringement proceedings; and iii) the duration between the Court's judgement and the closure of the case.

From 2013 onwards, other aspects have been included in the SMS:

- A focus on certain priority areas, as identified by the Communication on "Better Governance on the Internal Market"⁹⁵. For these priority areas, in addition to the transposition and compliance deficits and the infringement indicators, the Commission also monitors the submission of draft transposition measures and the provision of online information on these measures.
- The performance of other initiatives related to the institutions and mechanisms underpinning the working of the Single Market, such as EU Pilot, the Internal Market Information System, the Consumer Protection Cooperation Network, the European Consumer Centre Network, the Enterprise Europe Network, EURES, Your Europe, Your Europe Advice, SOLVIT, and the Points of Single Contact under the Services directive. For some of these tools, monitoring is based on performance indicators. For example, with regard to the Internal Market Information system, Member States are assessed over three indicators: i) speed in accepting requests; ii) requests answered within the mutually agreed deadline; and iii) speed in answering requests. For Solvit, Member States are ranked in relative terms based on three indicators: case handling speed as i) home and ii) lead centre; and iii) resolution rate as lead centre. For other tools, the SMS only provides information on achievements and deliverables. For example, with regards to the European Consumer Centre Network, the SMS reports the main initiatives launched in 2012, and the number of contacts and complaints, split by sector and by resolution mode. This information provides an overview of this Network, but does not amount to a monitoring and evaluation tool.

The SMS has a narrow focus: the quantitative assessment of the transposition process and of the resulting national acts. This narrow focus is its strength, as the indicator is (almost) undisputable, clear, and actionable. At the same time, this is also its main limit, as it cannot distinguish between serious and non-serious cases of non-transposition and non-compliance. Therefore, the SMS cannot really be used to judge the extent to which the transposition or compliance deficits hinder, in practice, the working of the Single Market. While several commentators have called to overcome this limit (EP, 2008), we tend to disagree for two reasons. First, correct transposition and compliance are necessary, though not sufficient, conditions for Single Market integration. Secondly, by enlarging the scope of the indicator, its effectiveness as a policy tool risks being undermined. For this reason, it seems appropriate to complement the SMS with other indicators, rather than to reform its methodology.

Internal Market Index

The Internal Market Index (IMI) was published by the European Commission in 2002 and again in 2004 (European Commission, 2002; 2004). The IMI measures aspects of economic integration, namely **economic outputs and outcomes**, rather than impacts. The goal of the IMI is "to track over time the effects of internal market policy", that is, to track the achievement of medium-term goals, such as the elimination of barriers to the

⁹⁵ Communication from the Commission, "Better Governance for the Single Market", COM(2012)259, 8 June 2012.

free circulation of goods and capital; the reform of network industries; the opening of public procurement markets; and the advancement of the service, financial and labour markets. As such, it aims to measure real economic integration, including both positive and negative measures⁹⁶.

The outputs and outcomes measured are the following: i) sectoral and ad hoc state aid (as a percentage of GDP); ii) the value of published public procurement (as a percentage of GDP); iii) telecommunication costs; iv) electricity prices; v) gas prices; vi) relative price levels of private final consumption; vii) intra-EU foreign direct investment; viii) intra-EU trade (as a percentage of GDP); ix) retail lending and savings interest rates; x) the active population in a Member State (aged 15-64) originally coming from other Member States (as a percentage of active population); xi) postal tariffs; and xii) pension fund assets. These indicators are finally aggregated in a composite index, the Internal Market Index, which tracks both EU progress over time and Member States' relative performance.

