

The Cost of Non-Europe in the Single Market

II - Single Market for Services

STUDY

EPRS | European Parliamentary Research Service

European Added Value Unit

The Cost of Non-Europe in the Single Market

('Cecchini Revisited')

In May 2013, the European Parliament's Committee on Internal Market and Consumer Policy (IMCO) requested a Cost of Non-Europe Report in the field of the European Single Market. Cost of Non-Europe Reports are intended to evaluate the possibilities for economic or other gains and/or the realisation of a 'public good' through common action at EU level in specific policy areas and sectors.

In response to IMCO's request, the European Added Value Unit of the European Parliamentary Research Service (EPRS) has produced this Cost of Non-Europe Report, which seeks to analyse the costs for citizens, businesses and relevant stake-holders of remaining gaps and barriers in the Single Market, building on, and updating, the 1988 Cecchini Report which quantified its potential benefits.

In addition to a general paper bringing together the research findings as a whole, the exercise comprises five studies commissioned from outside experts on specific dimensions of the subject, which are published as separate documents:

I Free Movement of Goods

Study by RAND Europe

This study uses an econometric model to estimate the potential benefits of removing existing barriers to foreign direct investment and non-tariff trade barriers within the European Union. The removal of existing trade barriers could boost total intra-EU merchandise exports up to 7 per cent in the long-term. These effects will vary by Member State, and by sector of the internal market.

II Single Market for Services

Study by CEPS

This study attempts to take stock of the remaining gaps or deficits in intra-EU market access obligations in services, and the related deficits in the proper functioning of the internal market for services. It also tries to identify the quantitative and qualitative economic gains of overcoming the costs of non-Europe of the remaining fragmentation, insofar as the EU can address such deficits.

III Digital Single Market

Study by GHK

This study analyses the gaps in the European digital single market legislation which prevent attaining the benefits of a fully functioning e-commerce single market. It provides a qualitative appreciation of the existing legislation,

identifying gaps where further legislative action at European level could be beneficial and quantifying the direct costs of failure to legislate and the potential broader economic impact of closing the gaps.

IV Public Procurement and Concessions

Study by Europe Economics

One of the key benefits of the Single Market was expected to arise in the context of public procurement. This study updates the analysis presented in the Cecchini Report, estimates the value of savings to the public purse that have been achieved to date through European legislation on public procurement, and discusses the extent to which future savings might be achieved (in particular following approval of the proposals for new public procurement directives in January 2014).

V Consumer acquis

Study by GHK

This study analyses the gaps in European consumer legislation. It provides a qualitative appreciation of the existing legislation, identifying areas where further EU legislative action could be beneficial, and provides tentative estimates of the costs of failure to legislate. It is not intended as comprehensive quantification, but rather as a 'snap shot' of some benefits which could be attained through completion of the consumer acquis.

The Cost of Non-Europe

in the Single Market

- II -

The Single Market for Services

Study by CEPS

Abstract

Cost of Non-Europe Reports identify the possibilities for economic or other gains and/or the realisation of a 'public good' through common action at EU level in specific policy areas and sectors. This Cost of Non-Europe Report seeks to analyse the costs for citizens, businesses and relevant stake-holders of remaining gaps and barriers in the European Single Market, building on and updating the 1988 Cecchini Report, which quantified its potential benefits.

This particular study - the second in a series - attempts to take stock of the remaining gaps or deficits in intra-EU market access obligations in services, and the related deficits in the proper functioning of the internal market for services. It also tries to identify the quantitative and qualitative economic gains of overcoming the costs of non-Europe of the remaining fragmentation, insofar as the EU can address such deficits.

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Executive summary

The present report attempts to take stock of the remaining *gaps* or *deficits* in intra-EU market access obligations in services, and the related deficits in the proper functioning of the internal market for services. It also surveys the *state of the art* in identifying the quantitative and qualitative economic gains of overcoming the implied 'Costs-of-Non-Europe' of the lingering fragmentation, insofar as the EU can address such deficits.

The report is structured in five main chapters.

Chapter 1 sketches the evolution of the Cost-of- Non- Europe approach from the early contributions of the literature, namely the Cecchini report (1988) to the most recent performance approach adopted by the 2013 BEPA report. The implied methodologies, with their strengths and weaknesses are briefly listed.

The objective of Chapter 2 is to survey the 'deficits' in the market integration for services. The authors present a coherent picture of what the internal services market actually is comprised of and its underlying logic, followed by a summing up of intra-EU barriers and market integration deficits, both horizontal and sectoral as well as cross-cutting. The three horizontal aspects discussed at some length include the horizontal services directive 2006/123 and its successive follow-ups; public procurement of supplies (goods & services), works, services for network industries not yet in competitive markets and concessions; and infrastructure issues for network industries with very high sunk costs. In particular, the latter are too often 'conveniently' neglected, when discussing the EU single services market, or discussed separately, for the practical reason that Member States have the competence and need to furbish most or all the money. The sectoral aspects are divided into four blocks of a typical sectoral nature (financial, transport, network industries and regulated professions), plus two other blocks (temporary intra-EU cross-border services provision and three sensitive services sectors - private security, cross-border health services to mobile patients, gambling). Some other areas are summed up in Boxes (broadcasting, air transport & postal). Finally, attention is paid to market integration deficits in domains that are typical cross-cutting in nature: retail, digital single market, internal market for logistics, horizontal consumer acquis).

The chapter is based on a coherent and holistic design of what the Single Services Market really is or ought to be. This conceptual approach structures the entire report. Its merit is that the very strong tendencies of EU policy-makers, lobbies and observers to zoom in on sectoral or even subsectoral issues and thereby losing sight of the 'forest' when going for individual 'trees', can be overcome. Indeed, the authors are not aware of a single document or study identifying the policy scope of the entire internal market for services. Of course, the merit of coherence and oversight finds its counterpart in the difficulties of coordination between numerous policy domains for various services markets and submarkets. This is not surprising, as our report shows how comprehensive and encompassing the Single Services Market really is. The reader is

reminded that not all what belongs to the single services market or what fragments it, can be solved at EU level, either because the EU does not have the powers, or because other reasons generate modest degrees of fragmentation that even federal countries experience in their internal markets. Some of this may be addressed via voluntary cooperation between all or some Member States.

Chapter 3 briefly touches upon other determinants of fragmentation in services which the EU cannot address via the powers assigned to it. Indeed, there are 'other determinants' of fragmentation, beyond the reach of the IM or even the EU. Solving acquis deficits is most desirable and necessary for economic welfare and growth, but these efforts cannot be sufficient to arrive at a perfectly 'single' market. The 'other' reasons for fragmentation include: (i) regulatory heterogeneity amongst Member States; (ii) private law issues (which, as a rule, fall outside the internal market domain); (iii) tax issues; (iv) languages; (v) networking and trust (key for services, given their nature) these characteristics will always lend a degree of 'local preference / bias' to (some) services provision which may lead to market segmentation as well; (vi) informational asymmetries such as (national) reputation, cultural biases, local service traditions, which of course might interact with e.g. languages and networking/trust. It follows that some fragmentation, not explained by acquis deficits in the wider sense, will always remain in the EU services internal market. The authors show that especially regulatory heterogeneity - a permanent complaint in business circles - can act as a costly 'barrier.'

Chapter 4 sets out the costs of non-Europe in services. The authors assess, as far as the current state of economic analysis allows, what the costs-of-non-Europe in services are today and what economic gains might reasonably be expected if barriers are effectively addressed and overcome by the EU. Attention is paid to one alternative research strategy namely, the so-called economic performance approach (solicited by BEPA/European Commission, recently) and its results. Chapter 4 takes as the starting point the intra-EU 'market integration deficits' identified in Chapter 2 as 'barriers', standing in the way of deepening the Single Services Market. This includes infrastructure for a number of important network industries. However, it is exceedingly difficult to find economic studies providing quantitative welfare benefits of improving infrastructure for EU-wide or cross-border services provision. Moreover, the infrastructure deficits interact with regulatory, competition or other EU problems and it is probably an understatement to say that it is not easy to satisfactorily model such relationships at sectoral level. Therefore, it is critical in the costs-of-non-Europe approach to pay attention to both the quantitative economic gains, where possible, and the many qualitative ones which cannot, or have not yet been, modelled.

Gains in euro but beware!

Ever since the 1988 Cecchini report¹, the EU has witnessed an inclination to discuss the deepening of the internal market on the basis of a single figure in euro: the simulated increase in the EU income that this would yield. This is an understandable temptation when seeking to bring a powerful and succinct message in politics and the media. The present box provides such a very rough 'ball park figure' but also warns about the drawbacks and caveats of doing so.

Below we present a simple addition of the costs of non-Europe quantifications mentioned in the present report on the single services market. Before showing it, it must be realised that much of what matters to the single services market, has not been quantified. A number of elements are probably not even quantifiable in the first place. However, what is not quantified, may still matter a lot to the EU, both as gains in static efficiency as well as in terms of dynamic efficiency (which is very hard to foresee). Therefore, the first and serious caveat of a single 'ball park figure' is that one misses out on many qualitative gains, which require more time to grasp than a figure in euro. Put differently, the authors suspect (but cannot base this on rigorous empirical analysis) that the single figure in euro significantly underestimates the overall potential gains of a fully-fledged single services market.

Sector	Lower bound (bn)	Upper bound (bn)		
Services directive	100	304		
Financial markets	39.7	105.7		
Rail freight	no estimation provided			
eComms	150	150		
Gas and Electricity	47	77		
Professionals Services	no estimation provided			
Retail	no estimation provided			
TOTAL	336.7	636.7		

This range of (so far) quantified potential gains of € 337 billion to € 637 billion is subject to four other caveats, because it adds up apples, pears and oranges, all expressed in euro. Thus, a second caveat is that different studies may use different internal market scenarios. Third, the end-dates of the assumed adjustment may be many years apart. Fourth, they are based on different types of models (which hinders comparability or makes it even impossible). Fifth, in several areas of the single services market (which is so vast), only selective quantification is available. Finally, the present report deals with other aspects of the single services market, too, such as improving the understanding of what exactly a single services market is (the literature is specific and sectorial rather than horizontal), which is a very different value-added for the reader.

¹ The first author was a member of the Cecchini Group.

The longer run benefits of fully implementing and exploiting the 2006 *services directive* and its follow up amount to a range of 0.3% - 1.5% of EU GDP. Gains could augment with another 0.4% if EU countries would move to the EU restrictiveness average and with no less than 1.6% if all the member states would adopt services regulation no more restrictive than the five least-ones. Note that the follow-ups are sector-specific and might eventually bring further insights. However, we do warn that the typical "Brussels" way of portraying the services directive as covering some 43 % of EU value-added, though formally correct, is rather misleading from an economic point of view, as many economic agents in these services are bound to keep their business local, by the very nature of their activities (e.g. small local retail, non-tradable like services from barbers, etc.). In fact, only a relatively small part if this huge value-added will potentially be a candidate for cross-border activity, hence, the gains can never be more than a few per cent at most.

The further gains from the new 2014 EU regime of *public procurement in services* have not been quantified. The specifications for services have been simplified but no studies have been made on this aspect. In principle, this regime should exclude the existence of intra-EU barriers, but it is known that the actual practice in public procurement can be difficult.

The benefits of the reforms of EU *financial regulation* since the crisis, including institutions and funds for the Singe Resolution Mechanism (Banking Union) as a critical confidence building measure, have partially been quantified, as follows. In the SWD (2014) 158, the net benefits of 3 elements of financial EU reform (higher capital requirements, bail-in and the EU resolution regime) being 0.51 % of EU GDP for the capital requirements and 1.07 % for all three, minus the costs of these stricter measures, some 0.3 % of GDP, leaving some 0.3 % to 0.8 % of GDP or € 37 - € 100bn a year; subsequently, the benefits of the new requirements for derivatives trade (e.g. counterparties) amounting to net benefits of some 0.12 % of GDP a year; the improved efficiency of equity markets yields some € 2 bn - € 5 bn by avoiding excess costs of post-trading (clearing, settlements & custody), plus € 700mn for consolidation, plus a range of cost savings following the intro of the ECB T2Securities tool. This should be read together with a very long list of qualitative benefits in SWD (2014) by the Commission and many of those also noted by the ECB. The more important issues are summarised in our study.

The quantitative benefits of deepening the EU gas & electricity market amount to the following gains: (i) net market integration gains by 2030 of some \in 12.5 - \in 40 bn for electricity; (ii) plus smaller gains of \in 0.4 bn for sharing balancing reserves and \in 4 bn for introducing smart grids on a wide scale; (iii) net market integration gains of some \in 30 bn in gas, be it that this requires extra infrastructure on top of what ENTSO-G foresees until 2022 to the amount of \in 1.5- \in 3 bn. It should be noted, however, that the 'single' electricity market is seriously distorted by allowing single-agenda issues (renewables) to be pursued at Member States level without the slightest discipline for subsidies, with problematic and wasteful consequences for generation incentives and capacity markets. We also show and warn for price distortions in supplying energy at the company level in

energy-intensive industries in the EU, which undermine the gains for market integration (and in uneven ways).

The eComms market and the Digital Single Market (the latter usually being defined as the demand side, except for broadband, and its constraining rules/practices) has also been studied with respect to quantitative effects. Thus, the enormous price disparities in eComms are not only distortive but also costly; overcoming them would yield gains for all. The welfare gains of EU regulation of Mobile Termination Rates are in the range of € 2.8 - 11.8 bn, and those of the EU regulation of EU mobile roaming rates are around \leq 4.5 bn. Of course there are many more services with price disparities, hence, the overall gains are presumably much higher. We recall the estimates of the Impact Assessment of the Connected Continent proposals, ranging up to some € 110 bn per year or 0.89 % of EU GDP. The authors also make a careful qualitative assessment of these proposals, too. The Digital Market has been said (in 2010) to yield some 4 % of EU GDP on the basis of a highly aggregate model with some daring assumptions. Estimates about the numerous details (the Digital Agenda has 132 items!) have hardly been made, except for example a Commission study suggesting gains up to € 40 bn for electronic invoicing. It should be realised that eComms and Digital involve many dynamic implications which are extremely hard to foresee.

In freight rail (the only transport sector where the single market is hard to discern, despite the fact that - by its very nature - it is a European, not a national business), no quantitative studies are available (but one is in progress). The single market idea is still far removed and we show in some detail why that is so; it will take many measures and considerable and sustained infrastructure investment for it to be realised, but that may well take decades. The rail freight corridors have just begun operating (6 out of 9) and they may help achieving better quality and less costly rail freight. No quantitative benefits are known so far. Note that there also benefits in terms of climate strategy because rail is relatively green. Freight rail is linked with the EU logistics business which is impatient to see an internal market for freight (and its inter-modality where desirable) emerging. The costly and large installed base of infrastructure (including technical and administrative rules, still often nationally distinct) is one major problem that militates against going fast. The opening up of domestic passenger rail will eventually have a major pro-competitive effect, with large economic gains after some adjustment; it is unclear whether this would generate indirect benefits for freight rail as well since overall efficiency gains might be offset by greater congestion on the tracks in some parts of the networks.

Professional services fall under the services directive but their qualifications and access to practicing a profession has remained under national competence. Partly because of market failures and partly for other reasons, regulation of many professions in Member States is often quite restrictive, leading to cumbersome access issues. The single market for professional services is therefore at best incomplete and probably also distorted in many ways which are only partly understood at the moment (there are great data problems to begin with). There is some literature attempting to quantify (with PMRs) the

restrictiveness of national markets but economic effects of opening up are unknown, e.g. because of the difficulty of knowing what the 'right' regulatory restriction level would be. The cooperative method having been agreed between the Member States and the Commission, culminating in a 2 years calendar (until 2016) of discussing restrictions as to their justification in the EU public interest, is probably the only way to make progress at the moment, following some initial national reforms. It might also yield insights and data, enabling economic studies in future.

We distinguish three *cross—cutting services markets*, one being digital services (see above). The other two are retail and logistics. Further initiatives in deepening the internal market for *retail services* are indicated but it appears that no empirical studies providing integration gains have been published. The *logistics sector* has so far had limited success in getting the cross-cutting policies approach adopted by EU institutions. The High Level Group in Logistics (started in 2012) has not produced its final report, for example. The EU seems to have a difficulty in coordinating effectively across many policy fields, here, across distinct transport modes and wholesale.

Chapter 5 proposes an overview of some selected issues analysed at Member States level.

Conclusions are provided. The authors also outline some more general considerations for EU policy recommendations, which include the certainty that a credible strategy to overcome the 'market integration deficits' in services, that is removing their 'costs-of-Non-Europe', would lead to appreciable GDP gains for the Union, and other numerous positive qualitative aspects (even when these effects cannot be added up to single value-added figures). Finally, political leaders and MEPs eventual wish to prioritise is taken into consideration. The authors cannot assume a political view on this. But a few points can be made which might be of some help in this respect:

- One is to prioritise on the basis of the size of expected gains, quantitative or qualitative;
- Another is to prioritise on the basis of what is most needed for internal and external competitiveness of European business;

A third theme which might determine prioritization is the view of what is politically 'feasible' or at least not too constrained. This would seem to be a dangerous, probably futile, strategy, as immediately vested interests and rigid, defensive views of the demarcation between national and EU powers as well as control of e.g. infrastructure funding will render an effective strategy next to impossible. Some top-level political leadership is indispensable for this huge area of EU policy-making. That leadership has to be pursued over several years and its determination should facilitate the action even where lower-level political constraints might be in the way. However, if the EU leadership would once again shy away from providing greater infrastructure funding, it might thereby narrow down the options for an effective services strategy.

Introduction

Radical improvement of the internal market for services is high on the EU agenda for some 15 years now. The services single market strategy formulated around 2000 has undoubtedly brought about significant progress. This is exemplified by the horizontal Services Directive (2006/123), the stepwise improvements of the EU regimes of specific network industries and the reforms at EU and Member States' level in the regulatory regimes governing professional qualifications. Much of this was long held impossible. Nonetheless, the vast and highly diversified single market for services still offers significant opportunities for the EU to improve it further. Indeed, this is the conviction of the European Council, the Commission² and the European Parliament. It also is included as one of the eight priority items in the letter of 12 Prime Ministers, on the initiative of PMs Cameron, Monti and Rutte (2012). The two consecutive Single Market Acts (in 2011 and 2012) have been designed in this spirit but do not but very partially fulfil the need to 'complete' the single market for services.

The present report to the European Parliament attempts to take stock of the remaining 'gaps' or 'deficits' in intra-EU market access obligations in services, and the related proper functioning of the internal market for services. It will also survey the 'state of the art' in identifying the quantitative and qualitative economic gains of overcoming the implied 'costs-of-non-Europe' of the lingering fragmentation, insofar as the EU can address such deficits. Chapter 2 will survey the 'deficits' in the market integration for services. There is quite a lot of (policy) literature on these 'gaps', but a comprehensive and coherent survey is still lacking, because the single services market is so incredibly vast and multi-variate. The present report will do exactly that: within the size constraints of the report, the authors present first a coherent picture of what the internal services market and its underlying logic is, followed by a short summing up of remaining barriers and deficits, both horizontal and sectoral as well as cross-cutting. Chapter 3 will briefly touch upon other determinants of fragmentation in services which the EU cannot address via the powers assigned to it. Indeed, a perfectly integrated internal market for services seems not a reasonable prospect, but that is not even the case inside the US. Chapter 4 is about the costs of non-Europe. The authors assess, as far as the current economic analyses allow, what the costs-of-non-Europe in services are today and what economic gains might reasonably be expected if barriers are effectively addressed by the EU. Despite the length of the chapter and the considerable literature, there are significant omissions and shortcomings, which means that this exercise is subject to caveats and limitations. Briefly, attention is paid to alternative research strategy namely, the so-called economic performance approach (solicited by BEPA/European Commission, recently) and its results. Chapter 5 takes a closer look at selected issues at member states level. In the concluding chapter, some policy recommendations for the EU legislator are provided.

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² Communication from the Commission. Annual Growth Survey 2014. COM (2013) 800 final. Brussels, 13.11.2013. http://ec.europa.eu/europe2020/pdf/2014/ags2014_en.pdf

Chapter 1 The costs of non-Europe matter for the single market for services

The 'costs-of-non-Europe' notion is fundamental to the pursuit of European economic integration. It focuses squarely on the 'value-added' that the EU, in particular by means of a well-established and well-functioning single market, can bring to the economy, its workers, firms and consumers/citizens. Of course, when Albert & Ball presented their famous report on the 'costs of non-Europe' to the European Parliament in June 1983, the single market was still very far off. The accomplishments since then are commendable and should not be underestimated³. However, today there are still ample opportunities for the EU to deepen the internal market (in terms of 'establishment' of the internal market, treaty language for hard market access obligations such as unconditional free movement and the accompanying EU regulation where justified) and improve its proper functioning. The present report is about these opportunities, in the internal market for services. It remains inspired by the original Albert /Ball report but of course represents a modernized variation of it.

The idea behind the Albert/Ball and Cecchini (=ABC) reports on the Cost of non-Europe is that the costs of barriers (in other words, 'gaps' or 'deficits' in services market access inside the EU) indicate the minimum benefits of further market integration once these 'gaps' are tackled effectively. In more political wording: inaction at EU level is costly and 'more Europe' in this well-defined manner and in this specific area is beneficial. In this ABC approach, the initial costs of the gaps are the same as (a mirror image of) the benefits of 'more services market'. However, these are to be seen as 'minimum' benefits because it is next to impossible to incorporate dynamic market and productivity responses over time, bound to arise from grasping such opportunities. In this ABC logic, therefore, there would no difference between the 'economic costs' and 'benefits expected', except for the (positive) sign. However, the Cecchini report (and later, the 1996/7 Monti report as well) has gone beyond this basic ABC approach: after first (in many background reports on specific gaps and their static costs) identifying the 'trading costs' of intra-EU (services) barriers, the removal of such costs (also called 'tariff equivalents' of barriers) have been inserted into two macro-econometric models (QUEST from the Commission and the OECD Hermes model) as 'pro-competitive shocks'. This results in wider economic effects of a macro-economic character such as a one-time GNP increment (of some 4.5 %), lower inflation due to price reductions and both initial (negative) and longer-term (positive) adjustments of employment (eventually, nearly 2 million additional jobs). Truly dynamic responses of businesses are not incorporated in such models, as this is almost impossible.4 Nevertheless, with hindsight, some such dynamic market responses have been observed, illustrated by e.g. the new, low-cost business models in air transport

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³ In Pelkmans (2011a; 2011b) these accomplishments have been summarized with flowcharts

⁴ However, there is ex-post empirical work on innovation linked to the deepening of the single market, as in Griffith, Harrington & Simpson, 2006 and Surinach, Manca & Soreno, 2011 (both on goods, however).

which have revolutionized the intra-EU air services market and greatly augmented the gains from intra-EU market access liberalization, which would have been calculated from comparative static economic models.

Following the adapted ABC approach, the authors will provide a near-exhaustive survey of services market integration deficits in chapter 2 which explain, to a considerable degree, costly market fragmentation in services in the EU or EEA. Chapter 3 will briefly address 'other' reasons why services market fragmentation lingers in Europe, reasons that cannot be addressed by means of the EU powers with respect to the internal market. However, some of these other fragmentation factors may be mitigated via intra-EU cooperative policy approaches, in the enlightened self-interest of EU countries.

There is an interesting alternative way of thinking about market integration deficits and the economic effects of overcoming them. Rather than, as the ABC approach suggests, starting from the identification of market access barriers and simulating their removal in some way, one might start 'from the other end', as it were. One first observes 'economic performance gaps', especially in (sectoral or national) productivity levels or secular growth patterns, and subsequently tries to find out to what extent EU internal services market measures can reduce such gaps, and hence reap economic benefits. Of course, this requires a highly sophisticated and powerful economic explanation of all the determinants of the 'performance gaps' and the ability to attribute part of it to deficits in the internal market (here, of services). This is quite difficult and demanding. Nevertheless, as an alternative analytical approach to ABC, it is definitely worth paying close attention to such attempts and scrutinise the findings. The advisory group to Commission president Barroso, BEPA, recently commissioned an in-depth report from PriceWaterhouseCoopers and London Economics (= PwC/LE)⁵ which is a major effort of economic research on intra-EU performance gaps and the possible role of the internal market for services in (partially) closing such gaps. Although the reasoning does not start from 'gaps' in the internal services market, but, essentially, from productivity comparisons, one might still regard this alternative research strategy as possibly reflecting the 'costs of non-Europe' to some extent. Where 'economic performance' of (national) services sectors in the EU is below some benchmark, one may try to attribute this differential - to some degree - to deficits in the internal market for services. In our chapter 4 on the empirical economics of the 'costs of non-Europe' in services, the PwC/LE approach and its findings will be discussed.

⁵ Study on "The cost of non-Europe: the untapped potential of the European Single Market" Final Report April 2013. http://ec.europa.eu/bepa/pdf/publications_pdf/cone-report.pdf

Chapter 2 Deficits in the internal market acquis

I. The contours of an ideal internal services market acquis

Compared to 15 years ago, when more systematic policy attention for the internal market for services began in earnest, today's understanding of what such an internal market should imply has much improved. Nevertheless, it is crucial to first grasp what exactly it takes to realise the optimal internal services market acquis. To comprehend this, one needs to sketch the contours of the entire acquis of such an ideal internal market, which is hardly ever done. Only too often 'gaps' are identified without having a solid idea of the holistic concept of the internal market for services. For understandable reasons of political feasibility, European Commission papers or 'single market acts' or 'wish-lists' remain highly pragmatic in seeking progress on specific issues. The advantages of presenting a holistic concept of the internal services market include not only offering the relevant long-term EU context in which the specific proposals can be appreciated, but also the awareness of why successful services initiatives seem to fail, time and again, to bring the internal market noticeably much closer. Even initiatives which - for a sector or horizontally - seem ambitious, often constitute only a relatively minor part of what amounts to a giant undertaking. Services activities generate over 70 % of EU's GNP which is far more than agriculture, fisheries, manufacturing and mining generate together. This is even true if one restricts oneself to market services alone. The ambition of building, indeed completing, the internal market for services is thus one-of-a-kind, and simply cannot be compared with other EU initiatives in terms of complexity and magnitude. By implication, it must mean as well that a Costs of Non-Europe approach in this vast area is multi-varied and extremely demanding in terms of numerous specificities. The present report cannot, for that reason alone, pretend to deal with all and everything despite our intention to sketch the ideal single services market.

Consider Figure 1 sketching the internal services market in its entirety. It is depicted as a four floor building in order to accommodate the key aspects. The 'penthouse' or 'treaty chapeau' sets out the fundamentals dictated by the TFEU treaty. These have to be reflected in the lower floors in ways that effectively enable the internal services market to be established fully *and* function properly. If this is not the case, 'gaps' or deficits in the *acquis* have to be identified and addressed.

Figure 1 Holistic view of internal services market acquis

Treaty 'chapeau'

- General TFEU obligations
- Free movement & right of establishment
- EU competition policy
- EU regulation & European standards

Horizontal services regime

- horizontal services directive (2006/123)
- public procurement, works & concessions
- infrastructures for network industries
- appropriate, subsidiarity-driven EU powers in a two-tier Union (incl. Agencies)

Sectoral services regime

Financial markets

- banking
- insurance
- investment services
- asset management
- financial stability

Regulated professions

- diploma recognition
- link services directive
- EU-wide codes

Transport modes

- road haulage
- river/maritime
- bus/coach
- air/rail (see network section)\
- Agencies (safety)

Network sectors

- broadcasting
- eCommunications
- gas (electricity)
- postal
- air/rail transport

Temporary cross-

border services & Directive 96/71

- posted workers
- no circumvention

Sensitive sectors

- private security
- cross-border health (patients)
- gambling

Cross-cutting regimes for single market activities

- Internal retail market
- Digital single market
- Internal market for logistics
- Horizontal consumer aquis

Source: Authors' elaboration

Many services are regulated, hence, for the EU internal market to be 'established', these regulations (if justified by market failures) should be harmonised or mutually recognised, or, if that is the better or only effective solution, transferred to the EU level. For this purpose one may distinguish six sectoral services regimes, depicted in the second 'floor' in Figure 1. Many of these regimes are quite demanding. The third 'floor' houses four 'horizontal' regimes. The most important one in scope and potential economic magnitude is the horizontal services directive, which does not or hardly contain market regulation. Rather, it 'regulates' liberal intra-EU market access and forbids explicitly (in two 'blacklists') a number of national practices which obstruct or make very onerous market access from other Member States (one for cross-border services trade and one for the establishment of services firms in other Member States), besides facilitation measures such as Points of Single Contact.

Another potentially important horizontal regime is that of public (services) procurement and related regimes for public works—and for awarding concessions (competition 'for' the market for a certain period). These are vexed issues full of legal and practical difficulties but the aim is clear: public procurement, tendering for public works and for concessions should be open to all EU market players, transparent and pro-competitive, with realistic opportunities for firms from all over the Union. The economic activities falling under these three closely related regimes are large, some 18 % of EU GNP, an enormous value. Note that the announcements of contracts at EU level (i.e. above the thresholds) in 2011 amounted to no less than € 420 bn. Of course, a good deal of the 18 % of GNP public procurement activities is local and/or remains below thresholds, justified (in principle) for reasons of red tape and by the minimum costs to be incurred for opportunities that have to be 'worth it'. Nevertheless, open, accessible and fair public (services) procurement (etc.) under EU rules is of considerable significance.

A third horizontal regime concerns infrastructures for network industries, especially cross-border or EU-wide ones. The EU has some directives and regulations on crossborder infrastructures but its powers are grossly insufficient to ensure the building of such infrastructures when their need is not controversial. The reason essentially is that Member States have long held the view that infrastructure is a national competence. This position has frequently frustrated the deepening of specific segments of the internal market. The contrast with the US and Canada is almost black and white: the internal market integration in these two countries during the second half of the 19th century was a direct function of building infrastructure, mainly East - West. In e.g. European road haulage these problems have gradually been overcome in cooperative approaches, whether bilaterally or in the UN-ECE in Geneva. Such cooperative approaches are probably appropriate in bilateral arrangements, pursuant to local needs. However, from a truly European logistical point of view - that of the single market, in essence - bilateral or voluntary UN-ECE approaches are inefficient as they tend to avoid mapping and designs addressing 'missing links' from an EU-wide, rather than local/regional, perspective. These shortcoming are only slowly being overcome and at considerable costs. In network industries the many bottlenecks are often a combination of misaligned (or absence of) regulatory incentives and the incapacity or refusal to think of infrastructure in an EU-wide fashion (rather than national, for fear of risks, finance, public funds or NIMBY feelings). The network industries with large 'sunk costs' such as gas & electricity, freight rail and eComms do not enjoy a single market in the EU and one amongst several reasons is a lack of cross-border or EU-wide infrastructures. It would be a mistake to presume that mere cross-border liberalisation (and some EU regulation plus competition policy) can lead to a single market in these four network industries, let alone one that would function properly. On the contrary, this demands huge infrastructural investments as well.

The fourth horizontal element is the proper design of two-tier government for the internal (services) market. The TFEU treaty or its present case law or the habitual interpretation of the case-law amongst Member States and in the Commission, so far, is reticent about or plainly against independent EU regulatory Agencies, even when a functional need to complete the internal (services) market and make it function properly, can be demonstrated. Based on a carefully executed subsidiarity test, demonstrating this functional need, one should expect such EU Agencies to come into being in these four network industries and in financial markets. But are Member States, and in particular their NRAs (national regulatory agencies), willing to recognise this? The recent ESMA ruling (22 January 2014) 6 has clearly provided more room for overcoming the old Meroni doctrine and entrusting much needed but primarily technical internal market tasks in some sectors to EU Agencies (e.g. Pelkmans & Simoncini, 2014). In addition, there are some other treaty design issues where Member States have maintained powers which seem quasi-sacrosanct to them, even when the internal market is harmed - at the very least, the negative spill-overs across borders or for the single market as a whole are a proper ground to discipline the exercise of such national powers in the EU public interest. One example consists of the prerogative of choosing the national 'energy mix' in energy policy which should not have the effect of inflicting costs on other EU countries or damage the single energy market. Another example is spectrum (frequencies) where EU disciplines of exercising national power and the duty to coordinate effectively for the purpose of the single market should be firmly established.

The second 'floor' of six sectoral services regimes is the kernel of the internal services market. Although the economic activities under the services directive generate some 43 % of EU GNP, which is huge, it is also true that only a small fraction of these activities are 'europeanising', the overwhelming majority is in fact firmly domestic ⁷. This fraction will grow with the ensuing implementation of the directive and the emergence of new business strategies in some submarkets. However, it is unlikely that cross-border trade and/or intra-EU services FDI (with local sales) in the activities falling under the services directive will experience spectacular growth. So far, most FDI and most cross-border trade in services inside the Union take place *outside* the submarkets of dir. 2006/123. This is true for financial markets, some network industries, transport and some

⁶ Case C-270/12, UK v. Parliament and Council

⁷ This point will be analysed a little further in section 4.I.1 on some economic aspects of the services directive.

professional (and regulated) business services.⁸ An obsessive focus *only* on the activities under the services directive is inappropriate in the broader context of the internal services market. This is not to say that it would not 'pay' to focus on further economic gains under the services directive. This would surely be worthwhile because a lot can still be achieved under the horizontal services regime. However, the point is that the oftenquoted 43 % of EU GNP would be a mistaken guide for the scope of such future gains. The six sectoral services regimes are quite developed by now. However, it is also true that, in all six boxes, internal market problems persist, at times in the form of severe and stubborn forms of fragmentation.

Finally, the 'groundfloor' in Figure 1 depicts 'cross-cutting' activities which are regarded by business or consumers as highly interdependent or integral. Two prominent examples are mentioned: the single retail market, which remains quite imperfect, and the single digital market which seems even further away. Both cut right across many types of regulation/policies or issues under national regulatory discretion. The digital single market is even linked with a number of private law questions which, normally, do not concern the EU (which is typically public law based) such as copyright, contracting, etc. Two other cross-cutting areas receive much less attention although that does not seem justified: a seamless single market for logistics and the horizontal consumer acquis to ensure that THE ultimate stakeholders in market integration can benefit as fully as possible from the single market of services.

Temporary cross-border services provision

The free movement of services in the internal market is a very powerful principle. Cross-border movements of services are, as a rule, neither limited in number or economic value nor by any timeframe. Therefore, also temporary cross-border services fall under free movement. But EU law had and has to deal with two practical problems that render 'temporary cross-border provision of services' a little special.

The first issue is about the **duration of contract work across borders**: the longer the duration, the less clear will be the distinction with another mode of cross-border supply, namely, (the right of) establishment. The CJEU's refusal to fix an exact maximum of (say) one year has caused some confusion and also EU regulation has not laid down a clear dividing line. Nevertheless, with establishment it is crystal-clear what the obligations and rights of the service provider are, and in actual practice, a lengthy temporary cross-border provision is likely to create confusion, and may risk distortions.

The second issue has received much more attention, especially during the legislative process of the services directive 2006/123, but also recently once again. Although in principle there is no difference between services delivered domestically and across-borders, the labour contents of such services (typically being a high percentage of the price) may differ if the national regulatory regimes governing the labour contents are significantly different. This aspect is dealt with by the posted workers directive 96/71⁹ and it has been so sensitive that many people confuse the

⁸ It should be noted that regulated professions do fall under the services directive, but their regulation for the sake of diploma's recognition and exercise of the profession is national.

⁹ Directive 96/71/EC of the European Parliament and of the Council of 16 December 1996 concerning the posting of workers in the framework of the provision of services

posted workers directive with temporary cross-border service provision itself! It is good to remind the reader of the basic principle of such 'posting', namely, **host-country-control**, a principle that underlies EU labour market regulation as well as intra-EU labour migration. Without going into the technical debate about proper enforcement of the posted workers directive, the essence of host-country control is that local wages and secondary labour conditions are paid/guaranteed to the temporary workers providing the service (the main exception being social security contributions, as the worker will continue to pay his/her domestic system).