The IMI represents a 'classical' attempt to measure a multifaceted phenomenon through an indicator: researchers select a set of variables which are affected by the phenomenon, a weighting system is proposed, and then the variables are aggregated in a composite indicator. The Commission is itself aware of the limitations of this approach, and we concur with these limitations. Further to the other challenges of composing the different aspects of Single Market integration into a single index,⁹⁷ the selection of variables remains the soft spot of IMI. The selection is not fully grounded in a theoretical framework and includes elements whose relationship with Single Market policies is relatively distant (e.g. pension fund assets) and other whose direction of causality is unclear. Most importantly, it is not clear why certain variables and certain industries are considered as representative of the Single Market project, while others are left over. For these reasons, while there are lessons to be learnt in terms of the methodology to construct the indicator, content-wise the IMI does not seem to represent the way forward to measure the performance of the Single Market.

Market Monitoring Tool

In 2008, the DG for Economic and Financial Affairs launched a new tool for evidence-based policy-making, developed within the 2007 Single Market Review⁹⁸: the Market Monitoring Tool. Through this tool, 23 sectors (representing about half of EU25 value added) were screened for signs of possible market malfunctioning.

The screening is based on four dimensions of market functioning. The first dimension is regulation, which is considered an external determinant of market performance. Market performance is operationalised through the remaining three dimensions: market integration, competition and innovation. To assess these four dimensions, the authors resorted to an ample set of indicators and economic variables concerning both policy and economic aspects. Regulation is assessed based on the OECD's Product Market Regulation indicators (PMRs); hence, **policy inputs, processes and outputs** are indirectly considered by the Market Monitoring Tool. Integration is assessed by considering **economic outputs, outcomes and impacts**: intra- and extra-EU trade flows, intra-EU mergers and acquisitions and intra-EU price dispersion. To measure competition intensity, the authors use price-cost margins, market concentration, turbulence of the top leaders,

⁹⁶ 'Negative integration' measures include the set of the four freedoms and the principle of mutual recognition. 'Positive integration' consists in proactive policy interventions, such as common regulation, common supervision, or joint funding.

⁹⁷ Cf. Section 4 above.

⁹⁸ Commission Staff Working Document, "Market Monitoring: State of Play and Envisaged Follow-Up", 16 December 2008, SEC(2008)3074; see also Ilzkovitz et al. (2008).

and competition law infringements. Finally, to account for innovation, data limitations are acknowledged and indicators for the following **economic impacts** are considered: R&D intensity, and the contributions of ICT, labour quality and total factor productivity to the growth of sectoral added value.

Four sectors were chosen for in-depth review following the screening: the food supply chain, electrical engineering, retail services, and the pharmaceutical sector. While the in-depth reviews have been published and in some cases (e.g. the food supply chain)⁹⁹ had a considerable impact, the Market Monitoring Tool has not been used further to publish regular stand-alone reports.

The Market Monitoring Tool represents a good practice to assess the performance of the Single Market. First, it adopts a holistic approach, covering both the regulatory and the economic aspect; it also does so in a resource-wise manner, by resorting to existing indicators (the PMRs), when they are fit for purpose. As for the coverage of economic aspects, it builds upon the rich stream of Commission's comprehensive reports on Single Market integration, and therefore deals with most of the relevant aspects. The comprehensiveness sometimes results in a high number of variables for each aspect, which could reduce the ease of understanding.

Consumer Markets Scoreboard

The Consumer Markets Scoreboard (CMS)¹⁰⁰ is a report published every two years by the European Commission analysing the performance of more than 50 goods and services consumer markets.

In terms of assessing Single Market integration, the CMS is a unique hybrid. It is unique as it focuses on how consumers perceive market functioning, and hence it mostly consists of perception-based set of indicators, rather than fact-based like most of the other tools examined in this section. The object of measurement is an **economic impact: consumer benefits**. However, the CMS is a hybrid because it measures consumers' perceptions of market functioning regardless of the cross-border nature of the transactions. In a nutshell, consumers are asked whether they trust suppliers in a certain market, not whether they trust suppliers from other EU Member States. For this reason, it is more correct to say that the CMS measures market functioning rather than market integration.