The economic advantages of temporary cross-border provision (see below) have become discredited in some circles due to the costs and distortions caused by the actual practice of applying the directive. The two most important ones are :

- i. host country control [say, for simplicity, local minimum wages at least] does not work in EU countries without minimum wage laws, especially after the Eastern enlargement has introduced enormous wage differentials in the EU; this has prompted famous CJEU cases such as Laval and Rueffert, from respectively Sweden and Germany, then countries without minimum wage laws (now Germany is introducing one)¹⁰ – it is good to note that this problem hardly plays a role in other EU countries – this leaves only Sweden, Denmark and possibly Cyprus;
- ii. the actual red tape and enforcement [or, lack of proper enforcement] problems of the directive are notorious and circumventive constructions (in often long and unclear value-chains of intermediaries) have distorted the market whilst attracting 'entrepreneurs' seeking to exploit these weaknesses. As a consequence, deep social and political misgivings have arisen in many circles, discrediting 'the' internal services market for the wrong reasons. The recent political agreement on the draft enforcement directive, complementary to 96/71, is a step in the right direction. Therefore, with Germany introducing a general minimum wage law and the EU improving enforcement, the problem may recede to a considerable degree. ¹¹ One should also realise that the problems are limited to only a few sectors such as construction and the restaurant/hotel sector, at least in services. It should also not be confused with illegally employed labour.

There are many benefits of temporary cross-border provision of services. They include flexibility of service markets, which have often been rigid due to being shielded from competition; reduce cyclical effects on semi-skilled labour in a downturn by posting them on temporary assignments across-borders (instead of laying them off); better job and quality matching for specialized service assignments; filling up local shortages of certain labour or service provision; a general increase in service competition; greater choice for those demanding such services. Figure 2 (Maslauskaite, 2014) shows the balance between posted workers sent and received: Poland is undoubtedly the main net sending country while Germany, Netherlands and Belgium are main net receivers.

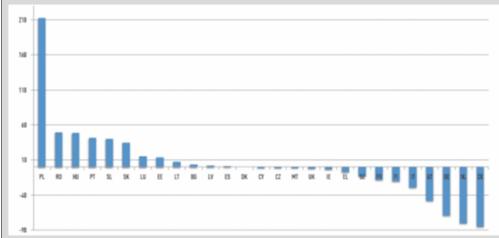
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¹⁰ There are many examples of incredible wage differences (not to speak of other conditions, e.g. housing, etc.) inside non-minimum-wage EU countries, e. g. in the South German slaughtering and meat processing industry with actual wages being one-fifth or even less of collective wage agreements of other low-skilled workers in the country.

¹¹ An idea of what more can be done, is given by work undertaken by the EESC. Very recently, the Single Market Observatory (SMO) released a report to the state of implementation of the Services Directive in the construction sector that carries out a study in a numebr of member state (Belgium, France, Germany, Poland, Portugal and Romania). The report is based on an exchange of views between national interlocurtors and European social partners. The interactions provided a set of policy reccomandations to improve the implementation of the Directive (EESC, 2014).

Figure 3 shows more detailed statistics for France (as receiving country) since it is still hard to have a comprehensive overview for all Member States. The figure identifies in which sectors postal worker are employed and from which EU areas they come: in total, almost 60% of posted workers come from EU15, 34% from EU12 and only 6% from third countries. In other words, the official statistics do not lend support to the suspicion that posted workers mainly come for Central Europe. All the sectors show the predominance of posted workers coming from EU15 except in agriculture where the presence of workers from third countries is as important as the one from EU12.

Figure 2 Net balance between posted workers sent and received in 2011



Source: Maslauskaite, 2014

Figure 3 Weight of declarations by economic sector and country bloc in France

	AGRICULTURE	CONSTRUCTION	HOSPITALITY And Tourism	NOUSTRY	CULTURE/ Performances	INTERIM AGENCIES	INTRACOMPANY MOBILITY	ОТНЕЯ	TOTAL
EU15	25%	60%	59%	58%	64%	68%	60%	56%	59%
EU12	39%	37%	40%	36%	2%	32%	16%	36%	34%
Third countries	37%	3%	0%	5%	34%	0%	24%	9%	6%

Source: Maslauskaite, 2014

Recently¹², it has been reported that cases of fraud are increasing since the enlargement of 2004-2007. The existence of fraud and circumvention derive from the incentive of the company to 'establish' itself in EU countries only to take advantage of cheaper labour workforce, even if there is no significant economic activity in that country. Typically, these workers are not 'temporarily' employed in another countries. Even if they spend most of the working time in the receiving country, wage and general contractual conditions respect the parameters of official sending country. This situation not only creates an unfair competitive working environment but, in most cases, it represents an abuse of the principle of free movement of services.

¹²S. Richard (2014), The management of the posted workers in the European Union, Fondation Schuman, *European Issue, Policy paper* No 300, January, Paris

II. Horizontal acquis deficits in the internal services market

1. Deficits in the functioning of the Services Directive

The horizontal services directive essentially lays down precise conditions to ensure the free movement of services as well as the establishment of services providers (via FDI) in other Member States on the basis of CJEU case law. In other words, it is a derivative of the treaty chapeau of Figure 1. Therefore, it does not harmonise national regulation; rather, it facilitates in a number of ways cross-border services activities for the services falling under it (see Figure 4). Nearly eight years after its enactment by the EU legislator, following hectic and lengthy deliberations in the European Parliament as well as nationally, one can sum up the achievements as follows:

- In sharp contrast with the controversies around the draft directive, its implementation has been a praiseworthy example of 'ownership' assumed by the Member States in transposition, intrusive screening of national, regional and even local laws (as much as 35 000 legal provisions have been scrutinised), intense cooperation between the Member States and the Commission in several committees (and otherwise) and a 'mutual evaluation' between Member States during 2010 about lingering issues of national interpretation and idiosyncratic barriers. This 'ownership' of the Member States has resulted in a far better implementation than expected before and the removal of a number of market access barriers in the relevant services.¹³
- Follow-up activities by the Commission ¹⁴ included a more specific agenda in the form of performance checks (that is, does market access really work in actual practice?) for selected services: construction services, business services and tourism services. According to the Commission, the biggest effort is to fully implement what the Services Directive suggests and this is an essential follow-up to exploit the economic benefits where members states play a crucial role. They identified a few steps and sectors where the benefits are considered more relevant: among them, a greater level of ambition for member states, a better use of the Points of Single Contact and their better development where needed. In addition, the Commission promised to focus on some lingering barriers such as a spurious justification of retained regulation in e.g. certain professions (e.g. in cases where most Member States did not have regulation), the retention of restrictions for establishment of companies via their mandatory legal form and/or ownership requirements and, finally, the tricky problem of required insurance in the absence of a market for such occasional (cross-border) activities.

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¹³ See European Commission (2011), On the process of mutual evaluation of the services directive, SEC (2011) 102 of 21 January 2011; for further detailed analysis, see Mustilli & Pelkmans (2013), section 4 and annexes.

¹⁴ See European Commission (2012), On the implementation of the services directive, COM(2012) 261 of 8 June 2012; and SWD (2012) 147 of 8 June 2012, Results of the performance checks of the internal market for services

The agenda outlined by the Commission is supported by the performance checks performed in three key sectors, construction, business service and tourism, where potential gains are foreseen if the Services Directive together with the Professional Qualifications Directive or the E-Commerce Directive are fully and correctly implemented. In October 2013 the Commission proposed a common strategy evaluating national regulation on access to professions (after a political agreement on the revised Professional Qualifications Directive, meanwhile enacted) 15 and published the outcome of the peer review on legal form, shareholding and tariff requirements under the services directive.¹⁶ In March 2014 the Commission proposed a work plan to address reforms of national services regulation and report on these in the Annual Single Market Integration report, attached to the Annual Growth report; it also published a report on insurance issues in professional (cross-border temporary) services and in crossborder temporary construction services.¹⁷ With respect to this, the Commission is proposing a questionnaire in which each member state will be asked to identify the insurance obligations related to the Services Directive. It is also hoped to promote best practices, especially with respect to insurance related to the professional services and construction.

• A third group of activities are of a legislative character for services falling under the directive but with intrusive national regulations (the regulated professions) and for services that were at first – in the draft stage of the directive – included in its scope but have later been dealt with separately, in particular, cross-border health services and patient rights as well as gambling.¹⁸ With respect to regulated professions, a degree of 'europeanisation' has been initiated in the omnibus directive 2005/36 for 15 important regulated professions with a view to facilitate mutual recognition,¹⁹ further deepened in dir. 2013/55/EU, inter alia, introducing an EU professional card for swift and quasi-automatic recognition.

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 $^{^{15}}$ COM (2013) 676 of 2 Oct 2013, On evaluating national regulations on access to professions; the revised Professional Qualifications directive is Dir. 2013/55/EU of 20 Nov.2013 in OJEU L 354 of 28 Dec 2013, pp. 132 ff.

¹⁶ SWD (2013) 402 of 2 Oct 2013

 $^{^{17}}$ See respectively, SWD(2014) 131 of 31 March 2014 (on national reform plans) and SWD (2014) 130 of 31 March 2014 (on access to cross-border insurance).

¹⁸ See Directive 2011/24 of 9 March on The application of patient rights in cross-border healthcare, OJEU L 88 (p. 45 ff) of 4 April 2013; on gambling (especially on-line) no legislation has been proposed yet, but see COM (2012) 596 of 23 November, Towards a comprehensive European framework for online gambling.

¹⁹ Note that dir. 86/653 lays down a separate regime for lawyers and commercial agents. Moreover, *automatic* recognition (in fact, minimum but effective harmonisation) already exists for six health professions (including Doctors and pharmacists) as well as architects.

Figure 4 Sectors under the Service Directive

Services Directive (Directive 2006/123/EC)

- Business-related services: office maintenance, management consultancy, event organization, debt recovery, advertising and recruitment services
- Activities of most regulated professions: legal and tax advisers, architects, engineers, accountants, surveyors (and many more)
- · Distributive services: retail and wholesale of goods and services
- · Construction services and craft
- Tourism services (travel agents) and accommodation and food services (hotels, restaurants and caterers)
- Leisure services: sports centres, amusement parks
- installation and maintenance of equipment, information society services (e.g. publishing - print and web, news agencies, computer programming)
- · Rentals and leasing services: car rental
- Real estate activities
- · Household support services

Despite the initial success of implementing the services directive, a new further drive to make it work as intended is indispensable. This should ensure that no service provider is afraid of or hindered in trying out other national markets in the EU, that no business model to europeanise services is frustrated by licensing procedures or dubious requirements not in tune with the directive and that national regulation is justified by market failures which are recognised in economic analysis and/or at least by many other Member States. Therefore, an in-depth new review of the state of implementation of the directive is necessary. In regulated professions, several Member States have introduced intrusive reforms after the 'mutual evaluation' exercise of 2010 (e.g. Portugal, Italy, Poland) but there seems to be no overview of what other EU countries have done and, even more important, whether de jure or de facto barriers remain in the many (officially 800) services markets in which regulated professions operate. These are together representing a considerable economic turnover (the Commission mentions some 9 % of EU GNP) and many such services are skilled or highly skilled. Efficient and high quality business services are critical for competitiveness of European business at home as well as in value-chains more globally. More generally, what is needed is a selective but nonetheless wide-ranging and 'deep' 'market monitoring' approach as has been done in the Commission report on performance checks, both legally and economically, from the point of view of business suppliers and users. As will be shown in chapter 4, although many barriers were removed or lowered after the 'mutual evaluation' and screening, a lot of barriers remained and this must be a stimulus for Commission and the EP to take stock once again and firmly act subsequently. The Annual Growth Survey, initiating the European Semester for Member States, and its Annual Single Market Report provide good opportunities to drive this agenda forward.

2. Public procurement, works and concessions

In formal terms, there are no barriers in the single services market with respect to public procurement. In 2014, the third generation of EU regulation on public procurement was enacted,²⁰ with a view to simplification of the 2004 EU regime (seen as creating too much red tape) and with a solution to overcome the interpretation problems and heterogeneity in concessions contracts by means of the new concessions directive 2014/23/EU. Therefore, the public procurement area is not so much about the removal of 'barriers' in the internal (services) market [that is, the better 'establishment' of the single market], but largely about its 'proper functioning'. Of course, it is unavoidable that the EU public procurement regime will always have to balance the benefits of having open and nondiscriminatory public purchases throughout the EU - benefits for the EU single market, as markets are not distorted and pro-competitive tendering promotes rivalry and innovation, and benefits for local /national governments in that procurement will be at lower costs, easily some 5 % on average - with the costs and slowness of (too) heavy procedural requirements guaranteeing 'proper' tendering and awards. The less strict the latter requirements, the greater the risks that anti-competitive local preferences creep in. Moreover, there is the other unavoidable issue of the thresholds: these are inevitable because the costs of tendering and an unreasonably low probability of obtaining the contract will limit the actual interest of potential applicants, and this the more so when the contract values get lower and lower. This is an issue for all businesses, but even more so for SMEs. SMEs do acquire nearly half (47%) of the direct cross-border procurement. This figure is misleading, however. Most cross-border public procurement (some 11.4% of the contracts) is 'indirect', that is, via foreign intra-EU affiliates (compared to merely 1.6% 'direct') and these are overwhelmingly dominated by large multinationals.²¹ Subcontracting may help SMEs but this route amounts only to 1 % of the contracts. Not unlike the economic meaning of the horizontal services directive, the total value of public procurement in the EU (some 17 % of EU GNP or easily some € 2000 bn) is not indicative of the economic significance of the EU procurement directives. As the 2011 evaluation²² made clear, only some 20% of the public expenditure on goods and services falls under the directives; with the concessions directive, this might now become a little higher but, on the other hand, the economic nature of concessions is not fully comparable with public procurement. The 20% share has several understandable reasons such as below-threshold contracts (suspected to be some € 250 bn), large budget expenditure on health, education and social services which are not covered by the directives, and exemptions (e.g. defence equipment and state spending on fuel). The new public procurement regime aims to cut some of the heavy red tape from the 2004 regime (e.g. less documents for bidders and only the winner has to supply the full set) and the 'competitive procedure with

²⁰ On public procurement defined as public works, supply and service contracts, see Dir. 2014/24/EU in OJEU L 94 of 28 March 2014, pp. 65 ff (replacing dir. 2004/18); on public procurement by utilities which are not (yet) in competitive markets (water, energy, transport and postal services), see Dir. 2014/25/EU in OJEU L 94 of 28 March 2014, pp. 243 ff; and a new dir. 2014/23/EU on concession contracts, in OJEU L 94 of 28 March 2014, pp. 1 – 64.

²¹ See Ramboll & Chur, 2011 for details

²² European Commission, 2011, EU public procurement legislation: delivering results, summary of evaluation report, DG Markt,

negotiation' can be used for complex projects (where quality matters more than price, or, where there is no off-the-shelf solution). Innovation is explicitly fostered by a new 'partnership' procedure: once a company has been selected in a regular competitive procedure, the contracting authority can cooperate in such a partnership with that company to develop an innovative product or service which does not exist on the market. Moreover, eProcurement has become obligatory (with a deadline of several years away) for all public procurement in the EU, expected to yield the huge gain of some € 100 bn eventually. Finally, knowing that the costs of award procedures are not only high for bidders but also for contracting authorities, the new regime has been simplified for regional/local authorities as they can publish via simpler prior-information notices rather than contract notices.²³

Focusing on services only, the previous EU regime of 2004 distinguished so-called priority ("A") services and "B" services. This distinction has been abolished in the new 2014 rules. An annex to the directives will list services sectors under a new simplified regime; these will include sectors such as social, health, cultural and associated services in any event, which is of great importance for regional and local authorities. In this new simplified regime for services the threshold is much higher (€ 750,000) and EU technical specifications are no longer obligatory (as, often, local circumstances might render this less appropriate). Besides regular services, EU public procurement rules also apply to services purchased by network industries ('utilities') under dir. 2014/25/EU. Network industries having been consistently in competitive markets (such as eComms nowadays) are not included because there is no reason to expect them to be different from private purchases in competitive markets.²⁴ Thus, the main sectors involved include water, energy (gas & electricity), (public) transport (including airports and ports) and postal services (but even here, the competitive situation may be such that exemption can be requested). It is hard to obtain precise data on services procurement as such. Thus, the EU Public Procurement Indicators do not distinguish goods from services. For 2008, Europe Economics (2011) estimated that 'utilities' procurement amounted to € 135 billion, twothird of which was above threshold. However, most of these € 90 billion are presumably goods such as network equipment or intermediate goods for that purpose; how much services are procured is simply not known. Neither is it clear what share of these purchases is intra-EU cross-border. In Ramboll & Chur (2011),25 for 2008 the abovethreshold awarded contracts in all services (other than bought by utilities) amounted to € 173 billion, much higher than supplies (of goods; € 130 bn) but lower than public works (€ 240 billion). The 'direct' cross-border share is less than 3 % for services and around 15 % for 'indirect', together some € 31 bn. In their business survey, the authors do find some lingering barriers (such as special permits or licenses or procedures to offer services from across the border, prompting questions under the services directive or otherwise) but

²³ Further cost cutting could be accomplished both for authorities and bidders if a so-called 'EU public procurement passport' would be introduced, validating national certificates for the entire EU.

²⁴ The exploration of oil and gas is similarly excluded from Dir. 2014/25 for the same reason. Of course, that is not true for transmission, distribution and retail services in natural gas.

²⁵ See their Table 87 in the annex.

other factors standing in the way of cross-border procurement (according to business) include the lack of experience of smaller contracting authorities to do deal with non-national firms, languages and strong competition from local bidders. Business in Europe has a firm perception that contracting authorities prefer domestic bidders, implying that – still in the view of business – the EU regime still allows sufficient leeway to pursue such preferences.

Assuming that the few lingering barriers are in fact better dealt with under other EU regulation, the present 3rd generation EU public procurement regime for services is probably the best result obtainable, but for two aspects. The new concession directive 2014/23 is likely to be progress as a lack of harmonisation before amounted to a huge barrier to market access. But it should first be tested in actual practice and this is bound to take a few years. As the EP website notices itself, concessions are typically high-value, complex and long-term such as large bridges, building roads, sports venues or, alternatively services like supplying energy or waste disposal. Often, a private firm obtains a concession for a number of years and usually has to assume a substantial part of the economic risk stemming from executing the contracted work or services. The first remaining problem in public procurement is about national remedies. The harmonisation of national remedies procedures and institutions was not accepted by the Member States (and equally resisted by the EP) and there is little point to return to this issue in the short run. However, the costs of not addressing this serious problem are (too) little realised. In Pelkmans & Correia de Brito (2012, ch. 7), a brief survey brings out the incredible differences between Member States in these national remedies. It needs little imagination to realise that ensuring one rights in public procurement is highly unequal between EU countries; it may well be ineffective, hence a deterrent, in some Member States. In turn, this is bound to impact negatively or at least unevenly on the willingness to submit tender bids across intra-EU borders. In other words, the 'autonomy' of Member States to decide on their own remedies procedures and bodies entails a considerable cost and impacts negatively on the proper functioning of the internal market of services. Before bringing this up once again in future, greater clarity on the actual costs and disparities, as well as on the deterrent effect on firms having tried remedies in other EU countries, is desirable to better make the case for common minimum standards of performance of national remedies procedures. ²⁶ The second remaining issue is about the disadvantages of transparency, especially for non-successful bidders. As Sanchez-Graels (2013) has convincingly argued, and as is well-known from the economics (and practice) of cartels and bid rigging, too much transparency facilitates tacit or even explicit collusion. The problem is that both the Commission and the CJEU have continuously expanded the transparency requirements when disappointed bidders insist on knowing details about the winning tender offer and bidder. "The approach derived from principles of transparency and good administration in procurement management has resulted in excessive disclosure of sensitive commercial information prone to facilitate collusion. The EU courts have failed to grasp the implications of such an excessive degree of disclosure

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²⁶ However, it should be noted that directive 2014/24 does comprise a list of governance tasks for national authorities and the obligation to submit a monitoring report every three years.

of commercially sensitive information and the provisions on the protection of confidentiality and the withholding of strategically valuable information have been largely ignored". The author proposes to bring in the EU competition authorities for purposes of oversight and to drastically curtail the amount and type of information to be disclosed to disappointed bidders.

Given that some improvements of the 3rd generation EU procurement regime are desirable, as shown, what problems remain are not to be considered as major lingering barriers in the internal market for services. In the light of all the above considerations, we shall therefore not include public procurement in the survey of the Costs of Non-Europe (CoNE) in services in Ch. 4.²⁷

3. Infrastructures for network industries

As noted above, infrastructure in some network industries is so closely linked with cross-border intra-EU liberalisation, (EU) regulation and EU competition policy of the relevant services that a separate analysis of infrastructure and of the services regime is likely to be seriously misleading. Indeed, a stand-alone EU infrastructure policy for services is flawed or at best suboptimal. We refer here to network industries with large sunk costs: electricity and gas, (freight) rail and electronic communications. In addition, there are two instances where network industries have to make use of common elements of Europe's nature: spectrum (frequencies) for eComms and the European air space. Despite the traditional Member States' claim that these two are 'national', they have, in part, the properties of European collective goods. In spectrum the situation is complex, as parts of spectrum are unlicensed and shared, and other (more valued) segments are auctioned, licensed and/or 'owned'. At the same time, for eComms, respectively air transport, they serve as infrastructure indispensable for service delivery in a well-functioning internal market.

There are integration deficits in all those six infrastructures and these deficits affect negatively, and at times throttle, the functioning of the single services market. All these infrastructures can best be considered as having regional, national and European 'layers'. For the single services market, what is essential is of course the EU-wide or European layer. The national or regional layers should be governed at national and/or regional levels, but in such a way that the European layers are or can be developed properly from an EU-wide perspective. The EU-wide layer can be developed optimally only if (i) the sectoral services regimes provide the correct incentives to build and/or exploit such cross-border infrastructure; (ii) Member States do not unduly insist on their national competences irrespective of the effect on the single market and its functioning (a treaty obligation which they are held not to frustrate!); and (iii) some public EU and

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²⁷ It should also be noted that a special CoNE report on public procurement is being prepared for the EP by Europe Economics.

²⁸ In spectrum, there is a 'higher' layer, too. The EU is part of CEPT for spectrum matters, and hence subordinate to the ITU/World Radio Conference.

Member State funding for segments of the European layer where bottlenecks and missing links from an EU-wide perspective need to be addressed. It is customary to conclude that the second and third aspect are difficult in the Union – which is true, although there is more recognition of infrastructural EU needs than 2 decades ago – but the first aspect is just as much, if not more so, a cardinal problem of network services markets in the EU.

The second issue - reticence about, if not resistance against, EU infrastructure in Member States - is greatest in spectrum and air traffic control. The absurdity in air transport is widely recognized - with Europe fragmented into some 90-plus control areas and airplanes flying faster than the communication with the plane can be executed in the smaller control areas - but that is apparently not enough to get Member States to implement decades-old plans to europeanise air traffic controls in a Single European Sky (SES). With equipment and software finally becoming uniform, the SES promised – over a decade ago - to cut 8 million tons of CO2, avoid 19 million minutes of flight delays and prevent some € 5 bn extra costs due to rerouting. Not much actually happened. It was succeeded by SES-II, to little avail. The week-long stop of flights over most of Europe in 2010, caused by floating ash from an Icelandic volcano, has revealed the intolerable inefficiency and ineffectiveness of having the European airspace 'governed' by many Member States. The EU incapacity to act promptly and properly - after the Icelandic volcano had burst out huge quantities of ash - based on sound risk assessment and the appropriate degree of centralisation has demonstrated the high costs of not jointly dealing with airspace as the EU commons! Cost estimates vary from € 2,5 billion to some \in 4 billion for barely one week of failed intergovernmentalism . The EP adopted the Marinescu report in March 2014 which strongly advocates a SES-II+. The Member States should no longer drag their feet. Before the EP might sue the Council again in the CJEU, as it did (also on transport policy) successfully in 1985, the Commission has finally opened infringement procedures against 18 Member States.²⁹ In spectrum, the Commission has tried to get Member States to coordinate spectrum questions much more intensely, for the better functioning of the single eComms market, in particular for bandwidth-demanding services and new technologies. When GSM was prepared in the late 1980s, this worked: a single frequency band was agreed early on. Now, with far more urgent needs, soft cooperation is simply not good enough, as services will not be developed or have no chance to grow to European scale and not experience drastic falls in costs. Lacking an EU-wide spectrum policy will throttle single market functioning in some sets of existing and future services.

Infrastructure issues at EU level are too often still discussed in terms of the third aspect: EU and national funding. EU funding via Cohesion and Structural Funds may help but is usually targeted at local and regional bottlenecks and missing links, for purposes of regional development. Occasionally, such links may support EU infrastructure, too, but this will not happen frequently. EU level TEN funding is notoriously small – probably, too small, although it is hard to say what the ideal EU amount should be. The recent policy of targeting EU funding of only the pure cross-border segment has helped to

²⁹ See Commission Press release IP/14/818 of 10 July 2014

provide a modest degree of EU leverage in highways, but whether this targeting is also effective in eComms fibre / fast broadband networks, in rail track and for gas and electricity interconnectors is unclear. In any event, the financing needs for infrastructure in these four network sectors are formidable and TEN funding can hardly be expected to play more than a very marginal role. Therefore, the two keys to find finance for EU-wide infrastructure consist in the first aspect – incentives generated by the sector regimes – plus innovative forms of private or private & public (including EIB) funding combined.

The network sector regimes are too complicated in detail to analyse and assess in a satisfactory manner in this report but it is possible to make some essential points.

• Infrastructure in eComms

In eComms, three successive EU regimes have failed to solve the dilemma of 'services competition' versus 'infrastructure competition'. In fact, the approach has been strongly biased towards services competition. The pursuit of the so-called 'ladder of investment' (allowing new entrants - at first mere resellers - in at low network access prices, later to be increased by regulators so that they would be incentivised to invest in infra facilities, followed by competition between independent networks) has not worked in the EU: some 1500-plus services providers in eComms exist in Europe, as against barely 100 in the US, and very few of those 1500-plus have invested in facilities. Going to the top players, no consolidation has taken place in Europe and no pan-European providers exist, with all the losses of scale advantages and innovation incentives for a big market. Network investment (in fast broadband; 4G/LTE) in the EU runs far behind the US and indeed far behind some Asian countries as well. All this is due to a combination of having no single eComms market (see Pelkmans & Renda, 2011; Maincent, Lorenzani & Eordogh, 2013) but national islands of eComms liberalisation, based on EU rules, and a heavy emphasis on low consumer and access prices, including roaming via imposed regulated prices moving towards zero, leaving few players with funds to invest on a large scale. Such disincentives cannot be replaced by public funds of EU programmes. Socalled 'regulatory holidays' (when building networks, they are exempted during a grace period from third-party-access) are also forbidden in the EU. Thus, these short-term consumer benefits come at the expense of a slow and incomplete build-up of advanced infrastructure. Since eComms and ICT have strong interlinkages in the digital single market, this also means that such hesitations undermine growth.

• Infrastructure in (freight) rail

The economic nature of rail freight is profoundly 'European', as for most shipments rail freight is profitable above some 500 km, compared to other transport modes. This means that 'national' rail freight is only a viable business proposition if, either, the EU country is so large that distances of 500 km - 600 km can routinely be covered (if there is demand for that, given industrial destinations or ports), or, specific consignments have to be delivered regionally for special clients (e.g. coal for a power plant; bulk chemicals to/from a chemical plant). Apart from these 'residual' submarkets, rail freight is 'European' as it will typically cross two, three but often four or five borders (intra-EU,

including Switzerland). The EU-wide rail freight market is severely underdeveloped and underperforming, to the detriment of competitiveness of EU industry as well as preventing the 'modal shift' in freight towards rail which would be so good for the climate (this modal shift was firmly agreed in two successive Commission White Papers on Transport).³⁰ In other words, the internal market for rail freight should long have been developed any way, but it so happens that this instrumental objective is now supported, too, by EU strategies reducing or controlling greenhouse gases. Freight rail is far 'greener' in this respect than road haulage or air transport; only inland river transport' is also 'green'. However, the fact is that there is no such thing as an EU-wide single market in rail freight at all. Although this profound failure has many complicated, often interrelated reasons, the basics are due both to infrastructure failures (discussed in this sub-section) and to EU regulatory rail regime failures (discussed briefly in section III).

Somewhat similar to electricity, where cross-border interconnectors long ago were built not for cross-border trading on a daily basis but for peak loads or mutual support in case of black-outs, cross-border rail freight was often bilateral for special large clients or an offspring of the mining of heavy-load resources which would be too costly to be transported by trucks (e.g. sand, gravel, coal, salt, iron ore, etc.). Therefore, cross-border rail freight was 'residual' at first and national or bilateral rail freight was dominant. High average speeds, reliability of delivery 'on time', sharp pricing (given intermodal competition), interoperability and other aspects which would be critical in an open EU market and in a competitive intermodal context, (all aspects which have been demanded by shippers and forwarders for many years) were essentially disregarded. Moreover, companies were typically state-owned and cooperated across borders on a low-key, inefficient basis, often with state-covered loss-making. Some 25 years ago, this was the starting point for a long and difficult path towards opening up the (intra-EU) market and attempting to drastically mend the ways of inefficient, overmanned and rigid companies with a strongly national orientation. As will be shown in chapter 4, the upshot was that other transport modes - market oriented and with a strong business orientation - have grown fast for decades, and rail freight became marginalised to niche markets where it was basically inevitable. European industry and wholesale found that rail freight was, for them, a hopeless business proposition.³¹ It is only since around 2000 that EU-driven regulatory reform and market liberalisation, as well as European standardisation and the tackling of numerous interoperability questions began in earnest. The profound legacy of a lack of competition and of competitive spirit is still lingering, however.

On the infrastructure side, the weaknesses are formidable. First, EU-15 countries had hardly been investing in new infrastructure tracks, other than between large cities (of less

³⁰ European Commission (2001), "White Paper - European transport policy for 2010: time to decide", Brussels, 12.9.2001, COM (2001) 370 final; European Commission (2011), "White Paper - Roadmap to a Single European Transport Area - Towards a competitive and resource efficient transport system", Brussels, 28.3.2011, COM (2011) 144 final, both clearly embraced by Council and European Parliament

³¹ How large shippers considered EU rail freight and its many shortcomings is analysed, with examples, in Pelkmans & White (2000), for the CEPS Task Force on sustainable mobility in Europe.

relevant to freight) or recent dedicated high-speed lines. What transport infrastructure investment was observed, was overwhelmingly in roads (and bottlenecks like bridges and tunnels), large ports and airports. Also maintenance, renewal and upgrading of tracks - a very expensive activity - was at best minimal to maintain the same quality (or for safety) or less. In Central Europe, with a legacy of a huge rail infrastructure but without (the funds for) sufficient maintenance, there was a profound minimal quality issue; the overall length of lines has been reduced by some 15 % since a decade ago. Second, since capacity constraints in rail are much more important than in (say) eComms or electricity, and have directly to do with safety as well, there is a quasi-iron law in rail freight that, no matter how much the EU regulatory and competition regime can be improved, it can never compensate for serious underinvestment in new lines, upgrading of all track, intermodal terminals, modern signalling, marshalling stations and adequate infrastructure for the so-called 'last mile' (to plants, or industrial sites or mines, etc. especially for single wagon loads). And it is precisely in infrastructure, where the EU can do little more than encourage or incentivise investment and help in the margin with either Cohesion Funds (in less developed EU countries/regions) or (small) TEN funding. The incentives to invest may improve once the internal rail freight market begins to be more promising and its huge untapped potential is beginning to be exploited better, but it is undeniable that there is a kind of vicious circle in arguing what comes first. Catching up in infrastructure investment for (freight) rail linked to river and sea ports, airports and major industrial centres will take decades, both to recover from the very low investment rates of the last few decades and to create or complete a much better European network without missing links, instead of a patchwork of very incomplete nationally oriented ones, rendering EU-wide efficient rail freight next to impossible. Third, it is not merely a pure infrastructure issue: there has also been a cleavage between the explicit intentions of EU countries to promote a modal shift to rail freight, and the continued de facto preference for road transport in direct and indirect ways. In fact, there is no discernible shift in infrastructure spending towards rail, and one pillar critical for the EU strategy promoting the modal shift - full internalisation of 'external costs of pollution, safety risks, congestion, noise and infrastructure maintenance' - is not adhered to. The single market for freight rail cannot be a vibrant one if this question is not seriously addressed by EU countries to begin with. Some individual EU countries are planning to introduce extra tolls or taxes in order to recover expenses for road damage (overwhelmingly caused by heavy trucks) which is one indication that internalisation is seriously insufficient for trucks, in turn, disadvantaging rail freight. Overcoming this profound inconsistency of EU Member States - that is, by taxing road haulage based on full internalisation - would, in and by itself, already prompt a modal shift, quite apart from climate considerations. Given intermodal competition in freight transport, a lack of internalisation is and remains a major distortion, hence a wrong market design. Fourth, the EU regulatory regime for (freight) rail - other than infrastructure, and to be discussed below - is still so fragmented and underdeveloped that European rail freight is not yet much of a tantalising business prospect. Infrastructure incentives thus also hang together with a host of technically difficult but also expensive adjustments of the regulatory regime or remedies, often of long duration, too, some of which may take decades to solve satisfactorily. In the light of all these aspects, one can begin to appreciate why Europe, that often likes to see itself as 'the' continent of rail, in fact is a laggard in freight rail in terms of performance as well as modal split compared to other densely populated countries like Japan.³²

A possible breakthrough of the vicious circle between the deficient EU regulatory rail freight regime and underinvestment in rail infrastructure are the 'European rail freight corridors'. Nine such corridors of several thousand kilometres have been agreed based on a common EU framework and common management.³³ Three basic ideas underlie these corridors: a reinforcement of cross-border cooperation among national Infrastructure Managers, providing dedicated capacity for rail freight services of good quality, and improving user (read : shippers, forwarders) involvement. In order to achieve quality, including average speed over the entire corridor, technical specifications have been harmonised.³⁴ Of course, these corridors require investments in upgrading, (possibly) electrification, marshalling stations, intermodal terminals (where there is demand), ERTMS signalling (expensive but fostering efficient use of track capacity) and possibly investments in the 'last mile' near industrial sites. But this must mean that terminals are integrated in traffic management and infrastructure planning. For customers, the idea is to improve cross-border traffic in terms of management, investment (better incentivised over these corridors) and infrastructure harmonisation, with a view to increase rail freight' competitiveness and modal split. For shippers and other customers, it should imply smooth and flexible path allocation processes, common punctuality targets (as customers used to modern logistics demand reliability from rail freight as well), sufficient priority for freight trains and permanent involvement and discussion of customer satisfaction surveys (a radical change for freight rail in Europe). The governance structures of the corridors are based on those already established for ERTMS corridors. Every corridor has a One Stop Shop for information for applicants interested to start services over these corridors, for allocation of dedicated freight capacity and for path requests, irrespective of the crossing of three or four borders. Six of the nine corridors have started operating in November 2013 and three more will do so in 2015. In a wider context, Trans-European network (TEN-T) and its financial instrument Connecting Europe Facility have recently begun to pursue a long-term strategy to improve the coverage, quality and multi-modality of nine so-called 'core' transport corridors over Europe, in which the rail freight corridors figure as an early achievement. These multimodal 'core' corridors are (to be) linked with ports, airports, various inter-or multi-modal terminals, and comprise several modal infrastructures.³⁵ One element important for rail freight in the longer run is how feeder lines and services outside the nine rail freight corridors will be dealt with, and these strategic 'core' corridors is one necessary, though

³² The comparison with the US or Russia, or even China, is inappropriate, given large spaces with very low land prices, the virtual absence of costly NIMBY problems and the widespread presence of (far cheaper) dedicated freight lines.

³³ Regulation EC/913/2010 on a European rail network for competitive freight

³⁴ That is, 740 m train length (long trains raise productivity), 22.5 ton axle load, 100 km line speed (which may require upgrading), new signalling (the European ERTMS) and guaranteed electrification everywhere. In fact, six of the nine corridors are based on six previously determined ERTMS corridors.

³⁵ Road, rail, inland waterways, air and maritime.

insufficient, answer to that. How the nine rail freight corridors actually function is important for MEPs and European business, especially wholesale and some industries, and public annual reporting and critical debate should be helpful to stimulate progress. This is needed as neither cross-border cooperation of IMs or one-stop-shops nor unquestioned attention for and adaptation to business demand come natural for rail freight companies. Moreover, the corridors require investment and this, too, has often been squeezed out in recent decades. However, if rail freight corridors would genuinely work, it is likely to give a major boost to rail freight as a European business and help to 'generate' an internal market for these services, positive for competitiveness and for the beginning of a modal shift towards rail freight.