The CMS measures six aspects of consumer experience across 52 markets and all EU Member States: i) ease of comparison; ii) consumers' trust in consumer protection rules; iii) problems experienced and related complaints; iv) consumer satisfaction; v) choice of retailers/providers; and vi) switching of tariffs/providers. Only the first four aspects are aggregated, with equal weighting, in a market performance indicator for each market. The CMS allows identifying better and worse performing markets, and hence the needs for appropriate remedies. At the same time, progress, both overall and in specific markets, can be tracked across time and throughout different countries and, as a consequence, the effects of policies can be tested. The latest edition of the CMS also includes a partial analysis of prices, including cross-country price dispersion, albeit not for all markets.

The CMS is a well constructed indicator for its purpose: assessing the functioning of different markets for goods and services. It does so by constructing indicators which are comparable across time and across industries, which are also aggregated through a sound

⁹⁹ See Communication from the Commission, "A better functioning food supply chain in Europe", COM(2009)591; for a compact overview of subsequent policy actions, see DG ENTR MEMO 12/ 941 of 5 December 2012.

¹⁰⁰ The latest edition is from June 2014.

methodology. However, it overlooks the cross-border aspect of integration. While Single Market policies obviously have an impact on within-border market functioning, this approach is not the most straightforward to measure Single Market integration and its performance. On the contrary, the analysis of price dispersion is likely to constitute one building block of the proposed set of indicators.

Consumer Conditions Scoreboard

The Consumer Conditions Scoreboard (CCS)¹⁰¹ is a report published every two years by the European Commission that has a distinct focus on Single Market integration, rather than on market functioning only.

The CCS measures two different aspects: how consumers and companies profit from the Single Market and consumer conditions in the Member States. The former is measured by assessing whether and the extent to which consumers shop cross-border, and whether they perceive that cross-border transactions can be finalised with levels of confidence, information and consumer protection which are comparable to national transactions. The consumer survey is mirrored by a retailer survey, in which retailers are asked whether they sell cross-border and whether cross-border sales take place with an ease comparable to that of domestic sales. By assessing the extent to which European citizens and companies trade cross-border and their perceptions, the CCS measures an **economic output** of Single Market integration. As for consumer conditions, the CCS analyses the quality of national consumer protection, measuring the enforcement of consumer and product safety legislation, the effectiveness of redress and consumer empowerment. As such, this second strand depends on the EU Single Market *acquis*, but has a looser connection to Single Market integration and as such is unfit to assess Single Market performance.

The CCS measures an aspect of Single Market integration which has necessarily to be covered by a proper set of indicators: how much consumers and retailers operate cross-border, and whether this can be done at comparable conditions. Interestingly, it does so through perception-based results, i.e. through surveying consumers and economic players. This complements other approaches, such as home-bias or cost-based indicators, which are pre-eminently based on hard data.

Single Market contribution to the Annual Growth Survey

The Commission decided in 2012 to set in motion a review mechanism of the Single Market, including a review of “key areas”, on a regular basis, based on economic indicators¹⁰². This request has been implemented through the 2013 and 2014 Single Market Reports¹⁰³, which are contributions to the Annual Growth Survey. While the set of economic indicators has not yet been developed, these reports represent a novelty because they are Commission-wide, rather than DG-limited, exercises.

In the reports, both quantitative indicators and qualitative evidence of Single Market integration/fragmentation and the performance of different markets are reported. The Commission discusses both cross-border and intra-border impacts (such as the rolling out of energy smart metering systems, or the diffusion of 4G mobile technology) of Single Market policies.

¹⁰¹ The latest edition is from July 2013. It is currently under review as regards the conceptual framework, data sources and indicators used.

¹⁰² Cf. “Better Governance for the Internal Market”, *supra* note 95, p. 3.

¹⁰³ Single Market contribution 2014, *supra* note 8; Report from the Commission, “State of the Single Market Integration 2013 –Contribution to the Annual Growth Survey 2013”, COM(2012)752, 28 November 2012.

The indicators included in the reports concern both **regulatory and economic aspects, from processes to outputs and outcomes**. The following indicators of cross-border regulatory and economics impacts are included in the 2014 Single Market Report:

- information from the SMS on transposition and compliance deficits;
- trade integration in service markets;
- interest rates of loans to non-financial companies;
- cross-border e-commerce transactions;
- share of intra-EU and extra-EU cross-border value chains.

These indicators can hardly be considered as a representative sample of the relevant variables to measure Single Market integration and its performance. However, the Single Market contribution to the Annual Growth Survey is a policy document, not an analytical one. Therefore, the decisions to cover certain aspects and to include certain indicators depend on what and how each DG and the whole Commission intend to describe the state-of-the-art of the Single Market in the various policy areas. For this reason, the Single Market contributions should not be considered as examples of how integration and performance can be measured. They rather are examples of which indicators eventually 'make their way' into policy documents and how they are used to support the policy analysis. We consider that a tool to measure Single Market integration and its performance should be different from the current Commission's Single Market contributions, and have a more systematic and comprehensive approach to the integration process and outcomes.

London Economics and Pricewaterhouse Cooper's Report for the Bureau of Economic Policy Advisers

In 2013, London Economics (LE) and PricewaterhouseCoopers (PwC) published a report for the Bureau of Economic Policy Advisors on the costs of non-Europe and the untapped potential of the European Single Market. The aim of this report only partially overlaps with this study. However, to select the sectors where the untapped potential is expected to be higher, LE and PwC developed an indicator of the performance gap of more than 60 industries across Europe, and this indicator could, in principle, be useful to measure the **economic impact** of Single Market integration, but, as we shall see below, the construction design falls short of achieving this goal.

To measure the untapped potential of the Single Market, LE and PwC compared a country's performance in each sector with the EU's best performer. LE and PwC claim that: "different performance levels of the same market among Member States show that these markets are at least somewhat compartmentalised, i.e. not fully integrated". Combining this statement with the decision to measure the untapped potential as the distance from the best performer, LE and PwC implicitly assume that in a fully integrated Single Market, the indicators concerned will converge to the best performer.

LE and PwC's composite indicator has a modular structure and measures the following aspects:

- Productivity
 - Labour productivity
- Innovation
 - Research and development investment
 - Patents filed
- Employment growth
 - Increase in hours worked divided by population

- Sustainability
 - Energy consumption per unit of output
 - Material inputs per unit of output
 - Service inputs per unit of output

Each first-level area has an equal weight (25 %), and each second-level indicator has an equal weight within its area (i.e. 25 %/N).

In the economic literature there is no indication that in a properly integrated Single Market the variables listed above will converge to the best performers and this aspect weigh against the possibility to use this indicator to measure Single Market performance¹⁰⁴. While productivity gains can be reaped in an integration process, there is in principle no reason why productivity of labour only should become equal across Member States, especially taking into account the different endowment of capital and technologies¹⁰⁵. To have a full picture, capital productivity should be brought in the analysis, but KLEMS data, on which this analysis is based¹⁰⁶, do not allow for this¹⁰⁷. But when the attention is moved from productivity to the other seven sub-indicators, the research team could find no theoretical explanations why in the Single Market economic actors should become equal when it comes to e.g. numbers of hours worked, energy consumption per unit or patents filed. Eventually, the indicator at stake serves another purpose: selecting industrial sectors where the market is working 'imperfectly' and where some countries display relatively worst performance in terms of e.g. innovation, productivity and use of energy. In the LE-PwC report, this is how this indicator is used. For that reason, it does not serve well the purpose of assessing the state of Single Market integration and its performance.