• Infrastructure in electricity and gas

In electricity and gas huge cross-border network investments are needed, as congestion is still a serious issue in gas (see ACER, 2013b) and selectively also in electricity. Moreover, electricity demand is expected to rise secularly for decades still. Several estimates of these investment needs have been suggested in the EU policy debate and it is not the present report that is the proper place for an elaborate analysis. However, orders of magnitudes indicate the formidable sums involved. The totals crucially depend on what the EU ambitions are, within the internal market framework, but with explicit consideration of climate strategy as well competition and competitiveness of the user sectors. In European Commission (2011) and other sources (e.g. EAVA, 2013, p. 11) the sums for investment between 2010 and 2020 include: (a) power generation € 500 billion; (b) transmission lines € 200 bn ; (c) regional and local distribution lines € 400 billion ; (d) renewables around € 350 bn. This easily adds up to € 1,5 trillion and most of this will have to be funded via the market. Thus, wanting to optimise 36 the famous EU energy policy triangle [combining, but with inevitable trade-offs between, energy security, a competitive and single energy market and, finally, effectively pursuing ambitious climate objectives in the longer run] requires huge infrastructural investments, of some 1.5 % of GDP per year for decades. But, as Zachmann (2013) has rightly pointed out, the proper single market and climate solution is not to 'think cross-border' any longer, but to design a truly EU-wide network with gradual development and rolling investment plans of 10 years, as foreseen. However, for such EU-wide design in electricity to be optimal, a number of requirements

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³⁶ In electricity and gas, there is a conundrum of interlinked design and policy issues that, together, are called the 'EU energy triangle': the top angle is 'supply security', both for individual consumers /users (no 'black-outs') and in the form of guaranteed access to resources such as gas, oil, wind and uranium; the bottom-right angle is the cluster of internal market/competition/affordability, whether for industry or consumers; and the bottom-left angle consists of 'sustainability', mainly climate strategy and other environmental aspects. It is therefore inappropriate to focus on the single market in gas & electricity in isolation and that also holds for the infrastructural needs and delivery. However, it is equally mistaken to pursue one-issue agenda's such as security or climate strategy as they risk being (highly) distortive in the single market and/or ossifying today's fragmentation into national markets. Thus, setting quantitative targets for and giving priority to renewables, whilst also allowing lavish subsidies (incidentally, also vastly different between EU countries), cannot be but highly distortive and fragmenting over time. Similarly, it might be distortive and expensive to overemphasise risks of external security of supply and attempt to be more 'autarkic'.

would have to be fulfilled: full unbundling in transmission, a European control centre should be established (now still an anathema, apparently) and a truly EU-wide and binding network infrastructure planning process ought to be enacted, which, once again, implies a higher degree of centralisation than EU countries have been willing to allow so far. Also the funding should be broad-based, hence not just national but linked to all those benefitting from such investments - and in an EU-wide setting this includes by definition several countries at least. Some other barriers should also be addressed 37 Once one enjoys such a set-up, one can begin reflecting whether an additional EU-wide grid (say, in the seas around Portugal/Spain via France and Benelux to Denmark, Poland and the Baltics, which might cost as much as € 300 billion; and other imaginative ideas) would make sense, given the rise of wind power and its accommodation in generation in the EU everywhere. This would relocate to some extent generation to places in the EU where the technology is most effective, e.g. solar in the Mediterranean and wind in the North-East and North of the EU. But as we will see later, these recommendations are intimately linked with the distortions and deeper fragmentation of the single market, having been caused by a single-issue-agenda on renewables, linking a fixed target per EU country to an almost unconstrained (national) subsidy regime. Furthermore, as long as such ambitious EU approaches are not followed by Member States, interested more in short-term cost minimisation rather than long-run optimal solutions, greater ambition in interconnector investment has to accompany the gradual emergence of EU-wide market coupling in electricity. In the margin, it is also true that there are aspects of energy market integration deepening which -in and by itself - reduce the extra needs for infrastructure: examples include more optimal areas for balancing (electricity flows), 'market coupling' over interconnectors (leading to wholesale price convergence between the two connected countries for many days per year) and smart grids.

III. Acquis deficits in sectoral services regimes

1. Overview of sectoral barriers and other deficits

Kappf & Pelkmans (2010) for extensive analysis and solutions).

The present section refers to the second 'floor' of Figure 1. We shall neither discuss the fifth box in this 'floor' (sensitive sectors, two of the three are briefly addressed in subsection IV. below) nor the sixth (temporary cross-border services, see Box in section I. above). As to the other four sectoral services regimes, most of the discussion will be found in chapter 4, supported by selective empirical indicators of internal market fragmentation and /or its costs. The main issues of lingering fragmentation in the four services markets are summarised in Table 1.

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³⁷ Thus, from a long list of such barriers in EAVA (2013, pp. 24 – 26), one can mention the following ones as relevant to this issue: diverging views between NRAs on flow-based methods, the reduction of cross-border capacities due to unplanned and unforeseen 'loop flows' (usually caused by sudden extra electricity from wind), capacity constraints due to booked but unused capacity (the rule should be: 'use it or lose it'), insufficiently harmonised balancing regimes, and, not least, few or no incentives for grid companies to invest in cross-border transmission infrastructure (see also

Table 1 Four sectoral services regimes in the not-so-single market

Sector	Status I.M.	Nature of barriers
Financial services	Quite fragmented	Fragmentation is a function of: 1. lingering access barriers in specific segments, such as retail banking, mortgages and cross-border mergers, and 2. the failure to ensure a trusted and robust regime to minimise 'systemic risks', resulting in financial instability (in and outside the Eurozone), in turn severely discouraging cross-border exchanges, if not dismantling cross-border positioning (and even ownership of some banks) Item (2) may be restored, eventually, by recent measures, including the banking union as well as EU-wide supervision and other provisions.
Professional services	Considerable, but uneven fragmentation	Regulation is national and not disciplined by e.g. a proof of market failures and proportionality; only qualifications for major health professions are harmonized; mutual recognition has gradually improved but many barriers remain; national reforms inspired by key EU principles is essential.
Transport services (other than rail)	Moderately fragmented	Splintered air traffic controls are (too slowly) on the way out with SESAR-II and new IT infrastructure; a maritime 'Blue Belt' for EU coastal shipping would lower red tape; considerable interoperability issues (e.g. tolls) and investment needs; range of smaller deficits in road.
Electricity	Severely fragmented	3rd package (2009) improvement, but insufficient; cross border interconnectors too often congested, despite greater efficiency with power exchanges; wholesale markets not (yet) competitive enough; national concentration far too high; lack of conducive investment climate given formidable investment needs (incl. EU-wide grids and replacement of power stations) and great uncertainty about sustainability constraints (such as renewables and the low price of carbon); ACER Agency too weak to ensure genuine internal market (given NRAs) and ten years investment plans
Gas	Severely fragmented	3rd package (2009) improvement but insufficient; EU gas networks unfinished; national concentration even higher than in electricity; severe gas security-of-supply problem (reduced by LNG and possibly shale gas in future); gas hubs (wholesale) still few and illiquid, though growing rapidly; many gas exchanges too 'thin'; fragmentation profound e.g. due to medium-run capacity reservation of pipelines and storage; investment incentives via exemption of TPA show dilemma between security of supply and intra-EU competition; ACER too weak to ensure a single market (see electricity) but development of 'network codes' (under way) would be procompetitive and improve the single market.
eCommunications	Severely fragmented	Success of EU telecoms (eComms) due to interaction of technical progress and market liberalization; hides the fact that liberalization is largely 'national', managed by NRAs based on EU regulation (and some competition policy); no such thing as an eComms Single market, shown by huge price disparities, lack of convergence in applied rules, no EU-wide service providers, little consolidation of industry and a stubborn

Sector	Status I.M.	Nature of barriers
		broadband gap; BEREC "Agency" distinctly weaker than ACER –
		NRAs (sometimes hand-in-glove with ministries) are stumbling
		block to single market; series of other barriers to a single
		'digital market' possibly being addressed (such as more EU-
		oriented spectrum programmes – sensitive to finance
		ministries as a source of revenues - , pan-EU licensing for on-
		line rights management and harmonized numbering to enable
		EU-wide provision of business services); investment incentives
		in advanced networks problematic, might harden
		fragmentation.
(Freight) rail	(Very) severe	Economic case for EU-wide freight rail powerful, yet the
	fragmentation	barriers are the most severe of all network industries;
		overriding problem is the unsuitable "installed base" (of
		infrastructure) which is extremely expensive to overcome and
		will take decades; key infra problems: networks built as
		'national', hence, cross border "missing links", "dual-use" of
		tracks tradition in Europe (adding 40 % to costs), huge NIMBY
		issues for new infra, long European freight 'corridors' require
		many costly adaptations at many levels and, given EU density,
		difficult to accomplish, interoperability questions (ERA Agency
		is purely technical; and some solutions can only be
		implemented when investments in the network are made) and
		a need for many efficient intermodal hubs; moreover,
		profound investment incentive issue as the pan-European
		uncertainty about freight rail competitiveness lingers on,
		creating a vicious circle; besides infra, two other serious
		constraints, which will take time as well: the business models
		and mentality of freight rail companies in Europe have to be
		transformed radically, and, national freight access (to track)
		charges vary by hundreds of percent (deeply distortive);
		although national regulators have to be 'independent', conflict
		of interest (with the incumbent) are not fully excluded; there is
		neither an EU-wide regulator for general market access, slot
		allocation and track charges, nor an EU-wide Infrastructure
		Manager; implementation of several rail packages by Member
		States is seriously deficient; in addition, the opening up for
		domestic passenger rail, not so important from an internal
		market point of view, would nevertheless induce some entry
		but especially far greater efficiency, with large economic gains
		(cost savings) – indirectly, it may help freight as well via more
		rational and cost-reflective incentives for the use of the
NI-1- NID A		infrastructure.

Note: NRA = national regulatory agency; TPA = third party access; LNG = liquefied natural gas; ERA= European Rail Agency; ACER= EU Agency for electricity and gas; BEREC= EU Body for Electronic Communications (formally, not an EU Agency)

Of the seven market sectors mentioned in Table 1, no less than three are severely fragmented and one is even very severely fragmented. Only in transport (other than rail freight) is the internal market moderately fragmented. In financial services, the recent and increasing fragmentation is partly due to the loss of credibility of the EU regime, especially because of financial instability issues. If and insofar as systemic risks - possibly causing financial instability, such as contagion across intra-EU borders - have been

brought firmly under control in credible ways to market players, this fragmentation is likely to be turned around (back to) to deepening financial integration. However, there are submarkets (e.g. mortgages, equity and retail banking) which have been fragmented for a much longer time and need to be addressed. In professional services, the panorama is quite diverse and it is hard to generalize. What is sure, however, is that in a number of specialised market activities, fragmentation is still pretty severe and a profound and careful programme of scrutiny of the justification of all kinds of restrictions or lack of recognised 'equivalence' should be undertaken, together with the Member States, who should assume 'ownership' of this problem and attempt to accommodate the internal market whenever possible.

It is in the network industries with large sunk costs where fragmentation is not only severe but also costly and time-consuming to overcome. Table 1 sums up in telegram style the numerous issues in the four sectors that somehow have to be addressed. It is beyond the scope of the present report to go deep into these issues. Moreover, several recent reports are available on these sectors which will help us to assess the costs-of-non-Europe to some degree in chapter 4. A close reading of Table 1 justifies the expectation that the economic benefits of market integration in the four network industries mentioned plus professional services and financial services ought to be at least considerable if not large.

It is worth noting that the areas in Table 1 are in continuous flux. Thus, in freight rail a fourth package was proposed by the Commission in January 2013,³⁸ in eComms a new single market initiative was tabled by the Commission in September 2013,³⁹ and in gas & electricity, although there is no fourth package⁴⁰, there is a quasi-permanent EU agenda in developing e.g. ACER/ENTSO network codes (highly technical regulation for network activities) and in connecting regional electricity markets via 'market coupling' and specific interconnectors, which do help the internal market. Also in professional services, a modernisation of the professional qualifications directive has meanwhile been enacted whereas in financial services and with respect to institutions and regulation concerning financial stability (including a banking union) much has been realised as well as recent as March 2014. It is not possible to do justice in this report to all these initiatives in what are rather technical solutions to each one of these sectors. The 4th rail package cannot of course resolve the core issues which will take a decade or more (e.g.

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³⁸ The 4th Railway Package includes an overarching communication – "The fourth railway package – completing the single European railway area to foster European competitiveness and growth", COM (2013) 25 of 30 Jan. 2013– and six legislative proposals, concerning the opening of domestic passenger markets and governance, the award of public service contracts, interoperability of the rail system, railway safety, the European Union Agency for Railways, and the normalisation of accounts.

³⁹ COM (2013) 627 of 11 September 2013, Proposal for a Regulation of the European Parliament and of the Council laying down measures concerning the European single market for electronic communications and to achieve a Connected Continent, and amending Directives 2002/20/EC, 2002/21/EC and 2002/22/EC and Regulations (EC) No 1211/2009 and (EU) No 531/2012.

⁴⁰ Note that Pelkmans & Kapff (2010) argue on economic and regulatory grounds for a fourth package.

interoperability and infrastructure investments, including intermodal). Nevertheless, it is useful as it attempts to tighten the discipline on properly activating the rail rules, ensuring appropriate conduct by Infrastructure Managers and authorities dealing with slot allocation and access tariffs and delegating more power to ERA (under a new name) including EU-wide licensing /certification of rolling stock, reducing administrative costs to the tune of € 500 million. The Connected Continent proposal on the single market for eComms is rather complicated, but essentially comprises a simplification of regulation for companies, greater spectrum coordination between EU countries, a standardisation of wholesale products, protection of the open internet (e.g. net neutrality, with options to have premium services at a price; consumer protection), what the Commission calls 'pushing roaming premiums out of the market' (the idea being that there be no difference between domestic, intra-EU and roaming calls by 2016) and consumer protection via drastic simplification of consumer telecoms contracts, greater transparency and easy switching.

Market integration deficits in rail

Not unlike other network markets, a number of 'rail packages' have been enacted by the EU legislator since 2001.41 In rail, however, building up an effective EU regulatory and competition regime is even more difficult than in other network industries with large sunk costs, for two reasons: the overwhelming dominance of infrastructure, both for capacity constraints and for the cost price of rail services,⁴² and the extreme legacy of the national orientation of the installed base and how it is governed. In many respects, rail has to catch up with other EU network sectors and EU practices in other goods or services markets, and this has been a very slow process so far. The three rail packages and the recast of the 1st package⁴³ have transformed the hopelessly inefficient or (often)

⁴¹ Building on unbundling (between the infrastructure and services businesses) and other directives from 1991 and 1995, which were far too limited.

⁴² Maintenance, renewals, new track, and/or terminals and/or marshalling yards and/or signalling and their depreciation may well determine some 80 % or more of the cost price of services. In addition, track access charges are national (which is a strange notion for European rail freight, let alone, corridors) and they differ a lot.

⁴³ Directive 2001/12/EC of 26 February 2001 amending Council Directive 91/440/EEC on the development of the Community's railways; Directive 2001/13/EC of 26 February 2001 amending Council Directive 95/18/CE on the licensing of railway undertakings; Directive 2001/14/EC of 26 February 2001 on the allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure and safety certification; Directive 2004/49/EC of 29 April 2004 on safety on the Community's railways and amending Council Directive 95/18/CE on the licensing of railway undertakings and Directive 2001/14/CE on the allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure and safety certification; Directive 2004/50/EC of 29 April 2004 amending Council Directive 96/48/EC on the interoperability of the trans-European high-speed rail system and Directive 2001/16/EC of the European Parliament and of the Council on the interoperability of the trans-European conventional rail system; Directive 2004/51/EC of 29 April 2004 amending Council Directive 91/440/EEC on the development of the Community's railways; Regulation (EC) No 881/2004 of the European Parliament and of the Council of 29 April 2004 establishing a European Railway Agency; Directive 2007/58/EC of the European Parliament and of the Council of 23 October 2007 amending Council Directive 91/440/EEC on the development of the Community's railways and Directive 2001/14/EC on the allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure; Directive 2007/59/EC of the European Parliament and of the Council

absent cooperation across borders into an EU framework for an internal market for rail services, both for passengers (although that part will always remain largely national) and for freight. But old habits, vested interests (of incumbents but also the state)⁴⁴ and the huge costs of transforming or upgrading the installed base (and known practices) in infrastructure, its day-to-day use and existing rolling stock, militate against the exploitation of that EU framework in ways that one might naively expect. There is a formidable gap between the broadly sound – though still incomplete - EU framework and the market reality. This gap must be narrowed rapidly and convincingly for market players, for a single market to assume much economic significance.

The key words to make this gap intelligible for non-specialists 45 are: national vs. EU regulation, European standards and interoperability, disciplines and quality control of Notified Bodies in technical rail conformity assessment, the powers of ERA, licensing regimes (for rail companies but also for rolling stock), anti-competitive (i.e. insufficiently unbundled) links between infrastructure and services, enormous differences in national track access charges (with many of them not leading to anywhere near full cost coverage of infrastructural costs, implying - major - subsidies for some operators, usually domestic passenger ones, but causing complexity for rail freight over several borders), EU disciplines on new national rule making, absence or improper use of competitive tendering procedures for Public Service Obligations in domestic passenger rail [not least, because domestic incumbents are monopolies, often state-owned], non-transparent public procurement in rail equipment, problems of access to terminals and marshalling yards for new entrants and insufficient entry (partly due to all these aspects, and the prior lack of EU-wide corridors) which perpetuates too weak competition in national and cross-border rail business. It cannot be the role of this report to illuminate all aspects, only some illustrations will be provided. The heterogeneity in track access charges will be analysed in Ch. 4. A critical issue is to overcome the engrained tradition of national technical and administrative rulemaking, to the extent that this is indispensable for the single market. This often closely related to European standardisation on safety and interoperability. In signalling, the advanced and expensive, but efficiency- and safety enhancing ERMTS system, full harmonisation has now become acquis, but the actual implementation is again subject to the financial constraint of investment: it will be a slow process, except on the rail freight corridors where it is an obligation. However, the 26 EU Member States (Cyprus and Malta have no rail) together have 11 000 rules (!) in place on

of 23 October 2007 on the certification of train drivers operating locomotives and trains on the railway system in the Community; Regulation (EC) No 1370/2007 of 23 October 2007 on public passenger transport services by rail and by road and repealing Council Regulations (EEC) Nos 1191/69 and 1107/70; Regulation (EC) No 1371/2007 of 23 October 2007 on rail passengers' rights and obligations; Regulation (EC) No 1372/2007 of 23 October 2007 amending Council Regulation (EC) No 577/98 on the organisation of a labour force sample survey in the Community; Directive 2012/34/EU of the European Parliament and of the Council of 21 November 2012 establishing a single European railway area (recast).

⁴⁴ For an authoritative and rather critical economic perspective, see Crozet, Nash & Preston (2012) ⁴⁵ It should be noted that a CoNE report to the EP on EU transport, including rail, by Steer Davies Gleave will be published in the coming months. This specialised report will provide a more systematic survey of the 'deficits'.

technical and safety in infrastructure and for rolling stock. This incredible and heterogeneous legacy is a major and costly stumbling block for the single market. The mandate for ERA, a purely technical Agency with - so far - only advisory functions on an intergovernmental basis, is of course far too weak in the presence of this mass of existing rules. In the 4th package, the proposal is to transform it into a new EU Agency for Rail (EUAR) with new powers : issue single safety certificates and vehicle authorisations, strengthened control by EUAR over the functioning of national rail safety authorities as well as Notified Bodies (with inspections and audit), bolster EUAR's role in removing unnecessary national rules, and verifying the compatibility of tenders for ERMTS with national technical rules (why other tenders for public rail procurement are not included here is not clear to the authors). All this is strongly supported by the suppliers of rail services and rail equipment in Europe⁴⁶ but the freight forwarders (key customers for freight rail) go even further and argue for a European Rail Regulator.⁴⁷ It stands to reason that the EUAR should also have a powerful role in case of disputes, in turn backed up by judicial review, but this seems not yet to have been proposed. Moreover, new national rules should be notified to EUAR or RISC (Rail Interoperability and Safety Committee) and carefully checked on their justification and potential to cause barriers (e.g. by giving priority to mutual acceptance), just as this has been done for decades now in other goods markets.48

The market reality is also clearly reflected in the limited and uneven degrees of market opening in rail. Our Table 8 sums up the very weak competition in rail freight in 2012, with national market shares of incumbents mostly above 50 % but often 100 % (EU weighted average 67 %) and with 20 of the 26 first freight operators being 100 % state-owned. One might perhaps argue, politically, in favour of the state-ownership of the incumbent for passenger traffic, but it is difficult to understand the rationale of state-ownership of rail freight companies which are a normal logistics business and have nothing to do with Public Service Obligations. Table 8 is based on national markets, which, for freight, is also becoming increasingly artificial when it is precisely a European market one is aiming for. However, even if privatisation would not occur, the real economic issue here is easy entry: once private operators can begin to discern a better business case in rail freight at the EU level, they might indeed enter more aggressively in future, thereby increasing competition and possibly introducing novel business models.

As for unbundling between railway undertaking(s) and the infrastructure manager, the issue is still of concern. Whereas for other network industries, clear separation of the ownership of networks and downstream services is positively perceived by (potential)

⁴⁶ See CER, UIP, ERFA and UNIFE (2012), Position Paper on the Future role of ERA

⁴⁷ CLECAT, Position Paper on the Fourth Rail Package, May 2013

⁴⁸ See A. Correia de Brito & J. Pelkmans (2012), Pre-empting Technical Barriers in the Single Market, *CEPS Policy Brief* no. 277, July, for details and assessment of the notifications over 22 years and the prevention of new intra-EU technical barriers from arising. For rail, also note the enormous scope and variety of technical barriers: in rolling stock, in spare parts (e.g. wheel sizes!), in signalling (when not ERMTS), safety rules (as distinct from technical rules) and different electrification systems.

private investors and new entrants, the assessment in rail is more ambiguous. Numerous practical difficulties arose in some countries implementing "full ownership separation" system (e.g. the Netherlands and UK).

Unfortunately, one should expect matters to move only slowly. Thus, the Commission expects, with the hoped-for adoption of the 4th package (which passed the EP in first reading), the removal of all unnecessary national rules only by 2025; the reduction in time-to-market for licensing of new railway companies would only be 20 % (again, in 2025) whereas the cost reduction in rolling stock authorisation (in 2025) would also amount to 20 %. And this is merely one of many aspects in need of being addressed.

• Market integration deficits in electricity and gas

After all those years there are still considerable barriers to the completion of the internal market for electricity and gas. Holding the view that the 3rd energy package of 2009 has resolved all problems and that it is now a question of implementation would result in a serious mistake.⁴⁹ Indeed, the nature of the problems and their highly technical and (often) country-specific nature render it next to impossible, and in any event inefficient, to lead this process by quasi-intergovernmental bodies of national regulators, not giving priority to the European public interest, and seeing internal market requirements as a residual question, after first ensuring national interests e.g. of the preferred energy mix. It is an elementary point, yet often ignored by national politicians, that national energy choices and their instruments almost always have (mostly, negative) repercussions for other Member States. For this fundamental reason, fragmentation - reduced by the three packages and some follow-up work of ACER - is typically re-introduced via uncoordinated national energy choices. The deep interdependencies in the internal market for gas & electricity therefore require greater centralisation for it to really work. But, of course, the foundation of such greater centralisation is first of all the political acceptance by all Member States that a balance between single market issues and the national energy mix (and other national interest in the short run) has to be sought at all times, and that national initiatives have to be coordinated before being introduced. Gas and electricity are archetypical markets where a single competent EU regulator can be 'hands-on' and employ profound economic and engineering expertise to drive the process on a daily basis and from an uncompromising EU-wide (single market and energy policy) point of view. The establishment of ACER and ENTSO (G/E) imply a significant improvement and the development of 'network codes' as well as the explicit and permanent attention to 10- year investment plans certainly go in the right direction. Whether it is sufficient to pre-empt national impulses, is far from clear, however. For example, investment plans are neither EU-driven nor EU-financed nor directly built in an EU-wide perspective; what is actually invested, where, and indeed what is not invested but should, is not decided by ACER or the EU at large. Also, the distortions caused by

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⁴⁹ See e.g. Kapff & Pelkmans (2010) for a detailed regulatory and economic criticism of the package with respect to the (lack of) incentives to build cross-border interconnectors, and suggesting additional measures to improve such incentives.

renewables are the result of a far too wide discretion for national politics which was imposed by the Member States several years ago to begin with.

Barriers to the internal market are relevant for the wholesale and retail markets. Cross-border investment in interconnectors, sometimes (gas) storage and/or LNG terminals, as well as the further alignment of longer-term contract pricing with spot or short-term forward prices in power exchanges or hubs are the main issues. There are problematic issues about incentives, possibly coupled with EU regulation or competition policy. These have to be addressed and the 3rd package has not done this sufficiently. In chapter 4, the distortions in wholesale markets (e.g. in generation) caused by RES subsidies (and other national) interventions in some EU countries are discussed and their economic consequences for the internal market, and regions inside it, explained, in particular for energy intensive industries.

As to retail markets, the barriers are even more important. Table 2 gives a sketchy summary of the barriers identified by ACER (2013) in its most recent report. The overall message is abundantly clear: to enjoy a genuine single energy market at the retail level alone, a systematic policy blending harmonisation (e.g. of cost methodologies), vigorous competition policy, and detailed scrutiny of national practices is needed, whilst regulated tariffs – first for business, and later and gradually for consumers (poor consumers can be helped in other ways) – have to disappear. Again, one wonders whether this can be accomplished within the remit of ACER or whether stronger central powers are called for.

Table 2 Barriers to the Electricity and Gas Internal Retail Market.

	Electricity		Natural gas
1.	Entry / exit rates (an indicator of effective competition)	1.	Entry/exit rates (an indicator of effective competition)
2.	Regulated tariffs (many different forms; many EU countries; some below costs, deterring entry; even business tariffs are not always free)	2.	Regulated tariffs (see electricity, for all aspects)
3.	Consumer switching (can be complex or with some uncertainty)	3.	High profitability of incumbents (persistent high mark-ups in many EU countries with weak/soft liberalisation)
4.	Regulatory framework (at national level) (a) complex licensing	4.	Illiquid and concentrated wholesale markets
5.	Idem as 4., (b) non – accredited licensing (implying preferential treatment of some EU countries)	5.	Regulatory framework (at national level) e.g. 'vintage contracts' (Baltics)
6.	Idem as 4., (c) non-cost-reflective charges, which are hard to contest	6.	Extreme taxation and network fees, undermining the ability to compete on price as such; such taxes and fees also differ a lot between Member States which causes distortions
7.	Extreme taxation, rendering it barely worthwhile trying to enter and compete on price as such	7.	Consumer switching (idem, as 3., in electricity)
8.	Inadequate unbundling	8.	Design and subtle details of retail markets differ a lot among EU countries

Source: Authors' elaboration

2. Deficits in EU financial market integration

Financial market integration is still a major problem in the EU. This is true despite several generations of EU financial services regulation,⁵⁰ many years of witnessing huge money and capital flows inside Europe and beyond, and the emergence of the euro (now for 18 countries) already 15 years ago. The lack of a deep and well-functioning internal financial market is very costly and distortive. The problem is not just highly technical; it manifests itself in various ways and activities, which renders it difficult for everybody, including MEPs, to appreciate the full extent and complexity of the question. In the following we cannot hope to do more than raise awareness of the problems and the (considerable but insufficient) degree to which they have meanwhile been addressed.

The fact is that, today, there is significant, if not profound, fragmentation of financial markets in the Union. In its newest report, the ECB [ECB (2014, p. 13)] says that 'a relatively high degree of fragmentation still remains'. First of all, a prominent reason is found in perceived or feared financial instability. The crisis and much what it entailed has increased fragmentation forcefully, due to the collapse of trust and confidence a few years ago and the (later) perceived risk of re-denomination (out of the euro) as a result of a possible break-up of the euro area. At the outset of the financial crisis, the (European) interbank market suddenly dried up, and subsequently various instances of actual or feared contagion (due to the adverse nexus between sovereigns and banks) have caused profound disruption in the EU internal financial market. The origin of this part of the fragmentation is lack of trust and the lack of appropriate Eurozone institutions (and funds) which can swiftly and effectively deal with (incipient) bank failures without implicating the market and irrespective of the debt status of sovereigns. In addition, a host of other arrangements were required, restoring, if not firmly improving, the credibility of the governance of the Eurozone. However, this is not only a Eurozone problem, as non-euro EU countries have also allowed major policy failures (including lousy bank supervision, etc.) and practiced serious neglect of financial stability issues. Therefore, the new generation of prudential rules and (more European) supervisory institutions, complemented by a range of other financial regulation initiatives (e.g. on derivatives, credit rating bodies, against market abuse, fund managers, etc.) is a necessary condition to restore trust and sound financial regulation and institutions in the Union. Recently, this has been further improved by what is called 'banking union', a truly EU-wide (with opt-ins for all EU countries not in the eurozone) regime to centrally supervise big banks (85 % of all EU bank activity) and exercise effective bank resolution if

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⁵⁰ The first generation (mainly about the right of establishment) in the late 1970s, the second in the late 1980s, the third between 2000 and 2006 (called the Financial Services Action Plan, more than 40 directives and regulations), followed by the recent wave of financial markets regulation (the fourth wave of EU regulation can be said to be prompted by the financial crisis, dramatically deepened after the collapse of Lehman Brothers, late September 2008). The fourth wave consists of more than 40 proposals (most of them EU law by now), conveniently summarized [with succinct wording about their underlying rationales (e.g. market failures and regulatory deficits/loopholes)] in Commission Memo/14/352 of 15 May 2014, Economic Review of the financial regulation agenda, frequently asked questions, Annex. See also COM (2014) 279 of 15 May 2014, A reformed financial sector for Europe, an extremely rich survey.

indispensable, with the funds needed and based on the 'bail-in' principle (of private owners and, if necessary, large depositors, having to accept the losses of bank failure). Once effective ECB supervision will begin (November 2014), this source of fragmentation will be terminated. Indeed, as chapter 4 will show in brief, the new governance and new regulations of EU's financial market in this respect have already prompted some degree of restoration of the *pre-crisis deepening* of financial integration.⁵¹

However, there is a host of other factors causing fragmentation. Thus and second, there is the split between the 'ins' and 'outs', the eurozone and the non-euro countries. This split is less than ideal for financial market integration, even if many rules and most institutions for market functioning are EU-wide and need not be affected. But there are likely to be interest differentials, Eurozone-driven institutions and practices with opt-ins (but not all non-euro countries join), exchange risks for financial services between the two zones, degrees of stringency in specific disciplines that non euro countries may not judge necessary, etc. However, it is also good not to exaggerate the split as many safeguards are in place. The most important one is the single rule book for the entire EU financial market. Also, the ECB and EBA work for the EU and neither solely nor primarily for the eurozone banks. Furthermore, a double voting majority system was introduced in EBA's Board of Supervisors, pre-empting block voting (say, by the Eurozone) against the EU public interest. Finally, in the SSM regulation a kind of non-discrimination clause has been incorporated, prohibiting direct or indirect discrimination against any Member State. Similar provisions exist in the SRM, the resolution mechanism. Third, one ought to distinguish wholesale from retail financial markets. Although both have suffered from barriers or regulatory heterogeneity between Member States (causing higher costs, at times making cross-border operations uninteresting), retail markets have remained more fragmented due to locally distinct consumer protection and several other reasons. Fourth, the EU has gone through a process of discovery about numerous, often technical, barriers as well as private standards, hindering cross-border transactions, making them more costly as well as pre-empting innovative EU-wide solutions or services. It has turned out that these technical barriers, standards and local conventions were far more important than suspected a decade ago. Moreover, they have been found in all four key markets of finance, that is, money, bonds, equity and banking. The crisis and the mere existence of the Eurozone, due to its desire to deepen market integration (given its aims) as well as for better monetary transmission of the ECB monetary policy, have greatly stimulated technical convergence programmes and encouraged legislation, in order to remove these technical barriers and/or help private parties to arrive at common standards.

Thus, at the wholesale level of money markets, ECB's TARGET2 has been a major improvement for financial integration in that it is the first market infrastructure which is completely integrated and harmonised at European level (with 18 euro and 5 non euro central banks). This single platform is used for processing euro payments (some 363 000 per day, a value of € 1935 billion on average per day) and managing accounts of financial

 $^{^{51}}$ Helped, it should be noted, by powerful ECB commitments such as OMT and many more conventional ones.

institutions with their central banks. At the retail level, the SEPA (single EU payments system) has finally been firmly established, after much delay.⁵² It replaces credit transfers and direct debits based on divergent national rules, causing costs and delays for cross-border payments. After incurring one-off costs of transition, SEPA will permanently yield significant benefits. Commission proposals are pending on the extension to card, internet and mobile payments as well as 'inclusion-based' consumer protection issues such as disciplines for bank fees for accounts and facilitation of payment account switching. It is well-known that one obstacle for cross-border B2C e-commerce consists in the non-acceptance of credit-cards in other EU countries, just one example of the benefit of the new proposals doing away with this nuisance. For mortgages, a classical fragmented activity, the Mortgage Credit directive 2014/17 should finally create an efficient and competitive single market for consumers, creditors and credit intermediaries (who can qualify for an EU-wide 'passport' for services provision), while providing (mostly) higher consumer protection and greater financial stability. However, it cannot of course remove exchange risks for non-eurozone consumers taking a mortgage in Euros.

In equity markets, the 2001 Giovannini report found a long list of barriers and heterogeneity of rules and standards in clearing & settlement (and custody) activities of stock exchanges, and a follow-up in 2010 53 showed that not much had been done about it. Giovannini saw three reasons for a lack of action: complexity (putting off policymakers as there was no political pay-off for them at all), few perceived gains for the sector and vested interest fearing more competition. Although the ECB (op. cit.) speaks even of 'deep' fragmentation of the EU post-trade market (in securities), the status quo of 2010 is subject to flux nowadays. The Commission proposed the Central Securities Depository (CSD) Regulation on improving settlement and a range of prudential and technical provisions for authorisation and supervision of CSDs. 54 Meanwhile, the ECB's Target2-Securities project will provide a single platform capable of settling securities transactions in central bank money across intra-EU borders, CSDs and currencies. There will be no price difference between domestic and cross-border transactions. It is expected that this initiative will lead to further harmonisation, both private and public, in the newly founded European Post Trade Group (with the Commission, ESMA, ECB and the private sector). In 2012 the EU market infrastructure regulation (EMIR) entered into force. It deals with a major omission of the EU regime before the crisis, namely that OTC (over the counter) derivatives often had no counterparty, thereby generating much greater instability than necessary. This creates serious risks, given the enormous sums involved. These financial products now must seek mandatory clearing. In addition, central counterparties (CCPs) are regulated and will have to be authorized; non-EU CCPs can be recognised as well. Furthermore, trade repositories also have to be authorized (by ESMA).

⁵² The delays are illustrated in Graph 32 (p. 34) of ECB (2014), showing a rush to near-100 % only early in 2014, with direct debits being the foot dragger.

⁵³ A. Giovannini (2010), "Why the European Securities Market is Not Fully Integrated", chapter in A. Alesina and F. Giavazzi (eds.) (2010), *Europe and the Euro*, The University of Chicago Press.

⁵⁴ In December 2013, political agreement was reached in conciliation between the EU legislators.

In bonds markets, the ECB has undertaken initiatives to revive structured finance in Europe, after its disastrous collapse, especially via the promotion of more simple and transparent asset-backed-securities⁵⁵ and by supporting labels for standardised products such as covered bonds (amounting to a suggested value of € 1.4 trillion).

Altogether, there are a number of legislative, technical and private initiatives which seek to reduce barriers and attempt to realise a greater homogeneity of rules and practices with a view to enhance financial market integration in the EU. In the longer run, these are likely to reduce the fragmentation of the single financial services market. However, as chapter 4 will briefly summarise, there is still a considerable, lingering fragmentation, especially in banking markets, but surely also in equity and retail. One may also wonder how much or how little incentive has remained for cross-border mergers, for example. The recent and ongoing initiatives are seen as highly beneficial for the whole EU in terms of cost reduction, removing distortions and allowing more scope for innovative European services in some cases, apart from enhancing at times the monetary transmission in the Eurozone.