ECB report on financial integration

The ECB publishes each year an annual report on financial integration in Europe in which it analyses the developments of financial markets and related policies (e.g. ECB, 2013).¹⁰⁸ From 2005 onwards, the assessment has been based on a set of indicators focusing on both **economic outcomes and impacts**. For outcomes, the ECB measures the share of cross-border transactions, capital flows or equity holdings. For impacts, the ECB measures price convergence in financial products. For some indicators, the assessment is focused on euro area countries only, which allows filtering the currency risk from the causal drivers. It is worthwhile noting that, more than in other markets, financial "prices" (such as interest rates) change rapidly not only due to more or less integration, but also to perceived changes in the business cycle and in the so-called economic fundamentals, that is, risk and performance of the credit counterpart/equity issuer, including the sovereign risk.

Currently, the ECB assesses the integration of four financial markets: monetary, bond, equity and banking. The main indicators that may be used for assessing Single Market integration and thus its performance in terms of economic outcomes and impacts are the following:

¹⁰⁴ The aggregation methodology is *per se* debatable, as any integration methodology, but would not constitute a major problem to this purpose.

¹⁰⁵ Labour productivity is indirectly proportional to capital endowment. Countries with a higher amount of capital have higher labour productivity by *default* and vice versa. Member States differ along capital endowment, also because different economic specialisations require a different allocation of factors of production.

¹⁰⁶ KLEMS is an project funded by the European Commission to measure productivity in the EU through a comparative industry approach (available at: <http://www.euklems.net/>).

¹⁰⁷ The KLEMS database includes 30 countries, including EU25 Member States. However, data on capital inputs are available and public only for 15 countries, of which 13 are EU members.

¹⁰⁸ See also the European Commission report on financial integration and stability in Europe.

- **Monetary market.** Integration outcome: geographical breakdown of transaction counterparties (domestic vs. euro area vs. other); price convergence: deviation of average interbank unsecured and secured lending rate.
- **Bond market.** Integration outcome: share of cross-border holdings of corporate and sovereign bonds by financial institutions; price convergence: deviation of sovereign bond yields.
- **Equity market.** Integration outcome: share of cross-border holdings of equity issued by euro area residents; price convergence: equity market integration based on common factor portfolios.
- **Banking market.** Integration outcome: cross-border loans to financial and non-financial corporations; price convergence: cross-country standard deviation of interest rates on new loans to non-financial corporations.

The report on financial integration has, of course, a narrow focus on a specific area of Single Market policies. This can be one element in a wider set of Single Market indicators.

Europe Economics review for BIS

Recently, Europe Economics (2013) submitted a report to the Department for Business, Innovation & Skills (BIS) of the UK government on Single Market integration, in the context of the review of the balance of competence exercise. In this report, the “costs and benefits” of Single Market integration were analysed and estimated, including an analysis of the degree of integration.

Europe Economics was aware of the debate between input and output measures of integration, and opted mainly for an (economic) output-based evaluation. According to our classification presented in Section 2 above, Europe Economics’ evaluation concerns **economic outcomes and impacts**. The following indicators were used to assess the degree of integration:

- price convergence of goods and services, wages (both overall and sector-specific) and the cost of capital;
- trade flows;
- labour migration;
- efficiency, with regards to both convergence and catching-up.

Europe Economics believes that this set of output measures allows assessing the degree of integration, and that the assessment is indicative of the progress made in Single Market integration in the EU so far. In terms of assessing the performance of the Single Market, this report is a good practice of having a comprehensive approach to the economic aspects. The issue, which fell outside of the scope of the BIS report, is how to transform the analytical results into a policy tools for monitoring and evaluation.

OECD Product Market Regulation (PMR) indicators

In February 2013, the OECD released the fourth edition of its Product Market Regulation (PMR) indicators, which cover all 28 EU Member States¹⁰⁹. The PMR indicators provide a synthetic evaluation of the regulatory structures and policies of each country, and are based on information collected through a questionnaire sent to national governments. Currently, the questionnaire includes 1,400 questions, concerning both general and specific regulatory provisions. While the information collected is of a disparate nature, it is

¹⁰⁹ The PMR indicators, data, and background information are available at: <http://www.oecd.org/economy/growth/indicatorsofproductmarketregulationhomepage.htm>. Technical back-ground publications will be released in the coming period.

appropriate to consider the PMR database as covering the **policy inputs, processes and outputs** of the Single Market project. Most of the information collected refers to the norms as they are “in the books”; in some cases, the assessment concerns factual information.