3. Deficits in the single market for professional services

It is widely thought that the internal market for professional services is highly fragmented. However, empirical knowledge in the EU is limited, as chapter 4 will show, to the core professionals and some other categories (with some selected data from the Mutual Evaluation in 2010). The core group of professional services are part and parcel of the much wider category of regulated professions, the latter comprising some 800 activities. In the latter, perhaps one-quarter refer to activities regulated in only one Member State. Another considerable number of such activities are regulated by a few Member States. In these two groups, it is hard to imagine that such regulation is firmly based on recognised market failures. If this were the case, one wonders why other Member States would not have regulated the qualifications for providing such services. It is entirely possible that the clear and undisputed quality of such services is an issue, but if there are no market failures, the proper solution is to find ways to be recognisable and distinct for consumers and users, so as to inform them when deciding to enjoy the service. Quality recognition of services can be achieved via market-based means, without restrictive regulation, via transparent quality marks, private independent certification, transparent and independent rating systems, branding or plain reputation. Hence, in all those cases - unless a convincing justification in the European public interest can be provided - restrictive regulation (which in actual practice will also throttle market access for other EU providers) should be removed and replaced by market-based means of signalling quality. The more EU countries do regulate a certain profession, the more one might suspect that there might be a public interest case for such restrictions, in other words, there would be a societal benefit, overcoming market failures, presumably outweighing the costs including those of the access restrictions. These instances would

⁵⁵ E.g. for consumers, leasing, credit card ABSs and mortgages.

have to be tested and verified. If the given justification passes a European public interest test, the next issue is how market access between EU countries can be made as easy read, least-costly - as possible. This might be achieved via mutual recognition, or based on an EU set of requirements for such qualifications, be it private (but recognised) or public, or via harmonisation. Finding such solutions corresponds to a serious challenge to national traditions. It is known that, even inside federations such as Germany or Switzerland but just as much the US (under the heading of occupational licensing),⁵⁶ a functional solution is not so easily found, and some degree of fragmentation has been accepted.

The EU internal market regime has improved during the last decade or so. It combines two directives⁵⁷ encouraging mutual recognition under the so-called 'general system' (based, respectively, on 'equivalence' and on 'experience'), harmonisation of minimum training (for 7 professions such as doctors, nurses, midwives, pharmacists and architects) and a special regime for lawyers and self-employed commercial agents. Some of the main points are summarised in Table 3.

Table 3 EU System of recognition of professional qualification

	Sectors of application	Notes
Harmonisation of minimum training requirements	 Medical Doctors, Nurses, Dentists, Midwives, Veterinary Surgeons, Pharmacists Architects 	After a two-year period there is automatic recognition. However, lingering barriers lie in the different languages spoken.
Mutual Recognition (Directive 2005/36)	800 professions (except lawyers and commercial agents)	MR applies under the so-called 'general system'; it is of course conditional to specific requirements, but the concept of equivalence prevails.
Mutual Recognition (Directive 2005/36) cntd.	4. Professions in craft, commerce and industry	The concept of experience prevails
Special regime Directive 86/653	5. Lawyers6. Self-employed commercial agents.	
Directive 2013/55 on recognition of professional qualification	7. Amending the previous legislation	

In chapter 4 we shall provide the available, scattered evidence on restrictive regulation on professional qualifications, with the help of an OECD indicator and otherwise, as well as

⁵⁶ See a survey Carpenter, Knepper, Erickson & Ross (2012), License to work, a national study of burdens from occupational licensing, Institute for Justice, May. This study is about 102 occupations, very few of which would be regarded as core professionals (such as doctors, nurses, pharmacists, or for that matter lawyers, architects, accountants, etc.) and many which raise serious question marks (including e.g. bartenders, florists, shampooers, barbers, makeup artists, coaches, school bus drivers, tree trimmers, animal trainers, funeral attendants, fishers, forest workers, milk samplers or packagers.

⁵⁷ Note that these also fall under the horizontal services directive 2006/123, imposing an obligation for Member States to cooperate (on mutual recognition) and create a Point of Single Contact.

the evidence on the liberalising effect of the horizontal service directive in intra-EU market access (whether trade in services or FDI).

Some idea can be had from data in Mustilli & Pelkmans (2013, Annex 2). In this contribution, six large services sectors are studied in terms of a range of intra-EU barriers, including authorisations: wholesale/retail, tourism, construction, real estate, business services and private education. It is conspicuous that authorisations for establishment of a company are often required, less so (on average) for cross-border trade, or less so for intra-EU trade *after* the service directive entered into force. Authorisations are not automatically very restrictive, it all depends. However, more often than not, the professional qualifications come in here and they may create costly barriers for professionals from other EU countries (who, as a rule, should be expected to be competent as well under the equivalence principle, unless one willingly assumes that other Member States' professionals are no good).

In March 2014, the Commission released a work plan⁵⁸ that was meant to report the yearly progress of national reforms on services. The aim was twofold: keeping track of the implementing status of the work started by the Services Directive and establishing a strong communication with the member states on the domestic reforms undertaken. On the sector under scrutiny is services provided by regulated professions where member states were asked to facilitate the access to certain professional activities and to play actively a role on transparency and mutual recognition.

4. Market integration deficits in road haulage

The internal market of road transport is fairly advanced. This is due to the liberalisation, including cabotage, and accompanying social and technical harmonisation accomplished many years ago. However, it is also a good deal easier as road haulage is not a network industry and does not suffer from the huge installed base legacy problems as rail does. Moreover, it is a highly competitive sector with hundreds of thousands of firms and few entry barriers. Nevertheless, there are lingering 'deficits' and these become more numerous once one includes closely related areas such as road traffic rules and environmental questions. Lingering 'deficits' include some minor restrictions on cabotage, differences between Member States because the harmonisation of employment conditions has been deficient (having caused a significant worsening of working conditions for drivers in the EU-15 and very little progress for drivers from new Member States, often replacing them via circumventive legal constructions, very similar to the problems of the posted workers directive [see Box in section I of the present chapter]), persistent differences in road charges, and a lack of success in European standardisation of tolls gat systems (with trucks requiring up to 11 systems if covering the entire Union). One can extend this set of deficits for road safety and environmental requirements, possibly yielding significant economic gains once overcome⁵⁹.

⁵⁸ Commission Staff Working Document, Workplan for reporting on national reforms in services markets, SWD (2014), 31 March 2014

⁵⁹ The forthcoming report on CoNE on transport (by Steer, Davies Gleave) to the EP is expected to

IV. Sensitive Sectors: Security Services and Gambling

1. Security Services

Private security services is a growth sector. It is also successful across intra-EU borders despite the strong national emphasis on its functioning, given the close linkage with public security as well as public security policies in every Member State. Its success in the internal market is not due to the services directive 2006/123, since it was taken out of its scope before the EP enacted the directive 60. Rather, it is due - in terms of Figure 1 - to the 'penthouse' of Figure 1, that is, the rulings of the CJEU on free movement and the right of establishment also for a service sector related to the 'public order' of Member States. National regulation is understandably strict, but uneven between EU countries. Hence, the fragmentation is considerable. Both company licenses and individual guards licenses are required, and the scope of allowed activities differs (e.g. some EU countries forbid that private security firms also provide other services). One amongst several reasons why the sector resists being under the services directive is the lack of close collaboration between justice and police authorities, with respect to screening and vetting of personnel, including workers coming from other Member States. A particular subsector in this area is 'electronic security services' which legally falls under the services directive, because such services are the technical complement of goods, namely, security products and systems, and have no direct relation with public security. However, that does not mean that these services move freely across the internal market, unlike the goods for which their technical services are meant (installation, maintenance, repair, alert services, etc.). There are national (rather than EU) standards, national licensing schemes, insurance coverage, local safety restrictions as well as barriers to cross-border skills movement due to problems of non-recognition of qualifications.

2. Gambling

Gambling services can be divided in location-specific gambling (e.g. casino's), sports betting and on-line gambling. The first two submarkets used to be heavily fragmented due to a great diversity in national legislative frameworks in order to protect consumers against addiction and extreme indebtedness, to exclude minors, to prevent fraud and misleading practices (e.g. in advertising) and for other reasons in the public interest. Many Member States introduced gambling only in the framework of national regulated (even state owned) monopolies. Due to a series of CJEU cases and stricter enforcement by the Commission, the right of establishment has been liberalised to some extent. This means that national markets have selectively opened up, under regulatory safeguards. But free movement of such services was still restricted or impossible, given the disparities of national regulation and licensing. However, rapidly growing on-line gambling has changed the market context: casinos are sometimes under competitive pressure - as some players see these two services as imperfect substitutes - and national regulation

deal with the lingering deficits in a narrow sense as well as with the ones with closely related policy areas (which are likely to be of greater economic importance). Therefore, he present report will be not elaborate here, nor in chapter 4.

⁶⁰ High Level Group, pp. 46 - 48

/licensing has great difficulties to check and control the consumption or provision of services over the internet, nationally legal or illegal. Following the 2011 Green Paper61 and the Commission's communication COM (2012) 596, a non-legislative roadmap is now followed, in close cooperation with Member States and the gambling industry. Fragmentation is expected to be partially overcome by codes of conduct (on advertising, this seems to work well) and mutual persuasion about the effectiveness of e.g. different risk-based approaches, identification techniques, payment procedures, etc. So far, it is regarded as undesirable, also in the light of diverse preferences of an ethical and public order nature, hence, deep roots of subsidiarity, to strive for EU regulation of these submarkets

V. Acquis issues in cross-cutting economic activities

The four cross-cutting economic activities which will be discussed in this report are retail services, the digital single market, logistics services across the EU/EEA and the horizontal consumer acquis.

The internal market for retail services

Retail is a huge sector in the EU. Not counting car sales and financial retail, its gross value added amounts to some 9.6% of all EU Gross Value added, its employment is 13% of the EU labour force and it incorporates no less than 5.5 million enterprises. Of course the retail sector already benefits enormously from the single market for its procurement and value chains, as well as in terms of the variety of goods and services. Nevertheless, there are still barriers and most of them are not so much 'sectoral' but cutting across different government/EU areas.

Retail, cross-cutting Single Market issues

- I. Market access from other EU countries, subject to discrimination
 - (forbidden) economic needs tests
 - permits/licensing de facto disadvantaging new entrants
 - once established, some EU countries take discriminatory measures
- II. Private barriers along national lines, due to 'branding' restrictions
 - forced procurement locally, rather than freely from the EU anywhere
 - restrictions on selling across intra-EU borders
- III. National consumer protection having single market fragmentation consequences
 - Rome I convention and CJEU case law impose 'choice of law' for local consumers (destination principle) which (may) create up to 27 cross-border 'trade-costs' due to regulatory heterogeneity [unless aspects are (more) harmonised]
 - The Consumer Rights directive helps, but not that much barriers would

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⁶¹ Green paper on on-line Gambling in the Single Market. 24/11/2011

significantly reduce if harmonisation would be accomplished for licensing, testing of consumer goods, consumer information

- Technology-based solutions not allowed
- IV. Restriction of local competition via planning, zoning, etc.; whatever the good or bad reason in the past, does this make sense in an on-line shopping world?
- V. Should e-commerce still be regulated separately from off-line retail commerce? Doing so might lead to distortions or barriers [e.g. 'channel neutrality']

Whereas the first category of barriers is plainly about (lack of) free movement or not enough right-of-establishment, the second category is probably the result of trademarks, although this use of IPRs would seem to be anti-competitive and against the internal market. The third one is private law (Rome I) as well as consumer protection, which, in the EU, is only partly harmonised. The fourth type of barriers is classic in retail but typically local, and probably fall outside the EU remit despite the restrictive effects they may entail. The fifth one is a newer question, prompted by the very rapid growth of online sales; it is suggested though not yet verified authoritatively that distinct combinations of online and offline regulation might imply distortions or de facto barriers in the single market. Any EU strategy to bring about a genuinely single retail market is therefore bound to be complex due to its cross-cutting nature. Beyond the achievement of a truly single market, the proper functioning of a single market for retail also depends greatly on two other cross-cutting issue-areas: the digital market and efficient, seamless EU-wide logistics.

2. The Digital Single Market

The Digital Single Market forms a combination of a single market for eCommunications (eComms) – the fragmentation of which is clear from Table 662 – and a large number of issues on the demand side and with respect to infrastructure of both eComms and internet aspects. Those demand side and infrastructure issues render a single market impossible for practical user or consumer operations, and/or for applications in many ways. The Digital Agenda is therefore much broader than the Digital Single Market; however, the economic exploitation of the latter, in particular in a dynamic sense, will be so much more effective with a successful pursuit of the former. Indeed, one may envisage distinct quality levels of a single (digital) market which has no barriers, but, for the single digital market to serve the overriding purpose of stimulating economic growth, minimum quality levels for e.g. infrastructure (fairly high speed broadband and enough spectrum in the right wave lengths) are required. Once this target is set, it is appropriate

⁶² The summary in Table 6 with respect to the single market in eComms is of course grossly insufficient once one starts to 'zoom in' on the specific barriers and distortions in some detail, so as to identify where what type of remedial action might be undertaken. For an in-depth approach of the lingering barriers, and a detailed explanation of exactly why practically no European-wide eComms services are offered as yet on the wholesale and retail levels, see Van Gorp et al (2011), esp. Chapters 5 and 6. Another systematic approach which also includes an appraisal of the Connected Continent proposal as well as a cost/benefit analysis is found in Marcus et al (2013), a study for the EP.

to be demanding in the coverage level for the EU as a whole, even when this is costly in sparsely populated regions. If one would not do that, a 'digital divide' (in terms of quality, hence applications and offerings) might remain or even grow worse. How far one wishes to go into the direction of near-full coverage is a political (and financial) choice.

The initial Digital Agenda of 2010 63 is therefore adding up to a huge list of items in seven domains:

- (a) vibrant digital single market
- (b) interoperability and standards
- (c) trust and security
- (d) fast and ultra-fast broadband access
- (e) research and innovation
- (f) digital literacy, skills and e-inclusion
- (g) ICT-enabled benefits for EU society

plus 'international issues', altogether some 100 items to pursue, plus the added one on durable solutions for voice and data roaming (set to be solved by 2016 in the Kroes package). Such a huge list risks to degenerate into a shopping list, especially because only a part of the list is clearly related to the Single Market, with a firm EU-level legal basis. A 2012 EP report on the Digital Single Market ⁶⁴ has insisted on prioritisation, a sound request.

The European Commission has, however, added two series of further Digital actions, as follows:

- in January 2012 ⁶⁵, five groups of initiatives related to (a) legal and cross-border offers of online products / services; (b) improvement of consumer protection (also via better information), (c) reliable and efficient payments and delivery systems; (d) more effective dispute settlement (whilst combating abuse); (e) high-speed networks and hi-tech solutions.
- in December 2012 ⁶⁶, another seven initiatives, with two on infrastructure (stable broadband regulatory environment & Connecting Europe Facility loans), two on related industrial policy (an 'Airbus of Chips', a new electronics industrial strategy; public sector buying power on cloud computing), a Grand Coalition of Digital Skills and jobs (given the shortage of IT specialists), an EU cyber security directive and an update of EU's Copyright framework, given that 'content rights' are usually national and subjected to price discrimination in the internal market.⁶⁷

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⁶³ COM paper of May 2010 on the Digital Agenda.

⁶⁴ EP, 2012, Roadmap to Digital Single Market, DG for internal policies, Dep. A, Economic and Scientific Policy

⁶⁵ COM (2011) 942 of 11 Jan 2012, A coherent framework for building trust in the Digital Single Market for e-commerce and on-line services

⁶⁶ COM (2012) 784 of 18 Dec 2012, The digital Agenda for Europe, driving European growth digitally

⁶⁷ It should be noted that this kind of geographical price discrimination can, but need not, lower economic welfare if national markets have distinct characteristics. At the same time, the deep

The upshot is that the Digital Agenda Scoreboard in June 2013 counted 132 actions of which, at that moment, 61 of the first 101 were completed and 9 of the 32 additional ones. It goes without saying that the present report cannot possibly do justice to these numerous proposals, let alone, provide a critical discussion. With respect to chapter 4 (where the Costs of Non Europe feature), such a lengthy (laundry) list of items is impossible to be 'costed' exactly, if indeed all items are susceptible to such quantification even in principle. Whatever quantification has been published, by definition these must be proxy figures of what amounts to a complicated strategy, including national and EU, private (e.g. standards) and public, diffuse and precise measures. It should be noted that a CoNE report for the EP by GHK is under preparation on eCommerce aspects (widely conceived) of the Digital Single Market ⁶⁸.

Paying attention to specific proposals immediately clarifies how difficult it will be to accomplish a genuine single market in both eComms and in the many internet-related services and offerings for consumers and users. One example of such intricacy, a subject with a clear cross-cutting nature, is copyright in the digital environment. The core of the many issues here is that 'contents' (hence, the rights involved) are under national law, indeed private law which is not normally an area for EU involvement. As the CEPS Task Force⁶⁹ has explored in detail, modern regulation of copyright in the digital environment touches upon many areas of law, as well as social and economic policy areas. The area is critical for the realisation of a Digital Single Market from the consumer point of view, as well as, sometimes, for achieving scale. The report deals 'only' with three important aspects: licensing rules and practices in the online music and film sectors, the definition and implementation of copyright exceptions in the digital environment, and the present and future of online copyright enforcement in the EU. There are many vested interests in the area. Moreover, whereas some of the incredible fragmentation would seem to be hard to justify and ought to be addressed firmly, other forms of catering for 'national tastes and preferences' may well be appropriate given languages, national cultures and other differences. At the moment of finalising the present report, the Commission is preparing a White Paper on these questions, following a consultation in 2013.

Single Market in Broadcasting

The EU is highly ambivalent on the single market in broadcasting, for sound and less sound reasons. Two recent quotations make this clear. The Commission's Green Paper says: "The main rationale for the regulation of audio-visual media services at EU level has been the Internal Market, with the country-of-origin principle at its core". It should be remembered that the origin

fragmentation in markets for music, films, videos, etc. (also given languages), prevents scale and critical mass in Europe, which has profound consequences for competitiveness of these sectors.

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⁶⁸ This report is expected to inspect, and possibly estimate the costs of 'deficits' in, the following area of EU regulation as far as they affect e-commerce: sales law, data protection, E-identification/authorisation, collective rights management, orphan works, re-use of public sector information, alternative, resp. On-line dispute resolution.

⁶⁹ Mazziotti (2013), rapporteur for the Task Force, with practically all (of many) stakeholders actively participating.

principle (here, the right of transmission principle) is radical and can be intrusive. At the same time, consumers typically experience audio-visual services as overwhelmingly national, if only for reasons of languages and subtle but critical aspects of national or regional culture, social habits and affinity with local networking and personalities. Insofar as such reasons play a role, consumer satisfaction cannot normally be achieved by artificially striving for a 'single market' in the practical sense, hence, there would seem to be little point in pursuing this except where justified explicitly. The report of the High Level group on Media Freedom and Pluralism confirms this in a more general way: "Culture and media are traditionally areas which are not treated at the European level". Yet, the High Level Group pays explicit attention to the fragmentation of the single market for broadcasting services, even though the Audio-Visual Media Services directive does comprise some harmonised rules on advertising, promotion of EU works, protection of minors and a circumvention clause for cross-border channels. The Group mentions 'arbitrage' between different national regimes on 'libel laws', disparate efforts of enforcement, national differences in taxation, subsidies and data protection, and finally a proper definition [now lacking] of the composition and role of national regulators as well as ensuring their full independence [which is not ensured at the moment]. All of these can and do lead to distortions and at times to de-facto barriers. Meanwhile, on 3 February 2014 the Commission has established a European Regulators Group for Audio-Visual Media Services.

The Green paper adds other barriers in the internal market for audio-visual services. It first notes that audio-visual media services delivered online often remain of limited choice and of disabled access usually based on geographical (read: national) delimitations. 'Applications in smart TV sets are often restricted by national settings and manufacturers pre-selected choices and access to content from other EU countries is often blocked'. There are also standards issues. Thus, for 'connected TV sets' (already some 40 million devices in the EU in 2013, and quickly increasing in number) there is an ETSI (i.e. European) standard called HbbTV, but Italy uses the MHP standard and other countries develop national specifications of HbbTV which tends to reduce interoperability. There are also concerns about market distortions arising from regulation which is different for 'linear services' (traditional TV) and non-linear services. Finally, the High Level Group shows considerable concern about a lack of competition in (some) domestic audio-visual markets, thereby not only undermining an important EU principle but also de facto creating barriers-to entry from other EU countries. The Group recommends a sectoral Inquiry by DG Competition, a strong signal of their concern.

There are two main sides to a potential EU broadcasting market. First, the 'platform' side, i.e. the ability for an operator in a Member State to be able to extend its reach beyond the national borders, using the same or an equivalent broadcasting technology. Despite the relative sophistication of the AVMS Directive, as well as the significance of the origin principle, there is no evidence at the moment of deepening platform integration in the EU. Similarly to electronic communications markets, technical services in broadcasting markets tend to be offered under substantially different terms in different EU countries, and with the additional difficulty that those Member States which use terrestrial broadcasting have transitioned to spectrum-based Digital Terrestrial TV (DTT) services, often without seizing the opportunity to increase competition (if not, as in Italy's case, with the apparently explicit intent to diminish it, as the European Commission and the CJEU have found).

The second side to the potential development of an EU internal market in broadcasting is in the form of cross-border programme offerings. Here the difficulties on the demand side lie mainly, as noted above, in consumers' preferences. On the supply side, the main obstacle is business practice, which has grown out of decades-old interpretation of exclusivity clauses, which makes it a standard to sell rights with full exclusivity in each territory. There are several ways in which this standard could be changed. First, of course, a re-interpretation of the exclusivity principle, which might favour non-exclusive arrangements when this can promote cross-border offering. However this is unlikely, given the current case law. Second, an active promotion of internal market offerings. The European Commission has recently opened an investigation in rights licensing between several major US film studios and the largest European pay-TV broadcasters. However the focus is mainly on the so-called 'grey market', i.e. the ability of users in an EU country to 'port' their programme offerings to other Member States. It is unclear whether the possibility to allow users in a Member State to directly subscribe to programme offerings in other Member States will, or might, actually be pursued.

Of course, when observing the broadcasting market (including online alternative services and VoD, etc.), it is also clear that the traditionally sharp dividing line between national services is softening recently. Consumers, used to global access to many internet services, find it rather frustrating that certain audio-visual services online are frequently defined or accessible only nationally. Thus, the 'unmet' demand for VoD services from Pay-TV operators from other Member States is estimated to be some € 760 - € 1610 mn (in 2012). At the same time, some services - hard to receive via cable TV - might increasingly be available across borders via online services. Much of these issues are critically dependent on copyright questions in a digital environment. Fragmented copyright underlies modern business models in the audio-visual industry and hardens the resistance to opening up to the single market. Languages help to sustain intra-EU price discrimination, too, but technology might eventually be able to overcome this with simultaneous subtitling and other innovations. A selected europeanisation of these services is not only of interest to EU consumers but should also help improve the competitiveness of EU-based producers of content against strong American competition. The Digital Market and audio-visual services are intertwined and will have to be solved together.

Nowadays it is exceedingly hard, and perhaps no longer useful, to separate eComms (the transport of bits for telecoms, internet and broadcasting) from what is called the Digital Agenda on the demand and infrastructure side. Even if one may still focus on the eComms market, its consequences have to be thought through for digital services and bottlenecks. The 2013 Kroes package on the Connected Continent focuses mainly on the internal eComms market, but clearly in a digital context. The incredible internal market fragmentation in a sector with such a successful liberalisation in terms of prices and variety of new services is a curious phenomenon. Since price disparities (Pelkmans & Renda, 2011; Maincent, Lorenzani & Eordogh, 2013) are often extremely large, the integration deficits are likely to be 'deep seated' and many. It is only recently that more careful attention has been given to these deficits.

Table 4 summarises the seven aspects of the September 2013 Commission Connected Continent proposals, attempting to address specified barriers to the internal market for

eComms (and some digital aspects as well), the qualitative efficiency and effectiveness as well as some drawbacks.

Table 4 on Single Market Proposals / Connected Continent

	IM Barriers	COM proposal	Efficiency/ Effectiveness	Drawbacks
1.	 national authorisation regimes; national licensing, even for cross- border; national licensing all different mostly, individual licensing (often forcing establishment) Remedies still differ, without rationale (no COM veto) 	- Single EU licensing (one stop shop) but via one reference regulator (NRA)	- Effective for multinationals (lower costs; better quality) - Efficient for SMP operators with multicountry footprint	 half-baked old regime stays in place new Reg.n complex soft on BEREC renders institutional complexity even greater at least, under COM approval
2.	- Multi-countries operators face inconsistent obligations	 One stop shop (see above) COM can prevent regulatory inconsistency, via veto over remedies 3 criteria test full harmonisation of consumer protection (helps providers, too) NRAs must promote investment and take 'over-the-top' providers into account 	- Consistency is not, in and by itself, the single market; however, prevents distortions and is a pre-requisite for undistorted cross-border or multi-country EU service provision	- negative only if differences between countries have sound local rationale, yet, not tolerated by COM (unlikely)
3.	- Wholesale access remedies (fixed) - VULA (virtual unbundled local access) as alternative to ULL, for next generation access networks - bitstream access (here, WBA = wholesale broadband access), typically regional/local - leased lines, terminating segments	- harmonise VULA conditions in implementing legislation - IP-based bitstream (WBA) subject to comitology, for harmonization - lease lines, idem, comitology	 case for leased-lines and business-grades of WBA is very strong with VULA, mostly residential, case weaker for single market, better for regulatory effectiveness 	- shift to implementing laws and comitology wise (for careful drafting) and risky (EU countries may be difficult - precisely in leased lines & WBA, early certainty would help single market

	IM Barriers	COM proposal	Efficiency/ Effectiveness	Drawbacks
4.	Spectrum problems: - lack of	- common regulatory principles for spectrum authorization - common best practice criteria (e.g. spectrum availability) - harmonisation of spectrum (timing, duration) - mutual evaluation among EU countries	- if successful (against resistance of national spectrum authorities) would be very good for dynamic efficiency (e.g. investment) and effectiveness (e.g. in wireless broadband)	- coordination is good, but probably still sub-optimal (as spectrum is a EU collective good, with competing national claims)
5.	Urgent need to increase data capacity in EU	 promote investment in infra, spectrum sharing & trading "use-it (spectrum) or-loose-it" sharing of WiFi 	Strictly spoken not single market issue, but indirectly it is, as data exchanges across intra-EU borders should be enabled	
6.	Users blocked from using full internet; heterogeneity of national rules on this	 guarantee net neutrality end to blocking freedom to offer higher speeds (user needs) without affecting basic internet quality for others 	- key to single market freedoms to enjoy access to and supply of contents EU-wide	
7.	or make more costly intra-EU services	- roaming costs not higher than domestic calls - intra-EU cross-border calls under retail price caps 13. ch. 7 and 8) and the au	retail price regulation is very interventionist	 risky, initially, when underlying costs may still differ roaming alliances have no incentives problem: 2 regulations and 1 directive deal with three closely related prices: roaming, intra-EU cross-border calls, and termination rates

Source: Marcus et al. (2013, ch. 7 and 8) and the authors' own assessment

Detailed and concrete consequences of these barriers, especially for business but also for consumers, can be found in Van Gorp et al. (2011). Table 4 clarifies that, even if the Commission proposals would be enacted by the EU legislator unchanged, they would

probably not succeed to ensure a genuinely 'single' eComms and digital single market, although it would certainly improve the situation considerably. There are provisions that will have to be worked out in implementing legislation or in comitology, and what these will bring is uncertain. In spectrum questions, the proposals make sense but are not going far enough, out of fear that Member States may not accept this. Yet, spectrum is fundamentally a collective good for the Union, be it with justified claims at the national and even regional levels, too. The veto on national remedies in eComms markets is an old (and justified) desire of the Commission and the fact that this is once again proposed (after the failure to obtain it in 2002) says a lot about how NRAs operate with respect to the single market. Indeed, as Marcus et al (2013) has proposed to the EP, it might be better to overhaul the 2003/2009 system and let the Commission only assess the exceptions and deviations of a more harmonised set of rules; but precisely in that event, the veto power becomes even more crucial. The conundrum of termination rates, costs of intra-EU cross-border calls and of roaming should be solved in an integrated fashion, whereas the proposals address each one of them separately, so it seems. The roots of these problems remain, although the costs of this fragmentation will decrease a lot: the roots are found in the tenacity of sticking to 'national' eComms frameworks, although EU countries are a completely arbitrary demarcation of networks or systems, ranging from the size of Malta to that of Germany, and often having extremely capricious borderlines. As a result, also the institutional mechanisms at EU level give far too much power to the collection of NRAs (BEREC), only marginally interested in the EU single market and strongly interested in maintaining power at national level. The Commission insists that, at this moment, it does not propose an EU regulator but it might reconsider in future. The central query is whether such a decision to centralise where justified, would be taken 'on the (EU) merits' or not.

3. Seamless EU wide logistics services

Logistics combines the planning, organization, management, execution and monitoring of the entire material, goods and information flows, from purchasing, production, warehousing, added-value services, distribution and reverse logistics. European firms are world leaders in logistics and many are in the global top twenty. Logistics are critical for the proper functioning of the single market at a high level of efficiency. It is crucial to see that logistics does include transport but is more much than transport itself, it has everything to do with supply chain management inside Europe and/or globally. Until a decade ago, the logistics sector strongly felt that the EU (whether Commission or the EP) was ill-organized to deal with logistics in an effective fashion. The Commission was thinking inside 'silo's' such as DG Markt, DG Move, DG Enterprise, DG Trade, if not other ones such as DG ENV (for Green transport and carbon footprint for logistics), DG TAXUD (for customs red tape) or DG Connect (for digital logistics or e-freight). It was little different in the EP with its committees. In 2006, the Commission began to broaden its view with a communication on Freight transport logistics⁷⁰ and a subsequent Action

⁷⁰ COM (2006) 336 of 28 June 2006, Freight transport logistics in Europe, key to sustainable mobility

Plan⁷¹ in 2007. However, whereas the European logistics sector began to organize annual Logistic Summits, the EU was moving rather slowly. Thus, the 2011 White Paper on the Single European Transport Area⁷² does not mention logistics explicitly, even though it does incorporate some of the issues recognized before.

However, with the competitiveness of European manufacturing and to some extent services becoming ever more dependent on the smart management of Intra-European and global value-chains, seamless EU-wide logistics become indispensable. It is only recently that there are signs that the Commission might begin to pay more explicit attention to European logistics as such, as a cross-cutting policy area. Precisely because logistics is cross-cutting, statistics and complex interactions between aspects of different policy have not been well analysed so far, an omission which now seems to be addressed.73 In June 2012 the High Level Group on Logistics was established, tasked with strategic advice on future transport policy measures with an impact on logistics. Unfortunately, little has been heard so far from that Group. A milestone so far has undoubtedly been the agreement (also by the EP) of October 2013 on the nine major EUwide multi-mode corridors, with a tripling of funding of the TEN-T under -Connecting Europe' to € 26 billion. For European logistics, this is a path-breaking decision because it signals a more integrated approach in regulation and EU funding. This 'core EU network' should improve connections between different modes of transport whilst contributing to EU's climate objectives in offering more serious options of long haul rail freight transport and inland river as well as (coastal) maritime shipping, all green transport modes compared to road and air.74

Air Transport and Postal Services

Air transport and postal services have more or less functioning internal markets in the EU by now. Both do not suffer from market failures (other than safety of airlines, and EASA works!), although large fixed costs do play a role [in postal, this is the case for large sorting centres, as well as large physical distribution for delivery to premises; in airlines, this is especially the case for network airlines [less, for point-to-point low-cost carriers] in the sense of 'sunk costs' of network development over the globe and strong name recognition and reputation [no or low sunk costs for equipment].

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⁷¹ COM (2007) 607 of 18 Oct. 2007, Freight Transport Logistics Action Plan

 $^{^{72}}$ COM (2011) 144 of 28 March 2013, Roadmap to a single European transport area

⁷³ In March 2013 the Commission has launched a tender on fact-finding studies in support of developing an EU strategy for freight transport logistics. It includes in-depth sector performance studies, work on combined transport, a standardised carbon footprint methodology and a revised Marco Polo programme linked to TEN-T.

⁷⁴ The core network will connect 94 EU ports with rail and road links, 38 airports with rail connections to major cities, 15000 km of railways upgraded to high speed and 35 cross-border projects to reduce bottlenecks. See Transport, new EU infrastructure, press release IP/13/948 of 17 Oct 2013; Memo/13/897 of 17 Oct. 2013. Each corridor must at least include three transport modes, three Member States and two cross-border projects.

In air transport, the 2008 updating of the three 1992 directives for the EU internal market of air transport services (into a single EU regulation No. 1008/2008) hardly led to any changes - a clear sign that the single market works for services. The only serious deficiency in the EU air transport is the Single European Sky (for air traffic controls/management) which seems to be postponed and delayed time and again. The problem is apparently less in capacity and efficiency, as the Performance Review Body concluded that the Member States had made a major effort, resulting in savings up to € 2. 4 bn (compared to the 2009 unit baseline). Rather, the critical issue is the development of Functional Airspace Blocks (FABs), with only 2 out of 9 firmly under way. With the recent Marinescu report of the EP has expressed dissatisfaction with the endless footdragging by national air traffic management authorities, since the benefits of this unequivocal EU-wide (and not national) infrastructural solution are large indeed. The Commission has initiated infringement procedures against no less than 18 Member States in July 2014.

In postal services, the internal market works more or less. Implementation of the last leg of postal intra-EU cross-border liberalisation (since the third postal dir. 2008/6/EC) has been completed and soon all EU counties will have used up their extra waiting time. For the postal market, the liberalisation for a single market is no longer an important challenge; the rapid decline of letter mail (at least, of individuals and picture post cards, less so for B2C direct mail) is not yet fully compensated by the increase in small parcel turnover due to internet sales, hence the sector is shrinking. Apart from some implementation issues (e.g. independence of postal regulators; non-neutral licensing conditions; access to postal infrastructure; VAT exemption and their distortive effects), a more troublesome question is the contradiction between the Universal Postal Union regime, including (non-cost-oriented) 'terminal dues', and that of the EU. Given the rapid changes in postal, one can agree with the most recent market monitoring report (WIK, 2013) suggesting to consider a modern overhaul of the EU postal regulatory regime, with e.g. a much more limited USO approach, lighter regulation and only where markets are demonstrated not to be competitive, and a greater EU (as against NRA) involvement in controlling cross-border services

The core network should be completed by 2030. The first phase up to 2020 will imply € 250 billion of investment, for which the € 26 billion can serve as seed money to be leveraged. Note that this integrated approach is linked to, but much broader than, the nine rail freight corridors mentioned before. One year before Commissioner Kallas ⁷⁵ insisted on "completing the internal market and removing all barriers so as to obtain the scale efficiencies of a genuine European transport area. Too many administrative formalities, numerous 'missing links' across the transport network, a string of technical incompatibilities and thousands of different national rules and standards'.

4. Horizontal consumer acquis deficits

The European consumer is THE ultimate stakeholder of the single market. It would be unduly narrow and inappropriate to consider the stake that EU consumers have in the single market by studying the specific acquis in, what are traditionally called, 'consumer protection' laws. Rather, the EU consumer has long benefitted from the building and

⁷⁵ Speech of Mr. Kallas at the 5th European Logistics Summit, 17 Oct. 2012 in Brussels

further deepening of the single market in goods and services via price competition, greater variety and choice, new business models and innovative products. In other words, EU competition policy, (open) trade policy, the pro-market reforms in the CAP, transport policy (where passengers are concerned, including their rights), more competitive energy markets, numerous specific removals in the internal market of technical and regulatory barriers to intra-EU wide competition (and the standardisation and conformity assessment behind it), the horizontal Services directive, the eComms and Digital Single market, and other initiatives have, on the whole, been beneficial to EU consumers. In addition, there are EU consumer laws which ensure in greater details that consumer can benefit and are not misled, or deprived of certain rights, etc. Initially, the Member States were hesitant about harmonisation of such laws, opting mostly for minimum harmonisation. This had the effect of either keeping fragmentation in place with differences between consumers in different Member States, but also having a discouraging effect on cross-border activity - or reducing it only to a modest degree. In recent years, these hesitations would seem to have receded somewhat. The hallmark of recently added EU consumer acquis is the Consumer Rights directive 2011/83 but many markets do not fall within its scope. This still leads to fragmentation at a cost. There are also lesser problems with respect to e.g. C2C transactions, micro-credits (not falling within the scope of the Consumer Credit directive 2008/48, although this concerns precisely the most vulnerable borrowers), the lack of EU regulation of gambling (for cross-border or on-line gambling) and e.g. some limitations of the e-commerce directive (in case of cloud computing, for example). In particular, the conceivable extension of the scope of the Consumer Rights directive - strongly resisted at the time suspected to bring major economic benefits to consumers.