The PMR indicator is a composite index with a modular structure. The first two hierarchical levels are described below:

- State control
 - Public ownership
 - Involvement in business operations
- Barriers to entrepreneurship
 - Complexity of regulatory procedures
 - Administrative burdens on start-ups
 - Regulatory protection of incumbents
- Barriers to trade and investment
 - Explicit barriers to trade and investment
 - Others barriers to trade and investment.

Further to the PMR indicator, three additional sets of indicators are included on i) sectoral regulation, ii) regulatory management in network sectors, and iii) the internet economy. The sectoral regulation indicators may be especially relevant to assessing Single Market integration in the market for services, as they cover network industries, retail trade and professional services. It is worth noting that they are based on information which already feeds into the PMR indicator, albeit aggregated across different sub-indicators. As for the indicators concerning the regulatory management in network sectors, which for EU Member States is to a large extent set by the Single Market *acquis*, they do not assess the regulatory provisions, but the features of the regulatory bodies (namely their independence, scope of action and accountability).

As the SMS, the PMR indicators assess policy processes and outputs and are based on the ‘law on the books’. However, they have a different approach, since PMRs are focused only on certain norms and institutions which are considered crucial for market functioning (as opposed to the *acquis*-wide quantitative approach of the SMS). The issue with PMRs is that they do not have an EU-focus. Therefore, they also cover matters which are unrelated, or loosely related, to Single Market integration and performance (e.g. public ownership or administrative burdens on start-up). For this reason, differently from the approach adopted by the Market Monitoring Tool, only some of the PMRs (or, at a more granular level, only some of the underlying data) may be relevant for the assessment of the Single Market, but not all. Furthermore, for some other policy areas, the PMR methodology could be used to assess other norms and institutions which are relevant for assessing the Single Market, but which are currently excluded from the OECD research.

Indicators from other international institutions

Various international institutions, both public and private, have developed indicators of economic performance and regulatory governance¹¹⁰. These indicators are very useful tools to perform cross-country comparisons of myriad policy and economic aspects, but

¹¹⁰ Among the most widespread indicators, the following can be listed: the Worldwide Governance Indicators (World Bank), the Freedom House’s indicators, the World Economic Forum Global Competitiveness Report, the Economist Intelligence Unit Riskwire and Democracy Index. For a non-exhaustive list, see Kauffman et al. (2010).

usually fail to properly grasp the specificity of EU membership, and as such are unfit for measuring Single Market integration and performance (Pelkmans, 2010). However, while the content of international indicators is not tailor-made for EU integration, they can provide insights about alternative methodologies.

One such insightful indicator is Doing Business, developed by the World Bank (2013), which has been extremely successful in driving policy reforms in both less-developed and developed countries. The Doing Business project aims at measuring the burdens of business regulation over ten areas of a company's life cycle. These areas are: starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting investors, paying taxes, trading across borders, enforcing contracts and resolving insolvency. For each of these areas, Doing Business estimates the costs and the time needed to perform a typical activity by a typical company located in the most important city of each country.

While many of these regulatory areas fall outside of the EU remit, for some (e.g. protecting investors or paying taxes) the Single Market *acquis* plays a role. However, as Doing Business mostly deals with the time and costs of administrative procedures, national norms and public administration play a much more important role compared to the Single Market norms. One possible exception would be "trading across border", where the time and cost to ship a container abroad from the most important port in a country (or in the nearest country, for landlocked entities) is estimated. In principle, the EU has a common customs code, which also regulates the finest details of customs procedures. Nevertheless, the time and costs of shipping depend on the effectiveness and efficiency of national public administration, even when common procedures are spelled out in EU-wide black letters (Bourdet and Person, 2011).

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