It should be noted that GHK is preparing a CoNE report for the EP on market integration deficits in the consumer acquis, with quantification of benefits where possible. For this reason, the present report will not elaborate on this area, also not in chapter 4.

Chapter 3 Other reasons for fragmentation

'Acquis deficits' do not fully explain today's fragmentation in the services market. There are indeed 'other determinants' of fragmentation, beyond the reach of the IM or even the EU. In other words, even if all EU-level proposals to achieve a truly single market would be followed and well implemented, there is bound to remain some degree of residual fragmentation. Solving acquis deficits is desirable and mostly necessary for economic welfare and growth, but they cannot be sufficient to arrive at a perfectly 'single' market. Even in the US, there are deficits - in particular, in services like insurance, transport and professional qualifications - in an otherwise tightly integrated internal market. The 'other'reasons may or may not be addressed by the EU - surely, some are definitely impossible for the EU to address. The following is kept short because the chapter is included mainly as a reminder or a help to understand better the practical notion of a single services market, but the 'costs' of the residual fragmentation will of course not be addressed in later chapters. The 'other' reasons for fragmentation include: (i) regulatory heterogeneity; (ii) private law issues; (iii) tax issues; (iv) language (especially for services, and in particular for Modes 1, 2, and 4); (v) networking and trust (key for services, given their nature) - these characteristics will always lend a degree of 'local preference / bias' to (some) services provision which may lead to market segmentation as well; (vi) informational asymmetries such as (national) reputation, cultural biases, local service traditions, which of course might interact with e.g. languages and networking/trust. It follows that some fragmentation, not explained by acquis deficits in the wider sense, will always remain in the EU services internal market. Such fragmentation cannot be read from the formal acquis, but it would still show up in an economic analysis trying to measure degrees of market integration.

I. What is the regulatory heterogeneity in services?

In a seminal paper, Kox and Lejour (2005) proposed a theoretical model to demonstrate the (negative) impact of *regulatory heterogeneity* on intra-EU services trade. For this purpose, they elaborated an indicator, ⁷⁶ based on the OECD International Regulation database (PMRs, 1998), and capable of quantifying numerically this "heterogeneity" between countries. ⁷⁷ Although the intuitive idea that many different rules in various Member States is costly, exists of course for a long time, these authors and even more generally Kox & Nordas (2007), have demonstrated that regulatory heterogeneity is so costly that it can easily fragment the internal market for services. The present authors will provide a very simple quantification of two elements possibly causing fragmentation of the EU services single market. We elaborate a simplified approach to analyse the new PMRs indicators released by the OECD in February 2014, ⁷⁸ directly using the newly

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⁷⁶ Further elaboration available in Kox and Nordas (2007), "Services Trade and Domestic Regulation", OECD Trade Policy Papers, n. 49, Annex 3.

 $^{^{77}}$ Please, see Annex II for more information on the original indicator and adopted formula used by CEPS.

⁷⁸ Please, refer to Annex I for more details on the OECD PMR Indicators

available indicators (and not their underlying data), thereby limiting the comparison to fewer dimensions and accepting a lower level of accuracy. In addition, the research team does not transform qualitative data into a "new" quantitative indicator, but merely seeks to provide a comparison among a set of OECD-quantified numerical indicators. Table 5 provides a summary of the various dimensions of the bilateral regulatory heterogeneity indicators (sectoral indicators highlighted in green).

As each subset of indicators has been indexed to 1 (thus indicators range from 0 to 1, instead of from 0 to 6 as in the original PMR), also the final regulatory heterogeneity indicators ranges from 0 to 1. The research team calculated a total of 12 sets of sectoral bilateral regulatory heterogeneity indicators, incorporating 36 sets of sub-sectoral indicators.⁷⁹

Table 5 Dimensions of the regulatory heterogeneity indicators

	Regulation in Network Sectors (2013)							
	Electricity	Gas	Telecoms	Post	Rail	Airlines	Road	
	Entry	Entry	Entry	Entry	Entry	Entry	Entry	
S	Public	Public	Public	Public	Public	Public	Prices	
on	Ownership	Ownership	Ownership	Ownership	Ownership	Ownership		
Dimensions	Vertical Integration	Vertical Integration	/	/	Vertical Integration	/	/	
Ĭ.	Market	Market	Market	Market	Market	/	1	
D	Structure	Structure	Structure	Structure	Structure	ļ '	'	
			Regulation in F	Retail Trade (2	013)			
	Licences or pe	ermits neede	d to engage in con	nmercial activity	,			
S	Specific regulation of large outlet							
ion	Protection of existing firms							
Dimensions	Regulation of shop opening hours							
ime	Price controls							
Ď	Promotions/discounts							
	Regulation in Professional Services (2013)							
	Accounting Legal			Archit	ect	Enginee	r	
			ı	Regulation	tion			
	Entry regulation			Condu	Conduct regulation			
S	Exclusive or shared exclusive rights			Regula	Regulations on prices and fees			
ion	Education requirements			Regula	Regulations on advertising			
ens	Compulsory chamber membership			Regula	Regulations on the form of business			
Dimensions	Quotas			Inter-p	Inter-professional co-operation			

Source: Authors' elaboration.

⁷⁹ Nonetheless, these indicators might be affected by some biases, namely: 1) (Positive) bias towards the median value, i.e. the more the regulatory level of a country is close to the median value of the index (i.e. 0.50), the lower the possible highest value of the indicator. It means that countries that have a regulatory level close to 0.50 (i.e. 3 in the PMRs) are somewhat "favoured"; 2) (Negative) bias towards country with low barriers, as they appear to have high regulatory heterogeneity with country having high regulatory barriers, but in reality barriers might be only unidirectional (i.e. probability of having barriers to services in the country with high barriers might be higher than the probability of having barriers to services in the country with low barriers).

After elaborating the "overall" country-level indicator of regulatory heterogeneity (calculated as the average of the bilateral regulatory heterogeneity indicators for one country), the research team decided to juxtapose it with the regulatory restrictiveness level as reported by PMRs. When reading the two together, it is possible to obtain a better proxy of the regulatory heterogeneity as originally conceived by Kox and Lejour.

Thus, it means that, for example, if both columns are dark blue, this shows a higher probability of incurring barriers than if the first column is dark blue and the second is light blue.

Using the regulatory heterogeneity indicator *H* seems to be appropriate for an intrasectoral comparison of country differences. Indeed, a higher PMRs level might be attributable to varying (and sector-specific) characteristics, e.g. entry barriers, public ownership,⁸⁰ etc. In contrast, *H* is able to quantify the level of heterogeneity among EU countries in a given sector independently from the absolute regulatory level, indicated by the PMRs. Given the initial hypothesis of "equal regulatory restrictiveness corresponds to no regulatory heterogeneity",⁸¹ our H could be read in a comparative fashion across sectors (see Table 6).

Looking at Table 6, network industries – despite their relatively high level of regulation – show less regulatory heterogeneity, i.e. they have a more analogous level of regulation, among Member States (0.10<H<0.25). Professions instead are distinctly regulated (0.22<H<0.31), whilst the level of restrictiveness is relatively high. The legal sector is the emblematic example among the four professions for which data is available (H=0.31). Finally, retail is the most "heterogeneous" sector, i.e. the sector where the level of regulation among countries differs the most (H=0.33). This might be the consequence of a fragmented regulatory framework, where the main competencies are national rather than EU in nature.

The joint analysis of the two indicators should allow the reader to overcome the main limit of the regulatory heterogeneity approach: a low bilateral *H* indicator does not imply that a country's regulatory restrictions themselves are low as they can be both very high as well. In this respect, it is very important to disaggregate the restrictions' level as much as possible to avoid that a sectoral or country average can lose specific information.

⁸⁰ Recall that the Treaty on the Functioning of the European Union (TFEU) includes the "principle of neutrality" regarding private and/or public ownership of companies (particularly Art. 345, and consequently Art. 106). Nevertheless, the OECD considers "public ownership" to be directly proportional to PMRs level, i.e. the higher the "level" of public ownership the higher the correspondent PMR. This may be more relevant for other OECD countries, not the EU.

⁸¹ This assumption is central to the calculation of the regulatory heterogeneity indicator. However, in reality it is not an automatism. Indeed, two different countries may have the same PMR score, e.g. 6, for a certain dimension, e.g. "education requirements" in accounting, but the content of each restriction (or rule) may still be different.

Table 6 Regulatory heterogeneity – Cross-sectoral analysis82

Sector	H (average)	PMRs (average)
Electricity	0.20	2.06
Gas	0.25	2.23
Rail	0.22	3.22
Telecoms	0.10	0.83
Post	0.17	2.41
Airlines	0.24	0.98
Road	0.11	2.05
Retail	0.33	1.93
Accounting	0.22	1.04
Legal	0.31	2.90
Architect	0.24	1.54
Engineer	0.22	1.54

Note: Road and airlines only depend on two underlying variables, therefore their results might be more sensitive to specific issues, e.g. public ownership.

Source: Authors' elaboration.

The regulatory heterogeneity indicates to what extent regulatory frameworks in two commercial partners differ one from each other: adapting a business model to a different regulatory framework can affect the fixed costs occurred by a country that wants to trade or invest somewhere else. That is why H is an indicator for at least one 'other' form of fragmentation of the internal market. However, whether it is EU duty to reduce this fragmentation depends on the sector under scrutiny. For sectors in which a further harmonization is justified, the identified fragmentation can be solved (most of the cases of sectors listed in Table 7) but in sectors where the EU has little to regulate, only voluntary cooperation may reduce it.

II. Single Market fragmentation due to lack of EU powers

The 'deeper' market integration, the more frequent the TFEU may not (fully) support the required instruments for effective action pre-empting such fragmentation. To some extent, this is inevitable, even for single markets inside federations.⁸³ There are political and other limits in the EU preventing powers to be shifted to the EU level and this is vital for political legitimacy. In the EU, areas such as private law, penal law and tax issues (other than VAT & excise) typically fall in this category. This need not mean that nothing can be done but it is anything but automatic and – usually – subject to unanimity. It is

⁸² Please, refer to Annex II for more sectoral analysis.

⁸³ In federations like Canada, Australia, Switzerland and the US, their internal markets suffer from some degree of fragmentation for reasons of a division of powers between the two tiers of government that expresses deeply felt regional/state preferences, not always the integrity of their internal market. See for instance a detailed comparison between these four countries and the EU single market in Anderson (ed.) (2012). See also Pelkmans & Vanheukelen (1988) on the US and Canada internal markets, and lessons for EC1992, a background study for the Cecchini report.

wrong to fear that unanimity never works in the EU, it does; there are many directives based on unanimity. But there is no doubt that the case has to be made quite forcefully and that clear and noticeable distortions or drawbacks have to be utilised as an argument. Nowadays, with national parliaments having a say in the subsidiarity procedures, this has certainly not become easier. As one example, some national parliaments have declared with strong majorities that the EU level ought to refrain from using penal law provisions (e.g. in enforcement of environmental acquis, or, in some competition cases, or, in issues of counterfeiting). Another example has already been touched upon in the digital single market: copyright issues related to (digital) contents tend to be extremely complex because the TFEU does not incorporate a legal basis (other than the general clause in Art. 352, with unanimity) to address such issues in a straightforward manner. In tax issues, there is also great sensitivity. Ever since PM Blair, prior to the Convention, declared tax a 'red line', this phrase has become popular with several other governments and parliaments. This has long led, and still causes, major and very costly corporate tax distortions in the internal market, not due to the corporate tax rates as is too often held, but due to the loopholes, inconsistencies, discretion and exceptions in the corporate tax base of EU countries. If only that base would be harmonised, many distortions would no longer be possible or in any event become much less costly, while a modest degree of tax rate competition would remain (and this can be a sound constraint on government spending). The net welfare gains would probably be very considerable for the EU. The US does not suffer from this problem as it has a federal corporate tax base, also for the states; the states only compete on the rates, and on top of a common federal tax rate. It is not so difficult to add other telling examples. The point is that any internal market runs into understandable political constraints at the EU (or, federal) level, and this fact may cause some degree of lingering fragmentation. The TFEU sometimes even forbids harmonisation, for instance, in certain social security issues and in national health systems. This report is not the place to elaborate on the issue.

III. Intangible 'barriers' in the internal services market

There is a series of 'intangible' barriers in the internal market which tend to prevent that a perfectly single services market can easily come into being in Europe. These barriers have little or nothing to do with EU rules or policies. They matter for consumers and business but, more often than not, in ways which tend to perpetuate some degree of fragmentation of the internal market. However, if consumers or providers prefer to take decisions about their supplier relationships or their networks or display other preferences in markets, it may well be possible, that these decisions are welfare improving, given less than perfect knowledge and/or an ingrained tendency to be risk averse.

The main intangible barriers are: (i) language and culture; (ii) networking and varying degrees of trust; (iii) informational asymmetries, often related to perceptions of reputation, local service traditions, various customs and lack of familiarity with 'ways of doing business'; (iv) the truly 'local' nature of certain types of market services, ⁸⁴ the

⁸⁴ In addition, many government services are by definition local or national.

archetypical example being the barber providing a haircut. Of course, a long-standing economic openness towards each other, as EU countries experience in ever increasing forms and intensity, may well reduce the severity of such intangible barriers over time. Also, it matters a lot whether business or value-chain connections inside the EU are studied at wholesale or retail level; at the former level, language may matter much less (given the rise of English) and familiarity with ways-of-doing-business will tend to grow over time.

By way of example, the question of languages is frequently underestimated. One illustration is in public procurement; both Sanchez -Graals (2013) and the Commission 2011 Impact assessment emphasize the language barrier both for SMEs on supply side and for smaller contracting authorities making irregular tenders. The Impact assessment notes that an astonishing 73% of contract authorities in the EU had not made any cross border tenders in the previous three years and language as well as unfamiliarity appeared to be the main reasons. Another illustration is found in the rail sector. Although there is increasing recognition of diplomas and country expertise of train drivers, it is still true that the train driver of the Eurostar needs to have command of three languages, English, Dutch and French. And a non-German train driver requires certificate in German before being allowed to drive a train.

In any event, this report is focused on the tangible barriers that the EU can, in principle, address, not these intangible barriers. The reason that the latter are briefly highlighted is that empirical economic studies have brought out that the degree of intra-EU market integration is far lower than one might expect, taking into account what the EU has already achieved. This subset of empirical economic literature goes under the name of 'home bias'. The home bias literature⁸⁵ starts from an ideal scenario of what cross-border trade (or, even FDI) would be, if no costly frictions whatsoever would stand in the way of any economic intercourse and preferences of purchasers and consumers would be unbiased with respect to national origin and distance (other than costs). What this literature shows, despite its variations in empirical approaches, is that intangible factors matter a great deal to intra-EU market integration; it also yields that the importance of such factors reduce over time (but apparently not to zero as even inside the US here is non-trivial home bias). It is found that languages matter, that distance does not solely represent a cost - it also relates to (less) familiarity for doing business or cross-border shopping (hence, adjacent countries demonstrate deeper integration and less home bias), that a common currency matters (for ease of price comparison) and that business networks (based on e.g. ethnicity)⁸⁶ may generate more home-bias if in the same country. Compared to the US internal market, the home bias in the EU is a factor three-to-four larger still (Pacchioli, 2012). This empirical literature cannot measure all intangible aspects separately (e.g. informational asymmetries) and, moreover, has mainly been applied to goods trade. The latter is crucial because many services are consumed or used

⁸⁵ See e.g. Delgado (2006); Balta & Delgado (2009, CESifo); Chen (2004); Head & Mayer (2000); Nitsch (2000).

⁸⁶ See e.g. Combes, Lafourcade & Mayer (2005)

on the basis of some relation of trust or repetition-of-use. This tends to reduce tendencies of 'switching' to other providers, when compared to goods. It should also not be forgotten that services in the internal market have four modes of business, unlike goods. In circles of policy makers, EU or national, one encounters already for years the proposition that cross-border intra-EU trade in services is only one-quarter of that in goods, and it is strongly suggested that this is indicating 'underperformance' of the single services market. The present report shows abundantly that the single market for services can be massively improved, but not because of this ratio of services trade versus goods trade. It is simply not known whether one-quarter is low or 'optimal' because services travel across borders in four modes. First, quite a few services are inherently untradeable across borders. Even if a haircut in Bulgaria costs a fraction of that in Paris, this will have no effect on service trade. For some services which are hard to trade, other modes are open and may be profitable: temporary services provision across intra-EU borders or, the consumer moves and enjoys the service at the place of provision (most tourism, some patients under dir. 2011/24), or FDI in services followed by local provision elsewhere. Moreover, the famous one-quarter ratio of intra-EU services trade compared to intra-EU goods trade is in any case too low, because both exports and imports of goods inside the EU incorporate services with which these goods have been made. Rather than bringing the services across intra-EU borders, to manufacturing elsewhere, it may often be efficient to incorporate the services locally and subsequently export the good. One should not generalise but a conservative average in manufacturing might be that this incorporation adds another 5 % - 10 % to the 25 %. In any event, to measure 'home bias' in services is much more difficult than in goods and to simulate what the optimal ratio between goods trade and services trade (as only one of four modes) might be, once the single services market would be far better established, is impossible with the present knowledge of economics. A reasonable conjecture might be that home bias is likely to be higher in services, as intangible factors are probably more important than in goods, but also because many services cannot be easily traded or not at all (except via other modes in different degrees).

Chapter 4 The cost of acquis deficits

I. The Horizontal Directives

1. The Service Directive

Five years after its entry into force, the Services Directive has been the focus of an interesting exercise of quantifying the restrictiveness of services regulations among the member states⁸⁷. The exercise aimed at evaluating how the enforcement of the SD contributed to the removal of lingering cross border services barriers and what economic impact this had. This assessment is a successful attempt to estimate the benefits of fullyfledged intra-EU market access in the service sectors falling under directive 2006/123. It is worth noticing however, that services included in the SD are usually not strictly regulated, compared to those in the six sectoral services regimes of Figure 1. At the same time, many services covered by the SD are also inherently less 'tradable' compared to others, as already noted in chapter 2. This is crucial for a good understanding of the eventual economic impact of the directive in the longer run. In many EU publications and speeches on the services directive, it is repeated that the services activities falling under the directive generate no less than 43 % of EU GNP. Although this is factually correct, it does suggest too many (and apparently is also suspected by many officials and others) that this huge GNP share is suggestive of the economic potential to generate extra economic growth over time, upon a fully-fledged implementation of the directive.

However, whilst it is capable of generating extra economic gains, there are two reasons for not expecting such economic gains to be spectacular. The first reason is that several sectors under the directive are only lightly or very selectively regulated, implying that the removal of barriers cannot be expected to generate a great deal of extra activity across intra-EU borders. Thus, sectors such as tourism, household support services, market research, management consultancy and facility management, to mention just a few, will not experience a great boost solely because of the services directive. The other reason has to do with the suspected 'tradability' of the services involved. Tradability of services is more complex than for goods. In services, pure cross-border flows can occur in three modes: simple trade between a provider in country A and a consumer/user in country B (mode 1 in WTO); a consumer enjoying a service only after moving across an intra-EU border (tourism; mobile patients seeking health treatment) (mode 2 in WTO); temporary provision of cross-border services as discussed in the Box in chapter 2 (mode 4 in WTO). Tourism is by definition quite 'tradable' (mode 2) but has few barriers. Construction is important for mode 4 but here the posted workers directive (and its enforcement) and other related issues (e.g. circumventive arrangements) matter much more than the services directive itself. The Box in chapter 2 also shows that temporary services provision does not seem to be more than a quite marginal economic activity, compared to the enormous GNP share of 43 %. This leaves 'tradability' for mode 1 trade. Here one has to reflect on the nature of business and location of clientele of big sectors like retail and

⁸⁷ Monteagudo et al. (2012)

wholesale (by definition, always predominantly domestic in final services), legal and tax advisors (except for multinationals, by definition tied to domestic activities), real estate services (idem), not to speak of household support services, facility management, industrial cleaning or restaurants, all largely tied to local clients. Of course, there is also mode 3, FDI in services, and some degree of 'europeanisation' is conceivable in all sectors falling under the directive. However, as is well-known, there are many reasons why companies hesitate to go abroad via establishment and the initial costs of entry are only very partly determined by barriers possibly removed by the directive. Put differently, FDI is predominantly driven by firm-specific knowledge or other assets or highly specific competitive advantages and even barriers before the directive did not prevent the entry of such competitive service multinationals. However, it did hinder it, especially by the 'economic needs' test and other provisions now firmly prohibited by the directive. Therefore, in some sectors, there is bound to be a positive effect.

Nevertheless, the FDI in services in the EU so far is heavily biased towards sectors not falling under the directive. Consider intra-EU cross-border establishment of service companies - a channel of providing services close to clients which is often critical in services - and one finds that financial and network industries occupy more than 70 percent of the intra-EU27 FDI (data of 2008 from Eurostat, 2012); FDI in services falling under dir. 2006/123 barely reach 10 % (Mustilli & Pelkmans, 2013, for more analysis).

Monteagudo et al. have built a barrier indicator that includes restrictions both affecting cross-border exchange and establishment of commercial presence of services covered by the SD. Instead of assessing each barrier (as previously done by STRIs), Monteagudo et al. (2012) quantitatively assess how barriers have changed since the entry into force of the Directive. In particular, they assess each restriction before and after the enforcement of the SD, with 0 (non-existent barrier) and 1 (existing) for 'before' and as 0 (non-existing), 1 (still existing) and 0.8 (partially removed), for 'after'. After the assessments, a simple mean is computed by countries and by sectors. The barrier indicator is defined in such a way that one can test two different channels through which the SD could improve the functioning of the internal market: first by fostering trade and FDI, and, indirectly, by boosting competition at national level.88 The fact that the sector scoping is restricted to the SD allows us to interpret the liberalisation implied by enforcing the SD as the potential cause of the changes in the variables. For an overview of the reductions in the restrictions due to the enforcement of the Directive, please refer to Figure 5: on the left side, the figure ranks sectors as to the number of restrictions prior to the directive; on the right hand side, the sector ranking is driven by the number of restrictions removed because of the directive. The figure provides the number of restrictions removed, partly or wholly, in all sectors. It is clear from the picture that the majority of sectors used to have between 50 and 100 restrictions: few sectors abolished a significant percentage of barriers, notably travel agencies, building companies, real estate agents and tourist

⁸⁸ For more detail on how this is done and the repercussions for domestic competition, see Monteagudo et al, op. cit., and Mustilli & Pelkmans, 2012

guides, while other sectors merely partially reduced or left unchanged the number of existing barriers before the entry into force.

In the order of the number of restrictions before the Directive

Legal services
Small Retail stop
Large Retail (grande surface)
Travel agency
Architects
Accountants
Crafts businesses in construction sector
Construction / Building company
Tax advisers
Retail eagerts
Tax advisers
Retail eagerts
Engineers
Construction / Building company
Tax advisers
Retail eagerts
Engineers
Tax advisers
Retail eagerts
Engineers
Tax advisers
Architects
Large Retail (grande surface)
Certification service in the area of construction
Restaurants
Large Retail (grande surface)
Certification service in the area of construction
Tax advisers
Architects
Legal services
Accountants

1 – unchanged
2 – partially reduced
3 – abolished
1 – unchanged
2 – partially reduced
3 – abolished

Figure 5 Restrictions across sectors in the EU

Source: Monteagudo et al., 2012.

By using an econometric model, the authors conclude that the removal of the intra-EU barriers could create an EU GDP increase of 0.8% (ranging from 0.3 to 1.5% dependent on the Member State) given the state of implementation of 2011. Gains would be even higher (around 0.4% more) if all member states would move to the average restrictiveness level and no less than 1.6% more if all European economies would adopt regulation in services no more restrictive than the five least restrictive ones. Although earlier estimates have been published (Kox & Lejour, 2004; De Bruijn, Kox & Lejour, 2008 for the Netherlands and the EU; Piette & van der Linden, 2009, for Belgium using the Kox & Lejour methodology), these studies could not use the data from the Mutual Evaluation exercise. Hence, their robustness is not clear. In any event, these studies report fairly low GDP increments (for Belgium, the GDP estimates are in the range between 0.5% and 1.5%).

II. Sectoral Regimes

1. Financial Markets

As clearly proved by the economic conditions during last six years, a healthy, well-functioning financial sector constitutes a solid backbone for the economy and cannot be missed. This holds true for all EU countries, even though it was accentuated rather painfully in the area sharing the euro. The interactions between financial markets and macro-economic stability can be extremely intense and it is critical that the EU as well as its Member States do not under-regulate financial markets, including banks, and do not avoid the justified degree of centralisation for supervision and/or required to act swiftly and firmly in order to stabilise or protect European financial markets. Such an approach pursues five objectives (mostly) at EU level: (systemic) financial stability, market efficiency, financial integration, and market integrity and investor protection. The EU

internal market for financial services should have EU regulation and, where appropriate, EU bodies fit to serve these objectives effectively.

However, financial market integration in the EU is far from complete. This holds true even for the Euro Area (EA), where one might expect an environment conducive to financial integration, as exchange risks have disappeared and the ECB has set up several facilitations like a highly efficient interbanking market.

In fact, it is easy to show that (a) EU financial market fragmentation worsened a great deal during the crisis, showing that only an EU regime – and not one with a heavy dose of inter-governmentalism and with not fully credible supervision or common bank resolution – , and (b) fragmentation differs considerably between the four core financial markets: banking, money, equity and bonds. This means that overcoming fragmentation can be partly realised by means of the fourth generation of financial regulation and selective centralisation, and, for the remainder, by addressing market access barriers between EU countries in certain submarkets.

It suffices to analyse some figures provided by the ECB statistical data warehouse to reveal that banking activities are mainly national. However, it is necessary to make distinctions between wholesale and retail markets.

In wholesale banking the crisis played a fundamental role in disrupting what achieved since the (virtual) introduction of the Euro. Indeed, cross-border inter-banking loans activities were the 23% of the total in 1999 (Figure 6). They showed a substantial increasing path in the pre-crisis period, reaching a peak in the second quarter of 2008, ranging the 35% of the total. In 2008, we assisted to a negative turnaround, and to the beginning of a decreasing path. The last data collected (Q4 2013) show that cross-border activities in this field felt to 24% to lower levels than a decade ago.

In retail banking, (partial) integration simply never happened. The share of cross-border loans granted by monetary financial institutions (MFIs) – oversimplifying: banks - to non-MFIs was approximately equal to 3% in 1999, and remained steadily around that value, being equal to 5% in 2013. In other words, this means that – in 2013 - approximately 95% of the activities in retail banking took place within the national borders. These figures get even more cumbersome when realising that retail banking constituted more than the half (51%, Figure 7) of the Euro Area financial activities in 2013. Nonetheless, it is not possible to assess from data, what kind of barriers exist at the retail level, and whether these might be addressed by policy-makers (for an in-depth analysis please refer to Chapter 2, III.2).

Finally, few words must also be devoted to another kind of fragmentation, equally linked to crisis remedy actions. Indeed, the nationalisation of (many) European MFIs⁸⁹ strongly shaped ownership related matters. Indeed, rescuing banks through nationalisation has a

⁸⁹ Just to name few examples: Northern Rock (UK, 2008); Roskilde Bank (DK, 2008), ABN AMRO (NL, 2008); Dexia (BE, NL, LU, 2008); Anglo Irish Bank (IE, 2009), several "cajas de ahorro" in Spain.

legacy effect on ownership. It moves towards a national dimension, where the State (i.e. the government, the national bank another public agency) becomes the main shareholder. Consequently, this may hamper the internal market specific, but – in principle – it does so without altering the broader internal market dimension for financial services.

55% 50% Cross-border inter-45% banking loans 40% 35% Cross-border loans to 30% non-banks 25% 20% Cross-border bank securities other than 15% shares 10% 5% Cross-border non-bank securities other than 0% shares

Figure 6 Cross-border provision of financial services in the Euro-Area (assets, in % of the total)

Source: Authors' elaboration on ECB

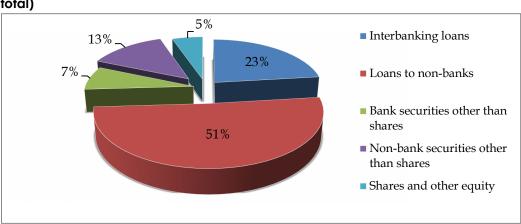


Figure 7 Financial services activities, by mode, in the Euro-Area, 2013 (% of the total)

Source: Authors' elaboration on ECB

The paths highlighted by Figure 6 points towards a radical reversal in the integration process due to the crisis. The turmoil shaded light on the sub-optimal level of governance the EU (and the EA even more) had in the financial market area, and this may be the main responsible for financial market fragmentation in the crisis aftermath. Since then, a set of European policy actions has been enacted, trying to create a new and more stable framework for financial operations and the relative stakeholders. They can be categorised

in three main groups of interventions: the ones enacted as (direct) response to the financial crisis; the ones aiming to constitute a 'banking union'; and the remaining others, necessary to establish a "stable, responsible and efficient financial sector that serves the real economy and contributes to economic growth". 90

The Commission SWD (2014) 15891 partially quantified the benefits of the reforms of EU financial regulation since the crisis, including institutions and funds for the Single Resolution Mechanism (Banking Union) as a critical confidence building measure. While trying to develop this exercise as precise as possible, the Commission acknowledges the impossibility of analytically separate the 'stability and sound regulation' from the 'market integration' benefits, as they are profoundly interlinked, and it also highlight that any estimations should be interpreted as an "indication" and not as a (nearly) exact quantification.

Implicit subsidies (and state guarantees) were estimated in a range of € 59 to 95 billion per year, 92 corresponding to 0.5% to 0.8% of annual EU GDP. Higher capital requirements instead, lead to cost savings (i.e. avoid output losses) equal to 0.51% of annual (pre-crisis, i.e. 2008) EU GDP. If this measure is considered together with bail in tools and the EU resolution regime, corresponding benefits are equal to 0.59-1.07\%3 EU GDP per year. This means about € 75 to 140 billion yearly. The implementation costs of these measures are approximately equal to 0.3% of annual EU GDP. Consequently, the net benefits deriving from the aforementioned 'three measures' (i.e. higher capital requirements; bailin; and EU resolution regime) may be included in the range of 0.3% to 0.8% of annual EU GDP (or 37 to 100 billion €). Other € 16 billion (approximately 0.12% of EU GDP) yearly are created by reforming the derivatives regime (e.g. counterparty exposure reduction). Other benefits deriving from relatively minor measures are also quantified. For instance, the improved efficiency of equity markets is expressed such as some € 2 - 5 billion excess costs of post-trading (clearing, settlements & custody), additional € 700 million for consolidation, plus a range of cost savings following the intro of the ECB T2Securities tool (ranging from € 145 to 584 million).

⁹⁰ Commission SWD (2014) 158 final, "Economic Review of the Financial Regulation Agenda" accompanying the document "Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: A reformed financial sector for Europe {COM(2014) 279 final}", Annex II, p.300. Commission proposals labelled as (direct) "response to financial crisis" amount to 11 (2009-2014); the ones on Banking Union are 2 (2012-2013; the Single Supervisory Mechanism and the Single Resolution Mechanism); the "others" correspond to 29 proposals (2007-2014). In the European Commission 'Memo' on "Economic review of the financial regulation agenda: Frequently asked questions", Brussels, 15 May 2014, the different actions taken (or proposed) are grouped by the objective(s) they aim to achieve, i.e. financial stability, financial integration, market integrity (and confidence), efficiency.

⁹¹ *Ibid*.

⁹² 72-95 billion € in 2011 and 59-82 billion € in 2012.

⁹³ Depending on the quantification of the cumulative costs of the crisis. Sensitive analysis conducted only on the "three measures together" scenario.

Nevertheless, we shall say that – despite the incredible effort in creating and gathering data – quantitative estimations may fall short in describing the overall benefits of these financial markets reforms, and their complementarities. Long lists of qualitative benefits generating from this agenda are extensively described in the Commission SWD⁹⁴ and many of those are also mentioned by the ECB.⁹⁵

2. Rail, with an emphasis on freight

The economic potential of a genuine single rail freight market is unfortunately unknown. The probable reasons for this lack of any estimate may include the many barriers to market access, the difficulty of how to overcome the disparities in national track access charges for model purposes, the dependence of any reliable estimate on the assumption of prior infrastructural investment all over Europe (in track but also inter-modal terminals and marshalling yards, etc.), the weak competition so far (making it very hard to obtain a robust baseline and/or foresee the efficiency improvements prompted by fierce competition), the lack of an EU Regulator (and the difficulties to appreciate its intergovernmental substitutes), the longer-run consequences of full internalisation of costs for the modal shift and the lack of knowledge of the economic advantages of having single EU rules instead of (11,000) national rules in the long run. There can be no doubt that a single market in this sense would signify a profound transformation, with the likelihood of creating new submarkets and igniting considerable additional demand, and perhaps also new business models. It is not comparable with just 'an' improvement of an existing market. In the absence of such an even rough order of magnitude, the section will be confined to some key economic aspects providing MEPs with important ingredients for at least some first qualitative assessment of the economic significance of building a single rail freight market. However, a special CoNE report on transport, including rail, will be produced by Steer, Davies Gleave in the summer of 2014, with some first quantitative estimates of overcoming a series of market integration deficits in rail.

Before focusing on freight rail as an intrinsically 'European' sector, at least once fully exploiting the future internal market, the opening up of the domestic passenger rail sector calls for some attention. In the Impact Assessment of the proposed regulation and directive (in the Fourth Rail Package), ⁹⁶ the operational objectives of the domestic passenger rail proposals are six: facilitate cross-border entry into domestic rail markets, abolish legal monopolies (hence, also domestic entry), open Public Service Contracts for competition ("for" the market), a common approach to PSOs, and equal access to ticketing and rolling stock (for new entrants and incumbents). The initial situation in

⁹⁴ Commission SWD (2014) 158 final.

⁹⁵ European Central Bank (2014), "Financial Integration in Europe", April.

⁹⁶ European Commission, Impact Assessment of the proposal for a Regulation of the European Parliament and of the Council amending Regulation (EC) No 1370/2007 concerning the opening of the market for domestic passenger transport services by rail; Impact Assessment of the proposal for a Directive of the European Parliament and of the Council amending the Directive 2012/34/EU of the European Parliament and of the Council of 21 November 2012 establishing a single European railway area, as regards the the opening of the market for domestic passenger transport services by rail and the governance of the railway infrastructure. SWD (2013) 10 and SWD (2013) 12 of 30 January 2013.

these markets demonstrates an astounding lack of competition: 16 of 25 Member States with rail, incumbent market shares are above 90 % (hence, monopolies, often also state-owned and some heavily indebted) and the efficiency differentials between best and worst performers – already large two decades ago – have only grown. No less than 42 % of the market value in the EU is operated under PSOs attributed through direct awards, that is, neither competition 'for' the market nor 'in' the market. In 9 Member States, monopolies are still laid down in law! Many policy options are discussed but these would go too far for present purposes. The quantitative (called 'illustrative') estimates of cost savings upon the introduction of competition, in combination with full vertical separation, amount to \in 43 bn, or, when 50 % of savings are re-invested in rail, \in 34 bn. The advantage of the latter is that it would greatly boost travel by rail, as much as 16 bn passenger km extra (compared to less than 4 bn without extra investment).

Figure 8 portrays the modal split, given intermodal competition: the smaller the share of railways, the fiercer the competition from other modes (e.g. road transport, both passenger and freight). Railway freight transport lost around 2% market share since 1995, shrinking to 10.6% in 2003. This is historically very low compared to several decades ago. Moreover, as will be shown later, it is far lower than rail freight shares in the US, Russia or China, and even densely populated Japan. Since 2003, the share of freight rail is more or less constant, except for a short dip due to the crisis (10.2% in 2010).

20% 18% Passengers Freight 16% 12 6% 14% 11.4% 10.9% 10.7% 12% 10 5% 10.2% 12.7% 10% 11 9% 11.5% 10.8% 10.7% 10.7% 10.6% 8% 6% 6.5% 6.4% 6.3% 6.4% 6 2% 6.2% 6.1% 4% 6.0% 6.0% 61% 2% 1997 1998 1000 2000 2002 2003 200% 2005 2006 2007 2008 2009 2010

Figure 8 Modal split: Share of railways in Total Transport

Note: In percent, based on tonne-km and passenger-km

Source: Pelkmans and Luchetta (2013), based on Eurostat.

A constant share since 2003 – i.e. no longer a decline - might be partly due to the beginning of liberalisation in the internal market. But it does not mean that rail freight was not growing as Figure 9 shows: freight services increased by 16% from 1995 to 2007 (i.e. right before the current economic crisis), that means an annual percent growth slightly above 1.2%. Due to its high sensitivity to economic activities, freight services registered a sharp decline between 2007 and 2009 to a level (measured in ton/kilometres) lower than 1995 (361 billion tkm). Nevertheless, in 2010 and 2011 freight services experienced a fast recovery, achieving 420 billion tkm in the last year in which statistics are available, slightly above 2005 values. As follows from Chapter 2, for rail freight to increase its share, what is required is a complex combination of better infrastructure for freight (including the dedicated European freight rail corridors), more interoperability, a

further push in typical single market items (e.g. the 4th rail package and possibly even more), more combined transport (including rail), more and suitable intermodal terminals, more aligned track access fees and unbiased pricing of rail as compared to road transport, including internalised costs for pollution, congestion, road damage and safety. Perhaps this is still not sufficient and more direct intervention via EU networks of Infrastructure Managers or even a common EU Agency (regulator) might be required given the daily complexities of slot allocation, access pricing and many other aspects. Such an EU regulator should not be confused with today's ERA, which solely deals with safety, interoperability and certification issues. The EU regulator would be responsible for a smooth, daily implementation of the tight coordination amongst national Infrastructure Managers, in such a way that, at all times, a pro-competitive access in a nondiscriminatory fashion, including access to track slots (whether regular scheduled or incidental applications) can be guaranteed within EU frameworks. Such an EU regulator should have powers to intervene (under conditions, specified in new EU legislation) if national infrastructure managers or for other inappropriate reasons, entry or track access or its pricing would violate EU internal market and competition principles, and other conditions as specified in new legislation. Besides all such policy-related aspects, the future trend will also be dependent on the development of the EU economic activities. In fact, freight rail is competitive in transporting very specific kinds of goods, i.e. nonperishable97 (or at least goods not subjected to "just-in-time" systems), low-value and high weight goods. However, there are many indications that freight rail in Europe is underperforming and could do so much better than recent trends indicate. As highlighted by Figure 10, the future of manufacturing and its value-chains in Europe will consequently play a role in shaping the future of rail freight services.98

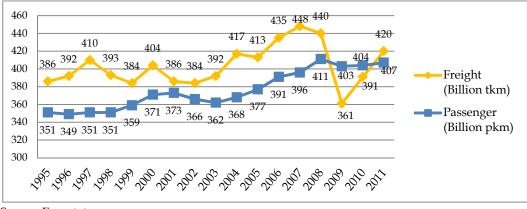


Figure 9 The EU Market for Freight and Passenger Services

Source: Eurostat

⁹⁷ In fact, during the economic crisis, several freight services companies decided to implement cross-borders refrigerated goods transport systems, trying to stimulate the relative recover (intermodal competition) of the sector in this field (for more information see The Railway Business Magazine, 2010, available at http://www.railwaypro.com/wp/?p=1579).

⁹⁸ The specific effects – and their magnitude – of this linkage are not the object of this report. For a deeper analysis see (among others): van Wee B., J.A. Annema and D. Banister (2013), *The Transport System and Transport Policy*, Massachusetts, Edward Elgar Publishing.

Road ☐ Agricultural products and live animals ☐ Food stuffs and animal fodder ☐ Solid mineral fuels ☐ Petroleum products ☐ Ores and metal waste ☐ Metal products ☐ Crude & manuf, minerals, building ☐ Fertilizers ■ Chemicals ■ Machinery & other manufactured goods Waterways 60% 0% 20% 40% 80% 100%

Figure 10 EU-27 weight moved by commodity and transport modality, 2006 (tonnes)

Source: van Wee B., J.A. Annema and D. Banister (2013)

Figure 11 allows for an international comparison of intermodal competition on freight transport, showing the respective shares by transport modes. Differences among countries/regions are striking. In USA and Russia, rail freight transport accounts for almost half of overall freight transport (40% and 43% respectively). This is largely due to determinants that cannot be imitated in the EU, such as large spaces with extremely low land prices (together this automatically creates an advantage over road haulage, especially with lengthy trains), only a minor significance of the costly non-economic aspects of density (NIMBY problems; many cities; noise in cities; etc.) as compared to EU track, and much more freight-dedicated track rather than the very costly dual track,99 customary in Europe. In China rail carries 19% of freight transport, partly because density is greater than in the US and Russia, partly because roads are still in relatively short supply and partly because China's resource intensive output requires long supply lines from its periphery (e.g. coal, minerals). But the tiny EU share of only 2 % of all freight in tonne-km is even lower than the 4% of Japan, which is at least as densely populated as Europe. Imagine if the EU were able to increase its rail freight share to that of Japan, it would be an enormous boost of the sector, and beneficial for lower congestion and for lower emissions. In the past four decades the EU has one-sidedly invested in road haulage, especially in Western Europe, whereas in the East of the EU the total length of rail track has even shrunk with 15%, renewals and maintenance of track have suffered and intermodal terminals are few. Road haulage today assumes an overwhelming 89% of freight in tonne-km.

 $^{^{99}}$ A rule-of-thumb is that dual track costs roughly 40 % more than dedicated freight track in the final cost price.

100% Sea (domestic/intra-EU27) 80% Oil pipeline 60% Inland waterways 40% Rail 20% Road 0% FU-27 USA Japan China Russia

Figure 11 Comparison EU-27 – World, Freight Transport

Note: Data for EU-27 refer to 2011; USA to 2009; Japan to 2010; China and Russia to 2011. Rail sector in USA refers to "Class I rail"; Road sector in Japan refers to 2009; Oil pipeline sector in China refers to "oil and gas pipelines". Based on tonne-km.

Source: European Commission (2013b).

Track access charges (TACs) play a pivotal role in shaping (economic) incentives for both infrastructure managers and railway undertakings. An excessive TAC will prevent new players to enter in the market, therefore hampering competition. Instead, a too low TAC will impede complete cost recovery for operating and maintaining the infrastructure (which is so costly in rail that it dominates the cost-price of rail services).

Central European countries have higher TAC (on average) than EU-15 countries, respectively 5.08 €/train km and 2.36 €/train km, i.e. more than double. Disparities in national or even regional track access charges are huge in Europe. The highest/lowest ratio reaches the level of 7538%, and it remains high even when outliers are not included (311%). These disparities are highly distortive for the development of a properly functioning EU Single Market. Typically, freight routes are passing through a number of countries having sharp differences in TAC. Such divergences severely restrict the potential efficiency of the sector and send confusing signals to shippers and potential investors.

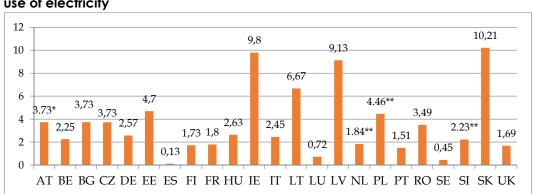


Figure 12 Railways: Average charge in euro/train km (2010), excluding cost of the use of electricity

Note: *Significant degree of variance among level of track access charges per train; **Highest tariff reported. Denmark and Greece: not available. Malta and Cyprus do not have a rail network. Source: Authors' elaboration on European Commission (2013b) and European Commission (2012).

The great complexity of building a properly functioning single rail freight market notwithstanding, two overriding concerns would seem to dominate all other ones for the short-to-medium run. One is a far greater emphasis on effective competition and the institutional requirements it takes. Shippers and forwarders are unanimous that it is the most profound problem. There are numerous informal ways to pre-empt competition from becoming effective, even apart from the well-known questions of track charges, track slot allocation, and the full independence of national regulators and Infrastructure Managers. For example, business users complain about systematic withholding of information about options for (new) entrants to use e.g. available storage or slots for marshalling (etc.) which impinges on the making of competitive service offerings. The other is a much more strategic focus on the nine corridors as 'flagships' or EU champions of a future internal market for rail freight. These corridors are not just another technical issue in 'just one' of the transport modes. Their success can spark greater and more systematic efforts, also by business in many Member States, to exploit the new opportunities and encourage a more vigorous pursuit of the single rail freight market in earnest.

3. Network Industries: E-Comms

The Digital Market, including the narrow definition of electronic communications (= eComms) as electronic transport of bits in telecoms, internet and broadcast, is extremely fragmented, despite many years of EU efforts to liberalise and regulate. In the following, a blend of qualitative and quantitative assessment of the integration deficits – hence, of the untapped potential – will be provided, emphasizing the main aspects. It is neither possible nor insightful to express this in one single figure. This section will discuss (i) price disparities, (ii) overall costs of not having a Digital Market, (iii) costing the lack of EU-wide B2B communications with a range of services; (iv) infrastructure issues, (v) the Connected Continent proposals, currently having passed first reading in the EP, aiming to deepen considerably the single eComms market and some digital demand aspects as well.

Price disparities are costly

Because EU eComms liberalisation has been organised as 'national islands' of liberalisation and competition, and because the Commission cannot overrule NRAs, it was to be expected that price disparities would arise in what is de facto not a single market (despite free movement and the right of establishment). Of course, especially initially, national circumstances and legacy networks could generate differences in cost price between EU countries. Moreover, some eComms services are basically domestic and intra-EU competition would barely exist even when possible. However, the facts are that there are many price disparities and they are very high, if not sometimes extreme. The authors have updated the Pelkmans & Renda (2011) exposition of these enormous disparities, for the period early 2013. Figure 13 uses a bar diagram for price disparities in 10 of the most important eComms services in the EU.

¹⁰⁰ Pelkmans and Renda (2011) is not theo only study highlighting the existence of significant price

Figure 13 provides a summary of the measured price disparities among the aforementioned (and analysed) markets. The differential between Euro and Non-Euro Tariffs, intended as voice, SMS and data, might be interpreted as favourable evidence of a positive impact of the Regulation 544/2009, as tariffs subjected to the regulation show less disparities among Member States than those not under EU regulation. Nevertheless, much still has to be done. Even in "Euro" markets, price disparities remain huge, up to 1069% in MTRs (including outliers) or up to 933% in the data retail market (no outliers). SMS retail and wholesale markets constitute positive exceptions, indicating a price disparities ratio equal to 138% and 136% respectively. 101

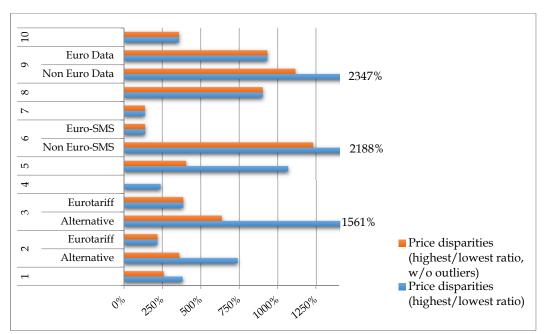


Figure 13 Price disparities in Telecommunications services in the EU, Q1 2013

Note: 1= Monthly price of Fixed Broadband standalone Internet Access offers, Advertised download speed of 8Mbps or above; 2 = Average roaming voice calls (retail; made); 3 = Average roaming voice calls (retail; received); 4 = Average roaming voice calls (wholesale); 5 = MTRs; 6 = Average SMS (retail); 7 = Average SMS (wholesale); 8 = SMS TRs; 9 = Average Data (retail); 10 = Average Data (wholesale). Price disparities in 3, 6 and 9 for unregulated tariffs exceed 1400%, their corresponding values are reported on the right side, at the end of their bars.

Source: Authors' elaboration on BEREC (2013a), BEREC (2013b), and Digital Agenda Scoreboard

Price disparities are not merely an indicator of fragmentation, they are also indicative of the high costs of not having a single market. This must be so because many of the tariffs

disparities in the eComms sector. Indeed, the European Commission (2013) confirmed these findings, furthermore depicting an increasing trend (2007-2011) in price disparities for some eComms segments.

¹⁰¹ Here, the indicator of market integration is the price differential between services in different EU countries, indicated as the highest/lowest ratio. E.g. a highest/lowest ratio of 100% corresponds to a price differential of 50% for the high price country, and of 100% for the low price country.

for these eComms services are (a) far too high compared to underlying costs, (b) in a single market, the underlying costs themselves would gradually converge downwards to a considerable degree as a result of competition. Given the traffic volumes and values for business and consumers, these two benefits of an eventual price convergence to a narrow range of disparities are bound to add up to many billions of euros but no overall estimate has been published. But there is partial information. Thus, in Marcus et al., 2013, chapter 5, two examples are provided which are consistent with rather large gains if price convergence would occur for all the services in Figure 13. First, the welfare gains of the EU regulation of Mobile Termination Rates are found to be in the range of \in 2.8 billion to \in 11.8 billion. Second, the EU regulation of cross-border EU Mobile Roaming yields welfare gains of \in 4.5 billion for the years 2012 – 2014. It is not easy to extrapolate these two examples to the remainder of Figure 13 but in any event it is clear that the total welfare gains of convergence would be much higher than, say, \in 9.5 billion, 102 probably a multiple of it.

• Overall costs of not having a single digital market

The best known estimate of not having a fully-fledged single digital market is from Copenhagen Economics (2010), with no less than 4 % of EU GDP or € 520 bn. This estimate is necessarily rather crude, as much of the details of this digital market are not modelled (and this would indeed be very difficult to do). The estimate is also very large, especially because it would emerge from a single 'sector', be it a cross-cutting area with many applications. Underlying this single-number increment to EU GDP is an extremely demanding and wide-ranging digital agenda of (in 2013) no less than 132 actions, which is likely to take a long period of time before being completed. Amongst the more serious impediments one can mention e-payments, VAT payments, e-privacy, consumer protection (not least from identity theft, fraud, etc.), dispute resolution, data protection and geographical restrictions for consumers buying on-line cross-border. But it also extends to cloud computing. One example is found in electronic invoicing: the European Commission 103 estimates that widespread acceptance of e-invoicing in B2B e-commerce in the EU (from the meagre 5% in 2010) alone would yields gains as high as € 40 bn. More specific studies on aspects of the Digital Single Market would be useful to better underpin the now famous 4% expectation in the medium to longer run. 104

¹⁰² The average of € 2.8 and € 11.8, plus € 4.5 (all billions).

¹⁰³ COM (2010) 712 [Brussels, 2.12.2010] Reaping the benefits of electronic invoicing for Europe.

¹⁰⁴ Two estimates by the Commission confirms the economic importance of the Digital Single Market and Agenda, but how these fit in the Copenhagen Economics one, and with each other is not clear. One such study is about the consumer welfare gains of "e-commerce ... to grow to 15 % of the total retail sector and Single Market barriers were eliminated", amounting to € 204 bn or 1.7 % of EU GDP [COM (2012) 784 of 18 Dec. 2012, The Digital Agenda for Europe –driving European growth digitally; the other one is the claim by the Commission that the full implementation of the updated Digital Agenda would increase EU GDP even by 5 % or € 1500 per EU citizen (with a long-term job increase of nearly 4 million). See http://ec.europa.eu/digital-agenda/en/digital-agenda-europe.

However, there is more. For a better appreciation of the long-run economic meaning of the Digital Single Market, combined with the full Digital Agenda, one should ideally incorporate dynamic aspects, including innovation, which is of course very difficult to foresee. The (too) often used expression of "unleashing the hidden or throttled entrepreneurship or initiatives" is particularly apt in these kind of activities. It is well-known that ICT-related activities make up about one-third of recent economic growth¹⁰⁵ (always a lower share than in the US) and that digital markets are incredibly dynamic in terms of innovation. There is little reason to assume this dynamics to subside. On the contrary, there are good reasons to expect the dynamism in the EU to be stimulated if only the Digital Agenda in a Digital Single Market would be pursued with vigour. The basic choices for the EU can be realised, for example, with the help of the four scenarios in Van Welsum et al. (2014). Another complementary road to 'unleash' innovative forces from the Digital Single Market has been proposed by Andrea Renda (2013), suggesting a holistic and incremental approach to build an appropriate ICT ecosystem, capable of attracting investment and, ultimately, of promoting growth.

Costing the lack of intra-EU B2B communications

The area where the economic case for the Single eComms Market is strongest is that of pan-EU services for which there is likely to be a considerable demand. Three such services one might think of are B2B communications, e-Health services and audio-visual entertainment services. These services encounter so many costly obstacles that they are simply not offered. What is crucial for MEPs to realise is that providers have been trying to overcome such barriers (in particular, in B2B communications) ever since telecoms liberalisation began in earnest in 1998. The huge loss-making of the first attempts by GlobalOne, Unisource and AirTouch (Pelkmans & Young, 1998) to exploit the internal market for telecoms by offering EU-wide business services, especially to locations where business is concentrated, was due to endless foot-dragging about licenses, right-of-way and other aspects. They all went out of business. Later efforts by AOL, Tele2 and Tiscali also failed. This is of course inconsistent with a single eComms market: cross-border and indeed EU-wide operations ought to be facilitated, not frustrated, and their failure should be due to business mistakes, not to fragmented rules and intra-EU barriers. In Godlovitch et al (2013), it is estimated that the indirect benefits of having, rather than lacking, a single market for B2B communications would be as high as € 90 billion.

• Broadband and mobile infrastructure improvements, including spectrum

The demands on EU infrastructure for the Digital Single Market increase all the time. In Marcus et al (2013) forecasts show that data traffic – especially video – will double from 2012 to 2017. Without file sharing and gaming, video will account for 52 % of consumer IP traffic in 2017; including those two, the video share will be around 90 %. Demand that cannot be delivered amounts to a welfare loss of consumers; demand which finds suitable supply tends to increase welfare and with it economic activity. This dominant (video) demand can be satisfied with New Generation Networks (NGAs), in particular,

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¹⁰⁵ Van Reenen et al., 2010; Van Welsum, Overmeer & Van Ark (2014)

when fibre is not only employed in the core networks but supplemented by rolling out fibre closer to end-users. For the latter the business model is sensitive to population density, the level of development, and absolute cost levels for consumers. Ultra-fast broadband via cable or fibre tends to be more expensive and does not enjoy anywhere near full EU coverage. In turn, this leads to various divides: the rural versus urban divide, the 'well-off' versus 'less well off' divide and to some degree East EU versus West EU (a legacy from the past). In chapter 2 we have already argued that infrastructure critically depends on how markets are organised and whether opportunities can be grasped without too many obstacles or conditions. For some of these new services a single market environment is likely to stimulate, more than in a national environment (certainly for the many smaller EU countries), the development or even emergence of such services. To some extent, there is therefore a chicken-and-egg problem, which may justify some targeted subsidies or other well-considered EU intervention, perhaps temporary.

For mobile traffic, growth rates are even higher but the share in 2017 is nevertheless only some 7 % of total data traffic. Here spectrum questions are essential. 106 However, as shown in Marcus et al (2013, chapter 6), there are two opposing trends arising from both demand and newer technologies. One the one hand, there is an explosion of mobile data traffic now that IP-based networks and services (e.g. mobile phones with Android) are generally used, and this will sooner or later require much more spectrum availability. On the other hand, only very recently, data has been published on mobile data 'off-load' (that is, it is taken off mobile networks by using private and public WiFi networks) and this shift is truly dramatic: whereas ordinary mobile traffic is expected to increase fivefold from 2011 to 2016, off-load traffic would increase ten-fold, reaching by 2016 a volume four times as large as ordinary mobile traffic! Off-load traffic basically converts mobile traffic into fixed network traffic again. This has consequences for network investments. Going beyond this, if mobile traffic may become a substitute for fixed broadband, the two would form one 'relevant market' in competition terms, having drastic implications for EU eComms regulation in future (which is based on lingering dominance in fixed services, requiring regulation). The reason is that, in such a single 'relevant market', it is likely that dominance would no longer exist. If this would occur, it is even less clear why eComms liberalisation is organised in national 'islands' of market competition.

The Connected Continent proposals briefly assessed

The impact assessment of the "Connected Continent" initiative quantifies the potential benefits of achieving a single market in eComms. The estimations are based on the Ecorys

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¹⁰⁶ Concerning spectrum policy, the impact assessment on the "Connected Continent" initiative quantifies (Analysis Mason, DotEcon, Hogan&Hartson, 2009, "Exploiting the digital dividend - A European Approach") diverse potential gains. Allocating the 800MHz band in Europe to wireless broadband, as a result of the digital dividend, would create benefits equal to €30 to 40 billion over 15 years. Similar benefits would derive from assigning spectrum at a European level.

study (2011)¹⁰⁷ on the cost of non-Europe in electronic communications. The report indicates enhanced competition –caused by a further opening up of national markets – as a driving force for the potential creation of a permanent welfare gain of between €27 billion to €55 billion per annum (corresponding to 0.22% to 0.44% of EU GDP). In addition to that, the realisation of an eComms single market would generate positive effects – such as, e.g., more specialisation through the value chain; economies of scale in the production of some goods; (re-)attraction of head offices and production facilities in the EU – equal to €35 billion to €55 billion per annum (corresponding to 0.30% to 0.44% of EU GDP). Therefore, the total benefits might reach as much as €110 billion per annum (or 0.89% of EU GDP).

4. Network Industries: Gas and Electricity

In 1988 the Commission published a far-sighted discussion paper on the Internal Market for Energy, ¹⁰⁸ meaning gas and electricity. It took eight years before the 1st electricity directive ¹⁰⁹ was enacted and ten years for the 1st gas directive. ¹¹⁰ Now, 26 years later, the enormous progress ought to be acknowledged. However, there is still no internal market for gas and electricity. Moreover, the emerging internal market has become hopelessly distorted by inconsistent policy choices in – especially – EU instruments as well as by the incredible latitude for national support policies (including state aids and other policies) of renewables. These distortions are very costly, do not really help much to achieve key objectives and wipe out most if not all the considerable gains arising from the internal market of electricity and gas. Therefore, two issues should be urgently addressed: the remaining barriers and other requirements (such as large investment needs) to accomplish a fully-fledged internal market for gas and electricity, on the one hand; an effective reduction, if not removal, of the distortions by redesigning the regimes for renewables and restoring consistency inside the EU energy strategy triangle, on the other hand.

• Progress towards energy market integration

Three electricity and gas packages (1996/8; 2003 and 2009)¹¹¹ and numerous measures in between as well as the follow-up of the Energy Inquiry (2006/7)¹¹² by DG Competition,

¹⁰⁷ Ecorys, TU Delft, TNO (2011), "Steps towards a truly Internal Market for e-communications – In the run-up to 2020", November, Final Report.

¹⁰⁸ Commission Working Document, COM(88) 238 final, 2 May 1988.

 $^{^{109}}$ Directive 96/92/EC of the European Parliament and of the Council of 19 December 1996 concerning common rules for the internal market in electricity

¹¹⁰ Directive 98/30/EC of the European Parliament and of the Council of 22 June 1998 concerning common rules for the internal market in natural gas.

¹¹¹ First package: see supra notes 2 and 3. Second Package: Directive 2003/55 for Gas and 2003/54 for Electricity, plus two access regulations: Reg. 1228/2003 (electricity) and 1775/2005 for gas. Third package: Directive 2009/72/EC concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC; and Directive 2009/73/EC concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC; Regulation (EC) 713/2009 establishing an Agency for the Cooperation of Energy Regulators (ACER); Regulation (EC) 714/2009 on conditions for access to the network for cross-border exchanges in electrity and repealing Regulation (EC) 1228/2003; Regulation (EC) 715/2009 on conditions for access to the natural gas transmission networks and repealing Regulation (EC) 1775/2005.

the Florence and Madrid Fora and the establishment of the Agency for the Cooperation of Energy Regulator (ACER) and European Network of Transmission System Operators (ENTSO-E and -G, for Electricity and Gas) have resulted in a steady, though somewhat slow, progress towards a single energy market.

Further to these acts and institutions, two market-based initiatives have played a crucial complementary function in the move towards a frictionless electricity and gas market: power exchanges and gas hubs. Power exchanges allow achieving much greater efficiency of electricity flows over cross-border interconnectors; hence, much smaller losses due to lower average congestion and an ever larger number of days of the year that spot prices on both sides are equal, the so-called 'market coupling', disciplining incumbent's wholesale pricing behaviour. Gas hubs have a somewhat similar function for spot prices, albeit only few of them display sufficient liquidity as yet, gradually having become so important that spot prices serve more and more as a price setting constraint for longer-term contracted gas supplies, yielding transparency and undistorted competition. However, as will be shown later, there are significant other distortions which undermine these sound developments. Market flexibilities have gradually been improved by shortening excessively long contracts for gas or electricity delivery. Although there is a painful shortage of cross-border interconnector capacity, still, new interconnectors are being built, with or without (a temporary) exemption for Third Party Access. The EU and the Member States have pursued a strategy of Regional Initiatives of e.g. market coupling, with a view of arriving eventually at a truly EU-wide electricity network by enlarging the 'coupled' markets with the inclusion of neighbouring ones.

In natural gas, in Central Europe, there are genuine security-of-supply concerns because gas networks do not always connect to other parts of the EU but (only) to Russia, and infrastructural remedies are by definition expensive and take a lot of time to build. Also Liquid Natural Gas (LNG) harbour and transfer facilities are not available in some of these Member States.

The present report does not aim at a full description of the manifold actions and an assessment of all the accomplishments in both sectors. Indeed, as this is a report on the Costs of Non-Europe, we shall focus on (a) the remaining barriers to the single market for gas and electricity, in particular their costs, and on (b) the distortions and underlying regulatory and policy choices threatening to wipe out the prospective and already realised gains from the prospective accomplishment of this single market.

Are national electricity and gas markets integrated?

All the many efforts notwithstanding, the integration of national electricity and gas markets is extremely uneven and also still incomplete even in the best practice cases. Given space constraints, the focus will be on two indicators: (i) market entry for the purpose of what is called supply substitution (i.e. more effective competition) and (ii) price convergence across the EU.

¹¹² DG Competition, Report on Energy Sector Inquiry, SEC(2006) 1724, January 2007

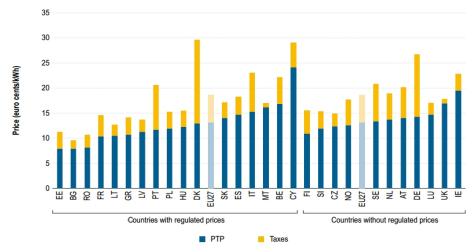
Supply substitution can occur by entrants in the electricity or gas market, coming from respectively gas or electricity in the same EU country, or, from the same fuel sector of another EU country. ACER data analysis (ACER, 2013, pp. 29/30) shows that foreign intra-EU entry is considerable in some countries (especially, their capitals) like the UK, the Netherlands, Spain and Portugal, but insignificant or non-existent in other EU countries. Domestic entry can be observed everywhere but either these entrants are owned by municipalities not having any wider competitive strategy, or they have proven incapable of expanding their market shares against incumbents (hence, remaining in a non-challenging position of fringe competitor).

When assessing price convergence, we note a sharply divergent trend between more integrated wholesale markets and disintegrated, if not ever more disintegrating, retail markets. Wholesale electricity spot prices are tending towards convergence where market coupling is advanced (and the Regional Initiatives have expanded and cover a large and increasing share of the EU-28), with contracted supply prices following in their wake ever more frequently. In the gas sector, spot wholesale prices from hubs are converging, with increasing (but still scattered) evidence that contracted longer-term supplies begin to be priced with reference to forward hub prices more and more often.

At retail level, however, energy markets are not integrated. A brief discussion of price disparities and their underlying problems will clarify this. In chapter 2 the barriers to energy market integration are summed up, substantiating the point in another way.

Figure 14 and Figure 15 provide retail electricity prices without and with taxes for respectively residential and industrial customers. Price differences can go beyond 150% if countries with regulated retail prices for consumers are taken into account and up to some 80% when only markets without price regulation are considered. For businesses there are still 11 countries with price regulation (!) and price disparities are stark. However, for those countries without price regulation, price disparities are lower, but still significant.

Figure 14 Household Electricity prices in EU countries: PTP (pre-tax total price) and taxes (2012)



Source: ACER, 2013

Figure 15 Industrial Electricity prices in EU countries: PTP (pre-tax total price) and taxes (2012)

Source: ACER, 2013

For natural gas, price disparities are much lower compared to electricity. However, this is not or hardly due to actual or potential cross-border flows within the internal market. Household gas prices (Figure 16) without tax are not far apart in regulated countries once one ignores outliers like Romania and Greece. Indeed, when they are included in the analysis, price disparities are far stronger. Taxes do alter the picture, however, with e.g. Denmark and Italy slapping high taxes on pre-tax (regulated) gas prices. In unregulated markets, Sweden in extreme form and the Netherlands, show high taxation (and this causes price disparities to be significant), but, again, ignoring tax, price disparities are small. This is also true for business gas prices (Figure 17), with the same exceptions/outliers as in Figure 16.

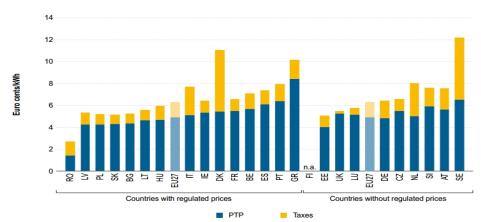


Figure 16 Household gas prices in EU countries: PTP (pre-tax total price) and taxes (2012)

Source: ACER, 2013

Figure 17 Industrial gas prices in EU countries: PTP (price without tax) and taxes (2012)

Source: ACER, 2013

• Economic benefits of the energy market

The direct economic welfare benefits of interconnectors in electricity have recently been estimated by ACER. For eight interconnectors (gross welfare) gains fall in the range of \in 100- \in 260 million; another sixteen show smaller gains. For those 24 interconnectors together, the additional gains give a rough estimate of \in 2.1 bn. It is worth considering that when electricity markets are coupled, there are winners and losers. The elimination of price divergence means that in Country H, with higher prices, prices go down, while in Country L, with low prices, prices go up. Efficiencies due to the larger market size, e.g. in production, dispatch or security of supply, imply that the new coupled price is lower than the weighted average of former H and L prices. However, electricity producers in Country L and electricity consumers in Country H gain from the new coupled price, while electricity producers in Country H and electricity consumers in country L lose from the new coupled price. Even accounting for gains and costs for different market players, new interconnectors result in net benefits for the society as a whole.

Of course, this is merely the direct gain from connecting national markets at wholesale level. There are many other aspects that would have to be taken into account before arriving at an estimate of the overall gains of an internal market in electricity, such as direct and indirect gains for consumers (which in turn depend on the pro-competitive linkage between wholesale and retail prices), positive competitiveness effects for business in their downstream goods and services markets, etc.. Taken altogether, such aspects would multiply this rough figure. However, this requires careful modelling. On the other hand, the gross benefits of interconnectors cannot be regarded in isolation, for three reasons. One is the costs of TSOs (Transmission System Operators) to make this happen. But two other features are problematic: first, there is a considerable 'waste' in the actual

(as against the planned day-ahead) utilisation of interconnectors which can be minimised by intra-day trading in the future¹¹³; second, there are large 'loop flows' (unscheduled flows) which threaten to reduce significantly the welfare gains of interconnectors.¹¹⁴ The loop flow problem has become much more serious due to near-uncontrolled RES-driven electricity fluctuations in the grid ¹¹⁵ and it forces regulators to employ costly and disruptive curtailment strategies.

In gas markets, there are several EU countries not yet connected to the EU-wide networks; in other cases, price disparities are considerable due to reserved pipeline capacity for longer periods. ACER (2013, pp. 204-208) has calculated gross welfare benefits of full price convergence for the EU-25 in a range of \in 11 - \in 18 bn. But also here, there are a number of issues that cause this figure to be attained only a number of years from today. And once again, the overall benefits depend on how these welfare gains spill over to businesses for their downstream markets.

We report on two other recent surveys and estimates of the welfare benefits of a single electricity and gas market. First, in EAVA (2013) several case studies are summarised (commissioned by the EP/EAVA), showing selected economic gains for aspects of market integration. One case study deals with liquid hubs and power exchanges. They induce cost savings as the high cost country can import at lower costs; it also flattens the overall supply curve, reducing the unit price of energy. The case showed that 14 GW less generation as required; in terms of avoided capital costs and avoided fixed operational costs, some € 1.64 bn can be gained. Another case is about 'market coupling': for the exchange between France and Italy the efficiency gain is estimated as € 78 mn; reductions of market imperfections on the Italy side amount to € 58 mn and on the French side to € 256 mn. Such cases would have to be repeated for many interconnectors. Yet another case is about balancing markets. Effective cross-border balancing schemes lower reserve costs, will enable lower cost potential providers of the energy to go first (which lowers overall costs) and renewable energy - in a cooperative balancing system may be more easily accommodated. Going so far as to employ a common 'merit order list' (and not national), the efficiency gains would amount to € 600 - € 900 mn.

A recent study by Booz, Newbery, et al. (2013) is both more systematic and more rigorous.¹¹⁶ The authors estimate orders of magnitude for the entire EU, not for selected

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¹¹³ In three cases this waste results in welfare costs of respectively € 200, € 150 and € 60 million, the rest is trivial (ACER, 2013, p. 82).

¹¹⁴ In six cases, welfare losses due to loop flows ranged from € 11 to € 77 million (ACER, op. cit.)

¹¹⁵ One among several reasons being that RES-driven electricity has unquestioned priority for TSOs, a provision that should urgently be withdrawn, and replaced by properly costed capacity mechanisms.

¹¹⁶ It also studies related aspects such as the advantages of nodal pricing. The authors show that nodal pricing models are often not refined enough (insufficient nodes) to demonstrate properly the full gains. In addition, the study includes an authoritative survey of estimates in the analytical literature.

instances. The study distinguishes four types of economic gains for electricity. ¹¹⁷ The two major ones consist of (i) the net market integration gains of some \in 10 bn to \in 16 bn if integration would be accomplished by 2015, and \in 12.5 bn to \in 40 bn in 2030, besides (ii) an extra gain of \in 16 bn to \in 30 bn, if RES investment and hence the flows from it were coordinated by a genuine internal market for it. The two smaller gains consist in (iii) those from sharing balancing reserves (\in 0.4 bn), and from a widespread introduction of smart grids (\in 4 bn). For gas, the maximum net market integration benefits amount to some \in 30 bn. This does require additional connecting gas infrastructure, which, in turn, improves security of supply. The authors estimate that some \in 1.5 to \in 3 bn extra infrastructure investment on top of what ENTSO-G foresees until 2022 (namely, \in 10 bn) would be necessary. Altogether, these are significant gains, and they do not include indirect economic gains when the impact on competitiveness of companies would be considered. Note that the gas benefits in Booz, Newbery et al, op. cit, are much higher than the mere gains from price convergence calculated by BEREC, quoted above.

• Magnified distortions in the emerging internal energy market

This section explores how an increasing trend towards 'fundamental' (i.e. wholesale) price convergence of the electricity markets is countered by diverging national policies, which have been allowed in EU RES decisions. As discussed above, wholesale prices are converging, mainly with the help of progressive market coupling, which is in turn due to the increased interconnector capacity and improved ways of managing this capacity. However, member states still have a large room for manoeuvre when it comes to other cost components, mainly network costs, RES levies and other taxes.

Before exploring these three components, the Emission Trading Scheme (ETS) for carbon needs to be mentioned. Since 2005, stationary sources of greenhouse gases (GHGs) can emit CO2 (and other GHGs) only if they surrender an amount of allowances equal to the amount of emissions. These allowances are priced through a market mechanism and thus represent the 'cost of carbon'. Electricity producers are an important source of CO2 and as such had to bear, in theory, the cost of carbon. In practice, from 2005 to 2012 allowances were allocated to electricity producers mostly for free (over 90% of the total). However, they still have passed carbon costs on to residential and industrial consumers, imputing in the bill the opportunity cost of not selling allowances on the market. The pass-on rate is hard to estimate, but recent data on electricity auctions show that between 80% and 100% of costs have been passed on to customers. From 2013 onwards, electricity producers have to buy allowances in the market, rather than receiving free

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¹¹⁷ Note that the study allows for two more 'realistic' scenarios: one being that only 50 % of the transmission investment is made of that which would be optimal for a single market (the market integration gains would then be € 4 bn lower), and the other, reflecting a desire of EU countries to not fully surrender their supply security to the internal market, reducing these gains by a range of € 3 bn to € 7.5 bn. National instead of EU-wide security is expensive.

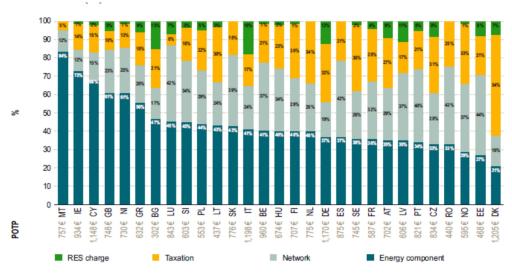
¹¹⁸ As set up by Directive 2003/87/EC of the European Parliament and the Council Establishing a scheme for GHG emission allowance trading within the Community.

¹¹⁹ For further details see Fabra N. and M. Reguant (2013), "Pass-through of emission costs in electricity markets", *NBER Working Paper Series*, WP 19613, November.

allocations on the basis of past production, and thus do not enjoy carbon windfall profits anymore. Electricity customers would barely notice the difference, as they had to shoulder opportunity or real costs in any case. ETS indirect costs, as they are usually called, in principle do not distort the internal market, as they originate from an EU wide scheme. However, two factors embedded in the ETS design do eventually distort it. First, the indirect cost of ETS depends on the carbon content of the marginal power plant. As such, coal-based Member States face a higher carbon cost compared to gas-based EU countries. Secondly, from 2013 onwards, Member States are allowed to compensate industries for ETS indirect costs. 120 The fact that costs, created by an EU wide policy, may be compensated on a country basis, creates distortions between industrial customers residing in different countries. While this is currently a relatively minor issue due to the very low price of carbon, it may become a source of large distortions in the future, if and when the costs of allowances will rise again.

Coming back to policy-driven components, Figure 18 and Figure 19 show the weight of other components of gas and electricity residential prices in Europe. The figure is striking: first, because the pure energy cost component is very low, about 50% for electricity and 60% for gas; and secondly because the weight of the components is extremely different across Member States. For this reason, 'private' competition, i.e. among energy companies, is becoming less and relevant if compared with cross-country regulatory competition, based on 'other' costs such as taxes and fees.

Figure 18 Decreasing relevance of market-driven (household) electricity pricing in the EU



Source: ACER, 2013

¹²⁰ Commission Guidelines on certain state aid measures in the context of the greenhouse gas emission allowance trading scheme post 2012 (2012/C 158/04).

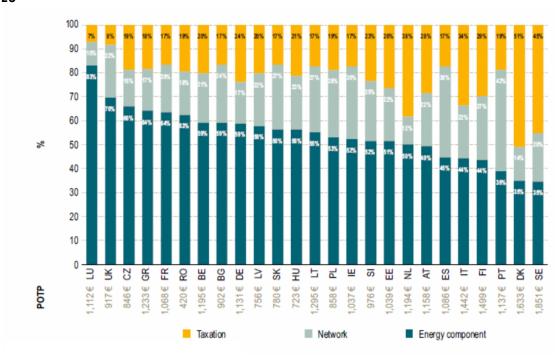


Figure 19 Decreasing relevance of market-driven pricing for (household) gas in the EU

Source: ACER, 2013

Network costs are in principle regulated through the energy packages: national regulators have to calculate the costs borne by transmission and distribution operators and to consequently remunerate these costs. However, the energy packages do not mandate who has to bear the cost. Countries may decide to allocate these costs more or less evenly between various classes of producers, i.e. between households, small enterprises and energy-intensive consumers. This results in diverging network tariffs for similar consumers in different Member States. While the ENTSO reports already show a certain degree of divergence, when the analysis is carried out on the *actual* price of energy and gas delivered at industrial plants, the situation is even more worrisome. ¹²¹ In some countries, energy-intensive consumers are (almost) completely shielded from network costs, while this is not the case in other countries (see the red bar in Figure 20 below). ¹²²

The same reasoning goes also for energy taxes. The EU legal framework¹²³ only sets minimum values for excises on energy products and fuels, including electricity and gas,

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¹²¹ In a study for DG Entreprise, CEPS was given access to the actual prices in the books of participating enterprises in energy-intensive sectors (on a confidentiality basis; aggregated in published form). See next footnote.

¹²² Egenhofer C, Schrefler L. *et al.* (2014) Final Report for a Study on Composition and Drivers of Energy Prices and Costs in Energy Intensive Industries: the Case of Ceramics, Flat Glass and Chemical Industries. CEPS Report for DG Enterprise and Industry of the European Commission.

¹²³ Council Directive (2003/96/EC) restructuring the Community framework for the taxation of energy products and electricity.

and also gives member states room for exemptions for industrial customers. Member states are thus free to levy higher taxes on residential consumers, and higher or lower or no taxes on industrial customers. The impact of taxes on final prices is high for residential customers, as shown by the orange bars in Figure 18 and Figure 19 above, while it is much lower for industrial consumers, as shown by the purple bars in Figure 20, first because they usually enjoy exemptions, albeit to a different extent, and secondly because they can recover the VAT.

Of all components, the 3rd one, RES levies are the most distortive. The EU 2020 and climate strategies require Member States to promote the deployment of RES source to achieve the objective of sustainability in the form of a quantitative RES target. In most Member States, this is done by granting RES producers a feed-in-tariff which (more than) compensates for the higher cost per MW installed of these sources compared to fossil fuels. The feed-in-tariff is then recovered by imputing additional costs in the electricity (and in some countries also gas, for biogas plants) bills. Retrieving data on the amount of RES subsidy per EU country is a complicated, but feasible task. Retrieving data on the amount of RES costs in the electricity bills for different kinds of consumers is almost impossible, because national policies are, to say the least, murky. Given the sheer size of RES subsidies, RES levies represent a large and growing share of electricity bills. However, some MSs allocate this burden more or less equally across consumers, including both industrial and residential ones. In some EU countries, residential consumers bear most of the costs while industrial plants are shielded through exemptions, and hence gain in competitiveness vis-à-vis other Member States. Things become even more complicated once it is considered that exemptions, which are similar from an economic point of view, may nevertheless get a different treatment under the state aid regime depending on the legal structure of the exemption (e.g. whether public bodies are involved in the payback or it is done only via private entities, i.e. the electricity producers). The European Commission may clamp down on this situation in the near future by requiring that all customers bear a 'fair' share of the RES burden, but this may lead to an overall loss of competitiveness for the EU industry. Finally, in some EU countries the RES support is funded via the general taxation rather than the electricity bills, again distorting the internal market further.

This report does not answer the paramount question of whether network costs, energy taxes and RES levies should be designed in a way that promotes more security of supply, sustainability or competition, or, for that matter, what combination of the three. What is clear is that Member States enjoy such a large discretion that they are seriously distorting the internal market through regulatory competition on energy cost components. All the efforts that the EU has made in integrating the markets for electricity and gas, which are finally beginning to be successful at the wholesale level, are (more than) wiped out when it comes to electricity and gas final prices for citizens and businesses. As the internal market is not a theoretical dream of economists, but a means to deliver tangible effects and improvements for European citizens and companies, these divergences have to be tackled with the utmost urgency. Unfortunately, the costs of these multiple distortions

are everybody's guess. However, they are bound to be sizeable as well as unfair to some enterprises in disadvantaging them.

125 :lectricity cost components (€/MWh) 100 75 50 25 0 2011 2012 2010 2011 2012 2010 2011 2012 2010 2011 2012 2010 IT (5 plants) ES (10 plants) DE (8 plants) PL (5 plants) RES levy 0.0 0.0 0.0 6.1 9.0 2.6 3.3 1.8 6.7 6.7 7.4 4.7 Other (excl. VAT) 2.6 2.5 2.2 3.9 4.4 4.5 0.5 0.5 0.8 4.9 4.7 ■ Grid fees 20.8 28.9 27.0 28.6 25.9 30.6 6.5 5.2 3.1 14.4 13.4 13.8 77.5 49.0 60.9 60.3 47.1 52.8 48.1 47.7 49.3 48.3 Energy comp. ■ Grid fees ■ Other (excl. VAT) ■ RES levy

Figure 20 Decreasing relevance of market-driven pricing for (industrial) electricity in the EU

Source: Egenhofer C., Schrefler L. et al. (2014)

The distortions for (back-up capacity) generators supplying indispensable carbon-based electricity (coal-fired plants, gas turbines) for (say) 75 % of the time when renewables are not available, have become so large that companies like E.on and RWE are 'mothballing' turbines, including very modern and efficient ones, with major losses of write-offs amounting to several billions of euros at least. Of course, this is not solely due to renewables, it is also due to a far too low carbon price in the ETS (making it attractive to switch back to coal) and to the low gas prices as a consequence of the shale gas revolution in the US.

5. Professional Services

The internal market dimension for regulated professions is relatively more complex than for other services. Indeed, various forms of intervention in this field at the national level make the regulatory framework for professions extremely fragmented. They may also hamper a de-regulatory approach in some instances where it might be needed.¹²⁴

Initially, the driving principle behind the regulation of professions at the EU level was the 'mutual recognition', allowing for substantial differences among the various

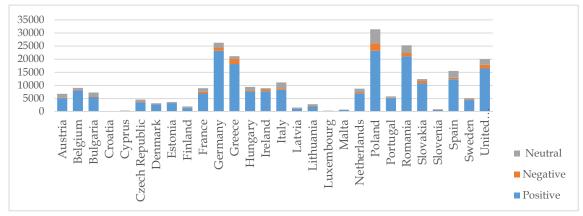
¹²⁴ Note that we are not taking a pro or anti-regulatory stance: the aim of this study is to identify areas of untapped potential and examine the current regulatory framework and its implications.

regulated professions in the member states. Later, several sectoral requirements converged into Directive $2005/36^{125}$ also known as the Professional Qualifications Directive (PQD).

The content of the PQD has been then complemented by the well-known Services Directive (2006/123, SD hereinafter), even if the approach imposed by SD is by far more ambitious, as it imposes a strict cooperation among member states on the recognition of diplomas and the establishment of Points of Single Contact¹²⁶.

Reserved activities for regulated professions, however, still hampers the free movement of professionals while, at the same time, mobility across EU borders is rapidly increasing. According to statistics on the movements of professions provided by the Internal Market Scoreboard (2010), from 1997 to 2008, 70% of the requests of recognition were accepted against 8% denied. Figure 21 shows all the requests of professional establishment received by another member state between 2006 and 2013 per country of qualification. These data cover all professions. On average, more than half of the requests were accepted but for few countries for which the relative percentage of negative requests is slightly higher (i.e. Poland and Greece).

Figure 21 Statistics on the establishment of professionals abroad from 2005/2006 to 2013 per country of qualification



Source: Regulated professions database (2013)

In 2011, the European Commission proposed a report¹²⁷ on the evaluation of the PQD aiming at identifying the remaining obstacles to the free movement of professionals among the member states after its full transposition in 2007. In order to facilitate the

¹²⁵ Directive 2005/36/EC of the European parliament and the Council of 7 September 2005 on the recognition of professional qualifications; Official Journal L 255, 30/09/2005.

¹²⁶ For further details, see

http://ec.europa.eu/internal_market/scoreboard/performance_by_governance_tool/points_of_single_contact/index_en.htm

¹²⁷ http://ec.europa.eu/internal_market/qualifications/docs/news/20110706-evaluation-directive-200536ec_en.pdf

mutual recognition of the different professionals, the PQD identified a set of rules allowing the free practice of a given profession across the EU. The evaluation was based on twelve questions covering the two different situations in which the Directive is applied, namely: 1) recognition under the general system and 2) automatic recognition (temporary mobility, language knowledge, third country qualifications, administrative cooperation, and assistance to professionals and access to information).

While it can be observed that the mobility of regulated professions has dramatically improved over the last ten years, what it is less clear is the extent to which some professions need to be regulated and which is the level of the unnecessary barriers to mobility that such regulations can cause.

More recently, a rather extensive stream of literature focused on the analysis of indicators measuring the degree of product market competition at country level (known as the OECD Product Market Regulation Indicators-PMRs). Their aim is to investigate the burden of anti-competitive regulations across OECD countries in three different areas: a) state control of business enterprises; b) legal and administrative barriers to entrepreneurship; and c) barriers to international trade and investment Performance PMCD has also promoted the construction of Indicators of Non-Manufacturing Regulation also defined as Regulation Impact Indicators 131 at industry-level with the aim of summarizing the impact of regulation in key service sectors, taking into account the endogeneity of intensity of competition.

The PMRs and the other regulatory indicators provide an interesting basis to build specific measures that could be helpful in identifying the effects of the two channels through which the EU can stimulate a growth effect: i) by increasing the intra-EU provisions of services, often working as intermediate to the trade of goods and ii) by stimulating domestic competition and, as a consequence, factors' productivity.

OECD Product Market Regulation 2013 in Professional Services

Figure 22 shows the presence of a "contained" level of regulation in professional services. Indeed, the estimations are all below 50% of the maximum amount. Nevertheless, this picture might be misleading (particularly when it comes to the functioning of the internal market). Indeed, standard deviation is high and differences between maximum and minimum levels of regulation are even greater.

Among the four sectors analysed in the PMRs, the legal profession is the one reporting the highest regulation level and standard deviation. This suggests that the likelihood of finding barriers impeding the correct functioning of the internal market will be higher in this case than

¹²⁸ A deeper analysis of the PMRs indicators is included in Annex I.

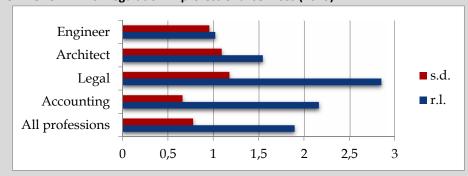
¹²⁹ http://www.oecd.org/eco/reform/indicatorsofproductmarketregulationpmr.htm

¹³⁰ Conway and Nicoletti (2006).

¹³¹ For further details, see http://www.oecd.org/gov/regulatory-policy/ria.htm

for other professions. The other three professions, namely architect, engineer and accountant, are also worrying to the extent that either standard deviation or regulatory levels reach considerable extents.

Figure 22 OECD PMRs: Regulation in professional services (2013)

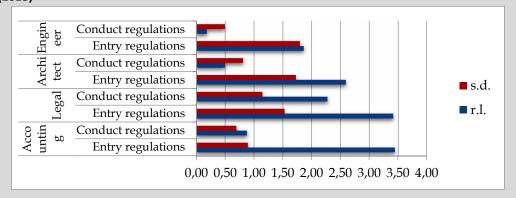


Note: S.d. = Standard deviation; r.l. = Regulatory Levels

Source: Authors elaboration on OECD (2013)

Figure 23 allows for a more detailed analysis of each category, as it separates rules affecting entry from those regulating conduct in the relevant market. Data suggest that — considering both regulatory levels and standard deviation (but results are starker if one concentrates only on the former) — internal market problems are more likely to be detected while observing entry (rather than conduct) regulations. If entry regulations are related to national requirements, i.e. linked to certifications that can only be obtained in the home country and otherwise subjected to a non-automatic approval procedure, these are even more likely to act against the proper functioning of the internal market.

Figure 23 OECD PMRs: Entry regulations and conduct regulations in professional services (2013)



Note: S.d. = Standard deviation; r.l. = Regulatory Levels.

Source: Authors elaboration on OECD (2013)

In particular for regulated professions, restrictiveness at national level can hamper the cross border provisions of services in two ways: first, if a regulatory regime is restrictive, this creates a barrier for nationals in the first place, even though the possibility of matching the requirements is less costly for them. If all the member states are characterized by the same degree of restrictiveness, the presence of the national regimes

creates a 'home bias' that hampers the free establishments of professional services abroad. Secondly, even if equally intense in quantitative terms, it is highly unlikely that the identified barriers are identical in qualitative/content terms across countries. This clearly hampers even more the cross border establishment of professional services.

The OECD (2012) has extensively demonstrated that the intra-EU (15) level of restrictiveness in professional services is relatively lower compared to other OECD countries such as US and Japan, while the degree of bilateral heterogeneity is equal to the OECD average. The OECD also shows that intra-EU bilateral heterogeneity is higher when compared to non-EU partners.

An evaluation study on the lingering intra-EU barriers in regulated services has been carried out by CSES (2012). By analysing existing regulations in 13 EU member states and covering business services, construction and tourism, CSES found striking divergences among the member states, in particular in the number of regulated services across countries. While this analysis, based on regulatory mapping, confirms the presence of many divergences among the member states, it does not allow judging to what extent the presence of deficits in the *acquis* can reduce the potential performance of the internal market.

Many of these indicators for professional services (OECD PMRs., NMR indicators) aim at reflecting how anti-competitive regulation reduces domestic competition. In order to isolate the effect of anti-competitive regulations in professional services, Paterson *et al.* (2003) developed a multi-sector indicators ranging from 0 (absence of anti-competitive regulation) to 6 (highest level of anti-competitive regulation). The index covers four sectors (architect, engineers, accounting and legal services) and different dimensions of restrictiveness grouped in two parts, entry regulations (licensing, educational requirements, quotas and economic needs test) and conduct regulation (form of business and inter-professional co-operation, regulation on advertising, regulation on pricing and fees).

Figure 24 displays the level of restrictions according to different scales: on the right scale, the overall score is reported for OECD countries while on the left side, the percentage composition of the different dimensions is provided. Different observations can be on this Figure. First, the majority of EU countries are characterized by a level of anti-competitive regulation that is higher than the OECD average. Moreover, a few countries such as the UK, Ireland, Finland and Sweden have an overall level of restrictions that is lower than the one reported for the United States. As mentioned, the left axis reports the contribution of each dimension: it can be easily observed that, regardless the overall level of anti-competitive regulation present in each country, the main contributors are always (except in the case of Ireland) represented by licensing and educational requirements. Instead, conduct regulations, mainly in the form of business and advertising are relatively less relevant.

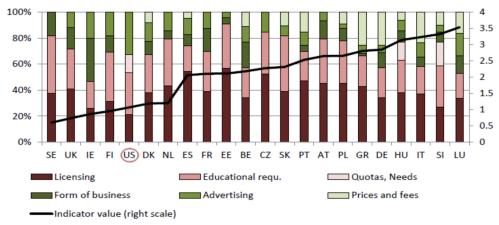


Figure 24 Regulation in professional services by low-level indicators, 2008

Source: Paterson et al. (2012))

A more interesting exercise is instead shown in Figure 25 where the indicator of 2003 and the one calculated for 2008 are compared for each country to understand to what extent the implementation of structural reforms resulted in a deregulation process or instead in stricter regulation. The 45 degrees-line show the unchanged indicators: to its left we find many member states that moved toward a more deregulated environment but not dramatically. Countries like Hungary, Poland, Luxembourg, France and Denmark moved to the right side of the 45-degree line, in favour of stricter regulatory environment.

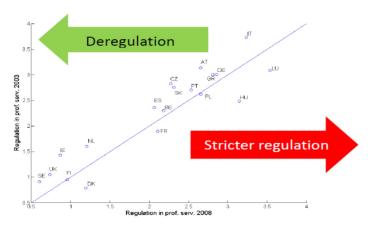


Figure 25 Regulation in professional Services from 2003 to 2008

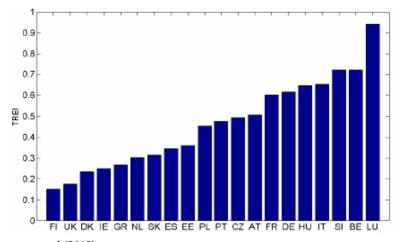
Source: Paterson et al (2012)

Overall, the literature confirms that professional services, more than other services sectors, are affected by a high degree of regulatory restrictiveness that can be translated in a set of anti-competitive measures. By deregulating these sectors, an overall boost in competition and an increase in trade and value added is indeed expected (Barone and Congano, 2011; Arnold, Scarpetta and Nicoletti, 2008). Due to the geographical proximity between the countries under examination, these positive effects are likely to materialise inside the EU borders.

To better understand how to exploit such untapped potential in practice, it is worth describing how professional services are indeed linked not only to their specific regulations (and degree of competitiveness) but especially to the competitive environment of the sectors that they 'go with'.

Indeed, sectoral interlinkages upstream and downstream (especially for services working frequently as intermediate inputs) tend to affect the regulatory economic impacts at different levels in the value chain creating so-called 'knock-on" effects¹³². According to Paterson et al. (2012), the knock-on effects that we want to describe now are on the consideration that "besides a sectors' own production value or value added, sectors might take important key positions in an economy in terms of intermediate deliveries. By providing inputsdirectly and indirectly- these sectors also provide organisational and product-embodied specialised know-how...". The authors argue that the presence of anti-competitive regulation in intermediate sectors (such as professional services) can transmit its effects to (up) downstream sectors through (back) forward linkages. The country-specific indicator combine a forward regulatory- Economic impact indicator (FREI) and a backward regulatory-economic indicator (BREI) calculated by multiplying the regulatory restrictions¹³³ (a value between zero and 6) for the forward and backward linkages and normalised sectoral weights. Figure 26 shows the normalized total regulatory- Economic Impact (TREI) Indicator: the variability of this indicator across the member states is quite high with Luxembourg, Belgium and Slovenia displaying a relatively higher score.

Figure 26 Total Regulatory- Economic Impact Indicator for Professional Services, 2005-2008



Source: Paterson et al (2012)

In 2012, the authors proposed an updated version of this exercise for few selected economies, namely Austria, Estonia, Finland, Germany, Italy, Spain and United Kingdom by running a survey given the lack of updated formal indicators. They found that, for

^{132 &#}x27;Knock- on' effects were primarily introduced by Conway and Scarpetta (2006)

¹³³ Regulatory restrictions are the same reported by the OECD PMR Indicators

<u>accountants</u>, the overall level of anti-competitive regulation decreased compared to 2002 in all the surveyed countries. Regulation for <u>architects</u> has also decreased but unevenly: the level of regulation for market entry in Germany, for instance, increase compared to 2002. A similar picture is valid for <u>engineers</u> that, in most cases, share the same regulatory framework applicable to architects. It was finally difficult to draw consistent conclusions for <u>lawyers</u> due to the low level of responses. However, no overall changes were reported, except few exceptions for notaries in Austria.

Performance of selected business services

It would be wrong to think that underperformance of specific services is mainly or exclusively due to barriers in the internal services markets. In some services, the single market is not the main problem. The PwC/LE study summarised in section 4.IV below shows in considerable detail that, for the 6 sectors selected by them, reasons other than barriers in the single market often cause for instance productivity gaps (compared to best EU practice), in addition to intra-EU barriers. In Ecorys (2012) four services sectors of the broader category of 'business services' are studied: advertising and market research, design services, facility management and technical consulting. The authors demonstrate that several features are at the root of disappointing productivity growth, such as the so-called 'missing middle' (sectors populated by very many SMEs, indeed micro-enterprises, often with low productivity growth, if any, besides a few large firms), a lack of high-skills outsourcing (due to a lack of internal high skills in order to do this effectively), a failure to engage in high-quality co-production as this requires 'absorptive capacity' and a lack of business services process standards. The main 'obstacle' to higher productivity growth is found in sub-size micro firms, a lack of high skill levels and insufficient degrees of internationalisation (for better integration into value-chains). No intra-EU barriers are mentioned. Of course, the focus here is on sector-specific barriers which seem absent, not on 'horizontal barriers (see below). Given the prominence of SME weaknesses, their only EU-related advice is the full implementation of the EU Small Business Act, a kind of charter for actions benefitting SMEs in EU regulation and otherwise.

In a recent paper, Kox (2012) explores the causes of productivity stagnation of the business services industry especially compared to the performance of US counterparts. The study identifies weak competition between small and large firms in business services and the persistence of firm-level inefficiencies as two of the main causes. However, a rigid regulatory framework on employment and high regulatory costs may play a role, compromising a better performance in foreign competitive environments and forcing small business to close down. The idea behind this work is that competitive selection in service markets would be improved by reducing administrative and regulatory costs linked to labour contracts, bankruptcy and start-up requirements.

Nevertheless, these and other 'business services' do suffer from horizontal barriers and rigidities in the internal market. As the 2014 report of the EU High Level Group on Business Services specifies (Annex II.1) , there are a number of serious complaints: (i) from a business user perspective, business services like testing, marketing, designing, labelling and security are 'as fragmented as the products they deal with'; (ii) for business service providers going 'Europe', the

Points of Single Contact (of the Services directive) are useful but insufficient and new initiatives (like the new one-stop-shop for VAT in all Member States in 2015) are again appreciated but threaten to splinter over many portals what, for business, ought to be a single 'doing-business-incountry-A' portal, including easy access to all documents required (as ch. 3 emphasizes, the costs of regulatory heterogeneity between EU countries are high and can be reduced significantly this way); (iii) liability requirements in EU countries are often disproportionate (with queries on whether its related risk assessment at national level is always appropriate) and different between them; (iv) lingering taxation issues, such as different interpretation of transfer pricing guidelines of the OECD, and the bilateral nature of intra-EU double taxation agreements, rather than a single EU agreement (or even advocating the CCCTB proposal from the Commission on a common corporate tax base), causing enterprises getting caught between two tax authorities. Interestingly, the High Level Group also recommends that the Commission proposal for an EU Private Company Statute is re-introduced, as it would considerably reduce the transaction costs for business services providers of disparate company law applications by Member States.

III. Cross-cutting services

1. Retail Services

The contribution of the retail industry to the EU GDP is remarkable as it accounts for 4.3% of total EU value added (data for 2010) and employs 33 million people. In terms of size classes, although two thirds of the retail sector's value added is provided by large enterprises (around 4 thousands enterprises with more than 250 employees), a large share is also provided by micro and small enterprises that accounted for 29.5% and 25 % of the value added in the retail sector respectively (Eurostat, 2013). Given the resilience shown during the crisis, the contribution of the service sector to EU growth, especially during crisis time, is crucial for the recovery phase. However, as mentioned in the Contribution to the Annual Growth Survey (2013), these sectors are still affected by territorial supply constraints which, by throwing up barriers to cross-borders trade in goods, can prevent small and medium enterprises (more than large ones) from exploiting the advantages of the internal market. In this regard, sometimes different domestic regulations (both in the origin and destination countries, with different degrees of intensity) can create obstacles to trade across intra-EU borders. Despite this limit, trade between member states can be further boosted by improving potential forms of cross-border exchange such as B2B trade/sourcing relations, intra-firm logistics and online shops. The performance of different actors of the value chain can be further improved by reducing the level of regulation in different segments. Indeed, as analytically proved by Javorcik and Li (2013) retail sector liberalization can improve the productivity of the supplying industries up to 2.6% (focus on the Romanian case).

Retail and wholesale sectors in the EU are covered by the Services Directive that, five years after its entry into force, has proved to be effective if correctly implemented. According to Monteagudo *et al.* (2012) in large and small retail activities, around 20% of the barriers to cross –border retail that were present before the entry into force of the Directive have been abolished and slightly less than 70% were partially reduced.

Even if the EU is slowly moving toward a more integrated market, the *status quo* of the retail services still shows a certain degree of regulatory fragmentation that hampers the cross-border provisions of goods from retailers that are not fully established in one country. Unclear B2B relations can also compromise an efficient downstream service provision by reducing consumers' choice and by fixing higher prices compared to the ones that could have been set in a more competitive environment. It is important, and here the EU regulatory power has a crucial role, that the downward pressure on consumer prices does not go to the detriment of suppliers and, more generally, of upstream producers.

OECD Product Market Regulation Indicators 2013 for Retail Services

OECD PMRs in the retail sector show a considerable degree of variance (measured by the standard error), and – on the contrary – a rather low absolute regulatory indicator (i.e. equal to 1.93) in 2013. However, being the "overall" retail indicator (i.e. the synthesis of 6 sub-indicators) it is interesting and useful to investigate this information further in order to increase the precision of our assessment. In particular, when it comes to regulation in retail trade, EU MS regulate the most on issues concerning licences or permits needed to engage in commercial activities, and the least on issues related to promotions/discounts (Figure 27).

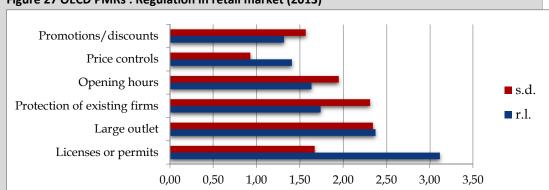


Figure 27 OECD PMRs: Regulation in retail market (2013)

Note: From the bottom to the top, the labels refer to "Licenses or permits needed to engage in commercial activity"; "Specific regulation of large outlet"; "Protection of existing firms"; "Regulation of shop opening hours"; "Price controls" and "Promotions/discounts". S.d. = Standard deviation; r.l. = Regulatory Levels Source: Authors elaboration on OECD (2013)

Looking at the variation of regulation among EU MS (again measured by the standard deviation), differences in regulatory levels are higher for matters concerning the specific regulation of large outlets and the protection of existing firms (from both national and foreign entrants), whereas a more homogeneous scenario (in relative terms) is observable for in price control (Figure 27).

In order to provide a useful tool for tackling and removing lingering cross-border barriers, in 2013, the European Commission adopted a European Retail Action Plan¹³⁴

¹³⁴ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee of the Regions. Setting up a European Retail Action Plan.

which also included a Green Paper on unfair trading practices in the business-to-business food and non-food supply chain. The rationale behind this initiative is that the smooth functioning of cross-border sourcing is still hampered by a number of barriers, consumer access to cross-border retail services and market entry for retailers. The Action Plan aimed at setting out a strategy to improve the competitiveness of the retail sector and by doing this, exploiting the growth potential. Key obstacles were found both upstream and downstream in the value chain and helped to identify five priorities: (i) empowering consumers through better information; (ii) improving accessibility to retail services by promoting an exchange of good practices between Member States on commercial and spatial planning; (iii) fairer and more sustainable trading relationships along the food and non-food supply chain; (iv) ensuring a better link between retail and innovation; (v) creating an improved work environment, for example by better matching the needs of employers and staff skills.

According to different stakeholders, the internal market for services would be complete if the following issues were solved:

- Removing geographical supply constraints: territorial restrictions imposed by some manufactures could in principle prevent retailers from procuring goods, when possible, at the most convenient price. The imposed mechanism keeps final prices higher.
- Enforcing the right of establishment: the establishment of a retail branch outside
 the origin country is protected by EU Treaties. Yet it is often hampered by
 different national regulations that prevent the expansion of the retail network.
- <u>Defining common labelling rules</u>: Adapting the content and form of existing labels in different member states can be very costly for a retailer that wants to be present in different EU markets. This sometimes compromises the choice of serving them. The labelling must be protected, especially when it could affect the safety of the consumers, however, where applicable, it could be harmonised or mutually recognized.
- Harmonizing payment systems: barriers raised by different payment systems
 can create an anti-competitive mechanism that alters cross border payments due
 to different and costly fee mechanisms. This runs against the principle set by the
 Single European Payment Area (SEPA)
- <u>Boosting cross- border e-commerce:</u> exploiting e-commerce is one of the key elements to pursue an internal market for retail activities. However, barriers that prevent cross border trade through internet are mainly linked to the completion of the Digital Single Market.

Very recently, another study on the retail and wholesale industry¹³⁶ outlined the role of the single market and the EU regulation in general to improve the competitiveness of this

COM(2013)36 final Brussels, 31.01.2013

¹³⁵ Green Paper on Unfair Trading Practices in the Business-to-Business Food and Non-Food supply Chain in Europe. COM (2013) 37 final. Brussels, 31.01.2013

^{136 &}quot;Retail and Wholesale: key sectors for the European Economy. Understanding the role of

sector. In particular, as it will be discussed in the following section, the retail sector can also be influence by the fully completion of the Digital Single market where intra-EU barriers still play a role (especially in digital infrastructure, consumer trust, electronic payment, physical distribution systems and tax regimes).

Beyond those studies, the literature does not help much in quantifying a clear quantitative figure on the cost of non-Europe in the retail sector. Also the BEPA report, although providing a comprehensive and informative analysis on the determinants of the performance gaps suffered by the EU retail industry, is not able to clearly quantify the effect of the EU regulation on the performance gap (if there is any).

IV. The BEPA Report

PwC/LE presented to BEPA a study that aimed at defining the "cost of non-Europe" and quantifying the "untapped potential of the European Single Market". These multifaceted concepts allow for various alternative interpretations. The PwC/LE exercise made no exception and created its own classification. The paper is divided in 4 main "phases" consisting in: 137

- 1. An inception analysis in order to delineate the boundaries of the "untapped potential" and identify the sectors;
- 2. A highly structured methodology for selecting 6 services markets to analyse indepth;
- 3. Further economic analysis ('deep dive') of the selected markets;
- 4. Final considerations and policy suggestions.

The elaborate PwC/LE procedure to define the "untapped potential of the European Single Market" appears to be much more focussed on shaping first the former notion, i.e. how is it possible to define an "untapped potential"?, and only afterwards to insert the results in the framework of the EU single market. In fact, for PwC/LE the notion of "untapped potential" boils down to economic "underperformance". Thus, "an untapped potential exists if an economy's or sector productivity, employment growth, innovation, or resource efficiency is well below that of a chosen benchmark". By definition, PwC/LE considers the "untapped potential" as comparative in nature. Also, they attach crucial importance to the benchmark chosen, having a pivotal role in quantifying the "untapped potential". PwC/LE applies a two level benchmarking, i.e. internal among MS¹³⁸ and external with respect to the US and Japan, comparing goods and services production performances between each MS and the MS serving as "best performer", through the use of a "multi-criteria analysis" (MCA) model. Therefore, this procedure compares each indicator between the MS under scrutiny and the MS "best performer", indexing the

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retaling and wholesailing within the European Union" Institute of retail management, SAID Business School and University of Oxford.

¹³⁷ A more detailed analysis of the BEPA report is available in Annex IV

¹³⁸ EU25 due to data availability.

resulting gaps from 0 to 1 (gap equal to 0 if it is the MS "best performer", gap equal to 1 if MS has no output in that sector).¹³⁹

PwC/LE entirely dedicated their "phase 2" to the implementation of the methodology defined in "phase 1", thus selecting the sectors (i.e. markets) in which to make its "deep dives", namely construction, retail trade, business services, wholesale trade, logistics, and hotels.140

Once the "selection process" of the six markets is over, the definition of "untapped potential" still has to be operationalised in terms of "underperformance". What changes is the indicator(s) used for measuring the performance(s). PwC/LE decided to focus on (labour) productivity, developing an indicator - with a customised formula - in order to capture its measurement in each market. More details are provided in Annex IV

It is only in "phase 4" that the PwC/LE research team elaborates a strategy to quantify the relative contribution of each cause to the total "productivity gap". Productivity gaps in each market are explained by selected market specific variables. Nevertheless, two common variables (un)explain the lion's share of productivity gaps in the six deep dives. These are the following:

- A "productivity index": unspecified index; it ranges from 30 % to 60% of the productivity gap;
- The unexplained part of the productivity gap: what is left out from QEVs explanation; it ranges from 2.4 % to 32.5%.

PwC/LE clearly states the "indicative" nature of the results, which should be interpreted as a "first approximation", highlighting the need for further "studies relying on more robust methods (statistical and econometric analyses, productivity decomposition), necessary for a full-fledged quantitative assessment of the relative importance and impact of the presented issues".

In addition to the aforementioned "gap causes quantification", the report (but only in its executive summary) quantifies a precise "achievable" productivity gain, due to a reduction of the initial productivity gap "between the average sector in EU27 and best practice in the sample". PwC/LE clarifies, in the very same part of the report (i.e. executive summary), that they calculated values reported in Table 7 following a "conservative approach" in estimating the effects that new (EU) regulation, oriented to narrowing those gaps, would boost. No other detail is given in the main text.

¹³⁹ See Table 25 in Annex IV.

¹⁴⁰ The final analysis will be focused on markets inside those sectors, corresponding to the following NACE Rev.2 code(s): "construction buildings", "retail sale in non-specialised stores", "architectural and engineering activities; technical testing and analysis"; "agents involved in the sale of timber and building materials" and "wholesale of wood, construction materials and sanitary equipment"; "freight rail transport" and "freight transport by road and removal services"; "hotels and similar accommodation".

Table 7 List of selected sectors and markets

Markets	Hypothesised Gap reduction	Productivity level ¹	Estimated Productivity gain	Estimated Productivity gain (%)
Construction – Construction of residential buildings	From 25.4% to 19.4% (-6.0%)	56,000 € per employee	4,450€ per employee	+7.9%
Retail trade – General retailing, including e-commerce, and apparel retailing	From 39.5% to 35.4% (-4.1%)	28,700 € per employee	1,928€ per employee	+6.7%
Business services – Architectural and engineering activities	From 22.2% to 14.6% (-7.6%)	59,000 € per employee	5,793€ per employee	+9.8%
Wholesale trade – Construction materials	From 10.9% to 9.3% (-1.6%)	42,600 € per employee	762 € per employee	+1.8%
Logistics – Land transport of freight	From 36.0% to 10.0% (-26.0%)	569 tons*km	231 tons*km	+40.6%
Hotels	From 25.0% to 16.9% (-8.1%)	964 tons*km	104 nights per employee	+10.8%

Note: ¹ As quantified in PwC/LE report.

Source: Authors' elaboration on London Economics and PwC (2013).

Table 7 shows the hypothesis PwC/LE experts did on the "achievable" reductions in productivity gap at EU level, and how they will affect productivity, both in absolute and relative (i.e. percent) terms. This exercise foresees massive gains in productivity in the logistics sector (in the order of +40%). Projections for the other sectors also envisage substantial gains (from +6.7% to +10.8%), with the exception of the wholesale trade, where it is only expected a +1.8% increase in productivity.

To conclude, the PwC/LE report constitutes a precious document, incredibly rich in data and information gathered. Distinct from macroeconomic approaches, that only allow for identification of general (i.e. macro) problems, its (microeconomic) nature allows – in principle – for a precise identification of which specific barriers to tackle in order to improve the Single Market functioning. The report uses an interesting and elaborate, though ad-hoc, methodology for selecting the six markets in which it will "dive deeply", conducting a unique and profound analysis on their respective productivity gaps, their causes and possible policy options for their solutions. This approach is based on the assumption that the EU not only needs more integrated markets but above all more performing markets (as underlined by the 2010 Monti report).

Nevertheless, on two issues the report leaves some questions open. The first concerns the barriers identified and policy options proposed (see the Box below for a detailed appraisal of the policy options proposed in the PwC/LE report).

PwC/LE Policy Options

Policy options proposed consist in measures to be taken at EU and/or MS level. A brief summary is provided below, regarding the areas where action is needed (in the light of PwC LE report), and the appropriate level for tackling barriers/issues (EU; MS; both):

- Retail Trade: Store size and local zoning (MS); Opening hours (MS); Labour flexibility (MS);
 Share of hard discounters (no policy proposal); Anti-competitive legislation (both); Labelling (both); (Freedom) of sourcing (EU); Product Safety and Liability (EU).
- 2. **Business Services:** Availability of skills (both); Innovation (both); incomplete transparency in public procurement processes (both); Lack of standardisation of regulations impacting the sector (both); Services Directive Implementation (both).
- 3. **Accommodation:** Education and employment (MS); Innovation and new technology (EU); Attractiveness of location and sector organisation/implication of governments (both); Share of upscale hotel chains in the offer mix (no policy proposal); Diversity of requirements asked to hoteliers in the EU (both); Classification of hotels (both).
- 4. **Logistics:** Inadequate infrastructure (both); Lack of Harmonisation regarding operation and certification (both); Service Providers (EU); Lack of investment into smart traffic system and ICT (EU); Labour and Skills (EU); Dominant position of state companies in rail (both)
- 5. **Wholesale Trade:** Performance of the logistics sector (see logistics section); Invoice recovery (both); Client default (both); Multiplicity of norms and lack of standardisation (both); National measures for construction and renovation (both).
- 6. **Construction:** Heavy Regulatory Framework (EU); Labour, skills and qualification (both); Standardisation (both); Public procurement (General) (EU); Public Procurement (Green/Sustainable) (both).

Indeed, the drivers of productivity gaps (mainly selected through stakeholders' interviews and a few secondary data sources) have not been tested for causality, i.e. what is suggested by stakeholders has not been confirmed by hard data analysis. Additionally, the weights assigned to each driver of the productivity gap(s) have not been underpinned by quantitative data either. The second issue concerns the implications of identifying productivity gaps. Do they show the need of national reforms or refer to EU competences? If and insofar as the first case holds true, should the EU act to foster MS domestic reforms? What can ensure the effectiveness of EU encouragements of Member States acting to intensify reforms? Does the EU have the political and socio-economic legitimacy of exercising such a role? The report remains silent on any of these questions.

Chapter 5 Specific potential benefits: Selected issues for Member States

According to the approach adopted in Chapter 2, the benefits of less 'non-Europe in services by reducing regulatory barriers between member states may still be many. We have also observed that, it is sometimes difficult to disentangle the overall gain the EU can take advantage of from single member states' growth figures. Indeed, there are a few examples in the literature showing how much the member states could gain from the implementation of a regulatory attempt to both harmonize and liberalize the service sector in the EU.

The analysis of the benefits of 'more single service market' at member states level is still at the initial phase and it is difficult to find a robust methodology and a coherent review across different services sectors. It is worth noticing that instead the literature is quite rich in analysing the relation between domestic services reforms in the member states (in most of the cases, regardless of their EU membership and without distinguishing its influence) and growth. Indeed, part of the economic research in this respect has been carried out by the OECD focusing on the better functioning of the services markets that can be achieved by removing restrictive effects on state control, trade and investment barriers and barriers to entrepreneurship. It is clear that the regulatory effect that is taken into account is mainly oriented to the (total) removal of barriers (that remove the anticompetitive regulatory effect, to be more precise) ignoring that many regulations, also at EU level, are in force to protect health, safety, environment and consumers (by fixing the so-called market failures).

Arnold *et al.* (2009) show that the removal of anti-competitive or overly restrictive regulations could stimulate, in ten years, increases in labour productivity from 7% for Spain, 8% (The Netherlands, Finland and Denmark) to 14% (Belgium and Czech Republic), 19% (Poland and Hungary), 10% for France and 12% for Italy. We have learnt that domestic services reforms can be ultimately stimulated by a deepening of the internal services market or be the result of the way through which EU directives are actually implemented. But which is the direct effect of these influences is not clear enough.

The major gains derived from the full implementation of the services directive, for instance, are largely due to domestic stimulus prompted by the removal of restrictions on relevant services hence takes place inside the national border no matter whether those services are actually tradable. This is particularly important if we aim at quantifying benefits for SMEs that not always are engaged in trade in services but can benefit more from a domestic regulatory environment without inappropriate or unnecessary burdens.

A good exercise that quantifies benefits from the internal market for services at member states level is the DG Ecfin report already discussed in Chapter 4 on the effects of the implementation of the Services Directive 5 years after its entry into force. This is of course

an exceptional condition that allows quantifying benefits from a horizontal market opening at country level. The present chapter will briefly present the member states' benefits of implementing the Services Directive. Other ways to quantify the benefits of the EU member states will be then presented: regardless of the actual implementation of a specific directive, benefits from more single market for services simply derive from an increased tradability of services across the EU borders thanks to a more harmonized regulatory framework.

I. Country benefits of the Services Directive: a quantification

There is no doubt that the Directive boosted a significant initial reduction of restrictive regulations across the member states. However, reductions have been not only uneven across the sectors, but particularly across EU countries.

Figure 28 indeed shows, regardless the initial conditions, the percentage changes in barriers to cross-border trade and to FDI that some countries (often the most restricted ones) achieved more than others.

Figure 28 Average barrier changes under the Services Directive by 2011

Source: Monteagudo et al. (2012)

The barrier indicator is then used in gravity regression to understand to what extent the cross border exchange and FDI in services have been affected by the reductions of restrictions across the sectors and countries. As anticipated, the implementation of the Service Directive has caused on average an extra EU GDP increase of 0.8%. This average increase is due to the boost of intra-EU trade (by 7%) and FDI in services (by 4%). Figure 29 shows the distribution of GDP growth per countries boosted by the (partial) enforcement of the SD: a maximum of almost 1.8% for Cyprus and a minimum of almost 0.3% for Belgium.

Figure 29 GDP Impacts of the SD across countries (%)

Source: Monteagudo et al. 2012

II. Other way to quantify country benefits in services

A (not so recent) stream of empirical economic literature identify the members states benefits of being part of the internal market for services by evaluating the impact of a bilateral heterogeneity indicator¹⁴¹ and average intensity on market entry and trade flows.

Kox et al. (2007) test the hypothesis that the indicator has a negative impact on market entry and total exchange of services through a gravity model. The idea behind it is also to figure out whether the regulatory environment influences the choice of mode of supply, according to the GATS' specifications.

They show that in *total services*, regulatory heterogeneity indicators, as proxy of low harmonization, are negatively correlated with both importing and exporting trade flows, confirming the basic hypothesis. As already explained in Chapter 3, this is due to the fact the heterogeneity impedes market entry by affecting its fixed costs. Slightly different results in *other business services* where, while regulatory indices are negatively correlated with trade flows both in exporting and importing countries (although with a more influence in the exporting countries), while market entry seems not to be affected.

A complementary study (Kox *et al.,* 2008) clarify the relation between regulation and commercial presence (i.e. FDI) and how the regulatory framework affects (if this is the case) the choice of supplying the service through one mode or the other.

Results are divided in two groups: firstly, they present the effect of regulation on investment in the different sectors according to the different degrees of regulatory heterogeneity. The second group collects results on the impact of regulation on choice of mode of supply¹⁴². Bilateral FDIs decrease when the bilateral heterogeneity index, in form

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¹⁴¹ See Chapter 3

¹⁴² The last point could offer interesting policy implications on how the current regulation could act as an obstacle to establish a commercial presence and how it affects the choice of supply the service, although, it is important to keep in mind that the current analysis is extended to all the OECD countries and it is not limited to the EU Member states.

of aggregate PMR and sub-indicators, increases¹⁴³. Being based on OECD data, the sample analyzes trade flows and FDI of both EU and extra-EU countries. The use of dummy variables, however, shows that, where an EU Member state trades with an Extra-EU country, there is a beneficial effect due to a potential harmonization (or mutual recognition) of the regulatory frameworks: this means that countries characterized by higher level of heterogeneity can gain more by this policy options than countries already liberalized, that experience, in any case, an increase in the inward stocks (see Figure 30). Figure 30 shows how inward FDI would increase if a minimum degree of regulatory harmonization would apply. Predicted changes would vary across the member states from 1.14 to slightly more than 1.3 (for Italy).

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Figure 30 Change from predicted levels of inward FDI if PMR was harmonized to minimum level observed (0.2)

Note: In this sample, Italy, Austria, Hungary and Portugal are the countries characterized by the highest level of heterogeneity. Source: Kox et al (2008)

III. A focus on network Industries

As consistently described along the different sections of this report, network industries represent a significant part of the Services Market. The European Commission (2013) attempted to build an in-depth analysis on the market functioning inside four of those industries, namely transport, gas, electricity and eComms. The paper provides an extensive set of data, which may serve as a basis for developing a measurement strategy. The overall situation is variegated among Member States, and across sectors (and indicators, some more uniform than others).

¹⁴³ Although the choice of the variables is mainly driven by the limited availability, according to the last developments and statistics collection (see MSITS, 2010), FDIs tend not to be anymore a good proxy for sales of foreign affiliates that exactly match the GATS Mode 3. In the last years, EUROSTAT together with the other international bodies (IMF, OECD, WTO and UNCTAD) is updating and improving year by year a new statistical device named FATS (Foreign AffiliaTes Statistics) that is able to keep track of different variables, the turnover among them, related to the multinationals' activity beyond the domestic borders. Using FDI as a proxy, although it is considered a sort of second best since it does not include foreign affiliates sales as variable to explain, is the only one that allow a (almost) complete empirical analysis across countries given a better data coverage.

Differently from Chapter 4, which mainly aims to quantify Single Market gaps, this section devotes more importance to the Single Market functioning, and the diversification of market structures across Member States and market of activities (i.e. namely transport, gas, electricity and eComms). As seen from the Services Directive experience, non-tariff barriers removal – particularly through the means of national reforms/actions – generated a significant part of the related benefits. Therefore, a tentative mapping of national market structure and functioning may serve as a ground for shaping future policy design and implementation.

Table 8 illustrates the situation in the transport sector, and in its sub-divisions of railways, road, air and ports. In railways, high market shares for the first freight and passenger operator are prevalent. In freight, 4 Member states present a monopoly (100%), 16 Member States present a share above 70% (monopolies included), with only UK (48.9%), Romania (45.3%) and Portugal (9%) being below 50%. In passenger, 5 Member states present a monopoly (100%), 16 Member States present a share above 70% (monopolies included), with only Poland (46.9%), UK (10.3%), and Portugal (9.6%) being below 50%. In road (that strictly speaking is not a network industry), cabotage penetration rate shows a very differentiate panorama. Indeed, the highest rate (Belgium) corresponds to more than thirty times the lowest (Hungary, Poland and Slovenia; excluding 0 values in Bulgaria and Cyprus). Air transport may constitute an exception, as market share of the biggest carrier in every Member State is quite low, the average being equal to 34.74% in EU-27. Few small Member States constitute notable exceptions.

Table 8 Market opening in the transport sector

			RAILWAYS				ROAD							AIR			
	Share of freight operator > 80%	Share of passenger operator > 80%	Public ownership of the first freight operator (>50%)	Public ownership of the first passenger operator (>50%)	Unbundling with infrastructu re manager (*)	PSO - Use of competitive tendering (**)		Cabotage Penetration rate in 2010	Cabotage Pentration rate - Evolution 2005- 2010 (in pp)	International activity of domestic hauliers in 2010	International activity of domestic hauliers - Evolution 2005- 2010 (in pp)		Market share of flag carrier >50%	Public ownership of flag carrier > 50%		Assessn nt of po facilitie (***)	
AT	85.40	94.20	100.00	100.00			ΑT	2.3	0.3	12.3	12.0	ΑT	48.00	0.00	ΑT		
BE							BE	6.4	3.4	9.5	6.1	BE	28.00	0.00	BE		
BG	73.44	97.40					BG	0.0	3.4	32.6	29.2	BG	25.00	0.00	BG		
CY		1	No rail marke	t			CY	0.0	0.0	0.0	0.0	CY	24.00	70.00	CY		
CZ							CZ	1.1	0.9	22.9	22.0	CZ	40.00		CZ		
DE	75.00						DE	1.9	0.4	2.5		DE	38.00	0.00	DE	(
DK	75.00	65.00	2.00				DK	3.7	1.8	6.3	4.5	DK	40.00	14.00	DK		
EE	57.00	50.00					EE	0.3		24.8	24.6	EE	33.00	97.00	EE		
EL			100.00	100.00			EL	0.8	0.4		-0.4	EL	25.00	0.00	EL		
ES							ES FI	0.5				ES	23.00	0.00	ES		
FI							FI	0.3				FI	55.00	56.00	FI		
FR							FR.	3.7	1.1	0.4		FR	50.00	19.00	FR		
HU	80.53	98.17	0.00	100.00			HU	0.2	0.0	25.5	25.6	HU	n.a.	n.a.	HU		
Œ					(derogation)		ΙE	2.1	1.0	6.3	5.3	ΙE	35.00	25.00	ΙE		
T	75.90	91.70					IT	1.0				IT	30.00	0.00	IT		
LT							LT	0.6		42.3	42.0	LT	n.a.	n.a.	LT		
LU							LU	2.6	-2.6	66.9	69.6	LU	66.00	27.00	LU		
LV	76.70	89.43					LV	0.8	0.8	32.1	31.4	LV	66.00	100.00	LV		
MT)	No rail marke	t			MT					MT	51.00	98.00	ΜT		
NL	67.00	95.20	6.00	100.00			NL	1.6	0.7	13.3	12.6	NL	47.00	0.00	NL		
PL	64.18	46.92					PL	0.2		16.8	16.7	PL	33.00	68.00	PL		
PT	9.00	9.60	100.00	100,00			PT	0.4		13.0	13.0	PT	41.00	100.00	PΤ		
RO	45.30	96.52	■ 50.00	100.00			RO	0.3	0.1	5.8	5.7	RO	22.00	95.00	RO		
SE	60.00		100.00				SE	3.1	1.6	1.5		SE	31.00	21.00	SE		
SI	92.46	100.00					SI	0.2	-0.2	35.1	35.3	SI	78.00	70.00	SI		
SK	95.75	99.99	100.00	100.00			SK	0.7	0.0	36.1	36.1	SK	n.a.	n.a.	SK		
JK	48.90	10.30	0.00	0.00			UK	0.9		0.4	0.7	UK	17.00	0.00	UK		
EU average	66.80	66.20						1.70	0.60	7.80	2.70		34.74				
Improveme	Above	Above	Above	Above	(*)	(**)		Below	Below	Below	Below		Above	Above		Belov	
Median	76.70	95.20			-			0.80	0.31	10.88	9.01		36.50			5.	
Cut-off	80.00	80.00	50.00	50.00	-	/-		1.70	0.60	7.80	2.70		50.00	50.00		5	

Note: (*) In red, no separation between infrastructure and services (holding); in orange, autonomous subsidiaries (annex V of the Communication on railways (2006), in green, unbundling. (**) in red, direct negotiation only; in orange, direct negotiation and competitive tendering; in green

competitive tendering only (***) WEF indicators on the perception of ports facilities with 7 for well-developed and 1 for underdeveloped. In red, scores below the mean (5,1). In green, scores above the EU average.

Source: European Commission (2013a).

Table 9 illustrates the market functioning in electricity and gas, across the Member States. In electricity, incumbent's generation share is higher than 80% in 8 Member States, and less than one percentage point less in another one (Belgium, 79.1%). These cases are not only associated with public ownership of the generator, but also high concentration happen when the ownership is private, Belgium being a representative case (no public participation in the biggest operator). These 8 Member States are relatively small in size, with the exception of France. In gas, the market share of the entity carrying it in the country is higher than 80% in 8 Member States. The public or private ownership of the first operator, at a first sight, does not seem to have a strong relationship with market structure. In general, price regulation confirms to be of marginal importance.

Table 9 Market opening in the electricity and gas sectors

	ELECTRICITY (2010)									GAS (2010)						
	Generatio n:share >80%	Public ownership of the first generation producer (> 50%) (*)	Certificatio n for effective unbundling (EU) (**)	Retail: cumulativ e share >80% (< or = 3 retailers)	Price Regulation NH	Price Regulation HH	Net transfer Capacity as a % of peak load > EU average (***)	Entity bringing gas into the country: share >80%	Public ownership of the first producer/s upplier (> 50%)*	Certificatio n for effective unbundlin g (EU) (**)	Retail: cumulative share >80% (< or = 3 retailers)	Price Regulation NH	Price Regulation HH	Resilience of the gas system (>100%) (***) (****)		
AT		51,0	ITO	92.00			53.13		31.50	ITO	70.00			161		
BE	79.10	0,0	UO	84.52			28.65	70.00	0.00	OU	95.00			172.34		
BG		100,0	ITO	84.60			14.10	97.10	100.00		94.10			61.3		
CY	100.00	100,0		100.00			0.00			1	No gas mark	et				
CZ	73.00	70,0	OU.	87.90			25.99	72.60	0.00	ITO	74.90			288.4		
DE	28.40	0,0	OU/ITO	37.30			23.29		0.00	OU/ITO	16.20			180		
DK	46.00	76,0	OU				42.86		76.00					115		
EE	89.00	100,0	OU	73.00			65.15		0.00	OU				60		
EL	85.10	100,0	ITO				16.79	88.6	65.00	ITO/OU	84.70					
ES	24.00	0.00	OU	72.57			6.98	43.70	0.00	QU	75.00			110		
FI	26.60	51.0					27.30	100.00	24.00		95.00			102.4		
FR	86.50	84.0	ITO	85.00			12.35	73.00	35.00		78.00			130		
HU	42.10	100,0	ITO	78.00			52.19	32,60	22.00	ITO	89.10			105		
Œ	34.00	95.0	ISO?	97.00			0.00	36.30	96.73	OU	98.40			62		
IT	28.00	31,2	OU	55.00			15.49	41.30	30.30	OU	58.40			106.1		
LT	35.40	100,0	OU	87.10			142.11	50.50	0.00	OU	98.40			27.4		
LU	85.40	25,0		91.40			92.73		25.00		94.00			44.24		
LV	88.00	100,0	ISED .	99.90			207.46	100.00	0.00		100.00			153.85		
MT	100.00	100.0		100.00			0.00				No gas mark	et				
NL		0,0	OU	75.00			26.37		51.00	OU	72.00			162		
PL	17.40	62,0		70.32			0.00	96.75	72.00		93.00			98.1		
PT	47.20	4,0		97.00			13.91	95.80	8.00		90.70					
RO	33.60	80,0	ISO	66.81			0.00	48.43	100.00		87.74					
SE	42.00	100,0	οŪ	47.90			32.62	52.00	0.00	σu	97.05			12		
SI	56.30	100,0		99.00			83.72	94.20	39.00	ITO	87.87			78.3		
SK	80.90	34,0	OU	86.42			76.52	77.73	51.00	ITO	95.48			173.48		
UK	21.00	0,0	OU	91.50			3.35	23.00	0.00	QU	72.30			113		
EU average	34.00			57.18			23.51	43.82			65.51					
Improvemen	Above	Above	(**)	Above	Yes	Yes	Below	Above	Above	(***)	Above	Yes	Yes	Below		
Median	46.60	-	-	86.42	-		25.99	76.00		-	89.90	-		-		
Threshold	80.00	50.00	-	80 and 3 retailers	Yes	Yes	23.51	80.00	50.00	-	80 and 3 retailers	Yes	Yes	100.00		
	exemption Ongoing r	eforms/proc	edures		High Medium											

Note: (*) Exclude possible golden shares (**) ITO: independent transmission operator; ISO: independent system operator; OU: ownership unbundling (***) Exemptions from certain market opening rules on the basis of article 49 of the Gas Directive 2009/73/EC related to "emergent and isolated markets" – EE, FI, LV, LT, MT, CY. Exemptions on the basis of article 44 of the Electricity directive 2009/72/EC (****) Source: DG Energy. Resilience of the gas sector based on article 9 of regulation 994/2010. N-1 formula which describes the ability of the technical capacity of the gas infrastructure to satisfy total gas demand.

Source: European Commission (2013a).

Table 10 illustrates the state of affairs in the eComms sector. The regulatory environment appears homogeneous across EU-27 Member States, spectrum constituting the main problem among those highlighted in the table; and NRA's independence being questioned by the Commission paper only in few Member States, such as Belgium, Denmark, Estonia, Spain, Italy and the Netherlands. In the mobile segment, main operators' share in national markets is consistently below 50% in most of the cases, Cyprus, Luxembourg and Slovenia constituting the exceptions. In the fixed broadband segment of the market, the conditions are substantially different, as 9 Member States present an incumbent's market share higher than half of their respective market.

Table 10 Market opening in the eComms sector

Spectrum (800MHz)	Spectrum					segment (2010)					Fixed broadband (BB) segment (2010)						
(800MHz)	Spectrum								Platform Competition							Т	
(800MHz)	Spectrum		1								Full LLU					1	
				M obile	Average revenue					LLU and	wholesale				Rural	ı	
	assigned (all	NRA's	Main mobile	termination	per minute of	Mobile		Fixed BB		shared	access		NGA		standard	1	
assigned	other bands)	indep endence	operator's	rates (Euro	mobile voice	broadband	HSPA	incumbent's	Share of DSL lines	access / DSL	charge	Fixed BB	(*****)	NGA	BB	1	
(**)	(***)	(****)	market share	cents)	(Euro cents)	penetration	coverage	market share			(Euros)	penetration	(*****)	coverage	coverage	_	
								00.076		16.1%			0.7%			ΑT	
										5.1%			9.7%		100.0%	BE	
			46.3%	0.00						0.0%	_		3.7%		32.8%	BG	
			73.8%					00.070	00.076	17.9%			0.0%			CY	
										5.8%			1.3%		79.0%	CZ	
													2.7%		58.0%	DE	
										16.3%			5.7%			DH	
										0.0%			3.1%			EE	
													0.0%			EL	
ш													1.6%			ES	
									70.1%				2.8%			FI	
									92.2%	47.4%			1.0%			FR	
										2.6%						HU	
			39.4%	4.60	13.28	60.0%	95.0%	44.6%	67.1%		13.2	24.3%	1.1%	35.6%		ΙE	
			32.8%	5.38	9.01	31.3%	95.5%	53.1%	97.8%	30.8%	10.0	22.2%	0.0%	10.7%	89.0%	IΤ	
				3.62						0.1%	7.3		9.0%		67.6%	LT	
			53.5%	9.15	14.81	64.8%	99.6%	72.5%	89.2%	12.0%	13.3	32.0%	2.2%	75.0%	100.0%	LU	
			46.6%	4.23	4.92	29.7%	99.0%	54.6%	36.2%	0.0%	9.6	20.4%	6.3%	60.8%	67.0%	LV	
			47.2%	4.18		21.2%			51.1%	0.0%	11.0	30.9%	0.4%	99.3%	na	MT	
			49.2%	2.70	18.27	49.2%	99.0%		57.1%	18.6%	7.0	40.6%	8.7%	100.0%	100.0%	NL	
			31.5%	3.45	5.85	41.4%	90.0%	30.5%	48.2%	5.9%	5.3	17.3%		37.1%	28.1%	PL	
			43.7%	3.50		27.5%		49.1%		15.8%	10.0	21.6%	2.9%	74.5%	97.4%	PT	
			41.4%	5.06	2.46	14.1%	95.9%	30.0%	29.8%	0.0%	7.3	15.2%	6.9%	42.9%	86.3%	RO	
											14.0		6.0%		86.7%	SE	
			02.010	4.26						27.0%		24.6%			59.9%	SI	
				5.51					41.9%	0.0%		17.8%				SK	
									79.2%			31.7%	1.7%		100.0%	UK	
			37.09%	3.87	10.66	43.2%	95.0%	43.3%	75.9%	36.49%	9.7	27.7%	_	50.1%	78.4%	┸	
	Above		Below	Below	Below	Above	Above	Below	Below	Above	Below	Above	Above	Above	Above	1	
			41.6%	4.19	9.01	38.7%	97.5%	44.7%		13.9%	9.8	24.7%	2.7%	60.8%	87.8%	┸	
	400MHz		50.0%	5,33 (*)	13,33 (*)	22% (*)	80.0%	50.0%	75.9%	10.0%	12 (*)	20% (*)	5.0%	50.1%	78.4%	丄	
				41.5% 41.0% 44.0% 44.0% 40.4% 40.4% 40.4% 40.4% 40.4% 40.4% 40.4% 40.6%	41.5% 2.01 41.0% 4.19 40.3% 6.05 41.0% 4.19 40.3% 6.05 77.8% 1.81 40.4% 4.36 32.9% 3.7 40.3% 4.43 42.0% 7.02 49.8% 4.95 41.6% 4.05 40.0% 2.50 45.3% 4.05 30.0% 4.40 30.0% 4.40 40.0% 2.50 45.3% 4.05 30.8% 5.88 30.8% 3.02 50.5% 4.05 30.8% 3.02 50.5% 4.05 30.8% 3.02 50.5% 4.05 30.8% 3.02 50.5% 4.05 30.8% 3.02 50.5% 3.05 30.8% 3.02 50.5% 3.05 30.8% 3.02 50.5% 3.05 30.8% 3.02 50.5% 3.05 30.8% 3.02 50.5% 3.05 40.6% 4.23 41.4% 5.05 4	41.5% 2.01 9.62 41.0% 4.19 13.83 40.3% 6.85 5.16 73.8% 1.81 7.51 40.4% 4.30 11.85 32.9% 33.7 11.98 40.3% 4.43 9.55 42.0% 7.02 6.86 42.0% 7.02 6.86 42.0% 7.02 6.86 42.0% 7.02 6.86 42.0% 7.02 6.86 43.3% 4.95 6.83 41.6% 4.95 6.83 41.6% 4.95 6.83 41.6% 1.82 30.0% 4.40 0.08 40.0% 2.50 11.44 45.3% 4.05 6.83 30.0% 4.40 13.28 30.0% 4.40 13.28 30.0% 4.80 13.28 30.0% 4.80 13.28 30.0% 4.80 13.28 30.0% 4.80 13.28 30.0% 4.80 13.28 30.0% 30.0 2.24 45.3% 4.05 6.80 30.0% 30.0 2.24 45.3% 4.05 6.80 30.0% 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32.4% 67.7% 69.0% 69.0% 46.3% 66.5 51.0 14.4% 69.0% 30.2% 30.0% 0.0% 8.5 16.0% 37.7% 71.4% 73.5% 18.1 7.51 42.7% 99.0% 45.0% 66.5% 17.9% 9.8 26.1% 60.3% 40.3% 43.0 11.85 49.5% 99.0% 34.4% 38.0% 88.5% 11.1 23.0% 35.3% 40.3% 40.3% 4.43 9.55 80.4% 89.1% 45.1% 45.5% 40.3% 10.0 33.3% 27% 40.8% 40.3% 4.43 9.55 80.4% 89.1% 55.5% 55.2% 10.3% 10.4 39.3% 57% 61.9% 42.0% 40.3% 4.43 9.55 80.4% 89.1% 56.5% 55.2% 10.3% 10.4 39.3% 57% 61.9% 42.0% 40.5%	### ### ### ### ### ### ### ### ### ##	

Source: European Commission (2013a).

Conclusions

Radical improvement of the internal market for services is high on the EU agenda for some 15 years now. The internal services market strategy formulated around 2000 has undoubtedly brought about significant progress. This is exemplified by the horizontal Services Directive (2006/123) and its intensive follow-ups, the stepwise improvements of the EU regimes of specific network industries and the reforms at EU and Member States' level in the regulatory regimes governing professional qualifications. Much of this was long held impossible. Nonetheless, the vast and highly diversified single market for services still holds significant opportunities for the EU to deepen and improve it further.

Although the understanding of what an internal market for services comprises and what its consequences are, has greatly improved among EU and national policy-makers as well as amongst scholars, also here a better comprehension of the entire concept of the internal market for services is most desirable. One among many signs of a lack of insight into the single services market, is the often repeated call to do more about "the" internal services market because this is suspected to be practically the only source of economic growth for the EU in the short run. Therefore, the present report begins with a holistic conceptual approach. It first answers the basic question what the internal market for services actually is and what it comprises.

In order to do this in a policy-oriented fashion, we have visualized the single services market by a four-floors house. The 'penthouse' or 'treaty chapeau' sets out the fundamentals laid down by the TFEU treaty, such as free movement and the right of establishment, EU competition policy and EU regulation (of services markets, where justified). The three 'lower' floors consist of the horizontal services regimes (dir. 2006/123 and its follow-ups, public services procurement and infrastructure for network industries), a floor of six different sectoral services regimes (like financial, transport, etc.) and a ground-floor of four cross-cutting regimes (retail, logistics, consumer services acquis and the digital market). The logic of the single services market is always based on the treaty fundamentals (and far more than often realised). This logic is ultimately driven by the principal role of the single market, also in services, namely, to help realise the (socio-)economic objectives of the EU as set out in the treaty. Economic growth beyond that, which Member States alone can realise, has always been a preponderant goal since the 1957 treaty of Rome. In order to serve the principal treaty goals, the internal market (here, of services) has to be accomplished by removing 'barriers', giving an economic meaning to 'free movement'. This is called the 'establishment of the internal market' (in the treaty and case law). Once this is achieved or in progress, what also matters is the 'proper functioning' of that accomplished internal market. Together, the two can effectively serve the Union's economic objectives. All this has to be reflected in the lower floors (the horizontal services regime; the sectoral services regime; and the cross-cutting regimes for single market activities) in ways that effectively enable the internal services market to be established fully and function properly. If this is not the case, 'gaps' in the acquis or 'market integration deficits' have to be identified and addressed.

Following this functional approach the research team found evidence of diverse "gaps" and needs:

- Services Directive what is needed is a selective but nonetheless wide-ranging
 and 'deep' 'market monitoring' approach, as exemplified in the 2012 Commission
 report on performance checks in three sectors, both legally and economically,
 from the point of view of business suppliers and users;
- Public Procurement it is not so much about the removal of 'barriers' in the
 internal (services) market [that is, the better 'establishment' of the single market],
 but largely about its 'proper functioning'; the new regime would seem to be
 better but only covers some 25 % of public purchases and still suffers from some
 weaknesses (also in national enforcement and remedies)
- Network industries (1) infrastructure in some network industries is closely linked with cross-border intra-EU liberalisation, (EU) regulation and EU competition policy of the relevant services. However, there are integration deficits in infrastructures particularly in: electricity and gas, (freight) rail, electronic communications, spectrum (frequencies) for eComms, and air traffic control. All these infrastructures can best be considered as having regional, national and European 'layers'. For the single services market, what is essential is of course the EU-wide or European layer. The national or regional layers should be governed at national and/or regional levels, but in such a way that the European layers are or can be developed properly from an EU-wide perspective. The EU-wide layer can be developed optimally only if (i) the sectoral services regimes provide the correct incentives to build and/or exploit such cross-border infrastructure; (ii) Member States do not unduly insist on their national competences irrespective of the effect on the single market and its functioning (a treaty obligation which they are held not to frustrate!); and (iii) adequate EU and Member State public funding, at times with private funding, for segments of the European layer where bottlenecks and missing links from an EU-wide perspective are found;
- Network industries (2) infrastructure is not the only issue hindering the full realisation of the Single Market for Services in network industries; other issues include
 - Transport services (other than rail): splintered air traffic controls are (too slowly) on the way out with SESAR-II and new IT infrastructure; a maritime 'Blue Belt' for EU coastal shipping would lower red tape; some lingering issues in EU ports; interoperability issues (e.g. road tolls) and investment needs;
 - <u>Electricity:</u> 3rd package (2009) improvement, but insufficient; cross border interconnectors too often congested, despite greater efficiency with power exchanges; wholesale markets not (yet) competitive enough; national concentration far too high; lack of conducive investment climate

- given formidable investment needs (incl. EU-wide grids and renewal of power stations) and great uncertainty about sustainability constraints (such as renewables and the low price of carbon); ACER Agency too weak to ensure genuine internal market (given NRAs and national energy strategies) and appropriate ten years investment plans
- Gas: 3rd package (2009) improvement but insufficient; EU gas networks unfinished; national concentration even higher than in electricity; severe gas security-of-supply problem (reduced by LNG and possibly shale gas in future); gas hubs (wholesale) still few and illiquid, though growing rapidly; many gas exchanges too 'thin'; fragmentation profound e.g. due to medium-run capacity reservation of pipelines and storage; investment incentives via exemption of TPA show dilemma between security of supply and intra-EU competition; ACER too weak to ensure a single market (see electricity) but development of 'network codes' (under way) is pro-competitive and expected to improve the single market
- eComms: Success of EU telecoms (eComms) due to interaction of technical progress and market liberalization; hides the fact that liberalization is largely 'national', managed by NRAs based on EU regulation (and some competition policy); no such thing as an eComms Single market, shown by huge price disparities, lack of convergence in applied rules, no EU-wide service providers, little consolidation of industry and a stubborn broadband gap; BEREC "Agency" distinctly weaker than ACER NRAs (sometimes hand-in-glove with ministries) are (more often than not) a stumbling block to single market; series of other barriers to a single 'digital market' possibly being addressed (such as more EU-oriented spectrum programmes sensitive to finance ministries as a source of revenues , pan-EU licensing for on-line rights management and harmonized numbering to enable EU-wide provision of business services); investment incentives in advanced networks problematic, might harden fragmentation
- (Freight) Rail: Economic case for EU-wide freight rail powerful, yet the barriers are the most severe of all network industries; overriding problem is the unsuitable "installed base" (of infrastructure) which is extremely expensive to overcome and will take decades; key infra problems: networks built as 'national', hence, cross border "missing links", "dual-use" of tracks tradition in Europe (adding 40% to costs), huge NIMBY issues for new infra, long European freight 'corridors' require many costly adaptations at many levels and, given EU density, difficult to accomplish, interoperability questions (ERA Agency is purely technical; and some solutions can only be implemented when investments in the network are made) and a need for many efficient intermodal hubs; moreover, profound investment incentive issue as the pan-European uncertainty about freight rail competitiveness lingers on, creating a vicious circle; besides infra, two other serious constraints, which will take time as well: the business models and mentality of

freight rail companies in Europe have to be transformed radically, and, national freight access (to track) charges vary by many hundreds of percent (deeply distortive); although national regulators have to be 'independent', conflicts of interest (with the incumbent) are not fully excluded; there is neither an EU-wide regulator for general market access, slot allocation and track charges, nor an EU-wide Infrastructure Manager; implementation of several rail packages by Member States is seriously deficient; in addition, the opening up for domestic passenger rail, not so important from an internal market point of view, would nevertheless induce some entry but especially far greater efficiency, with large economic gains (cost savings) – indirectly, it may help freight as well via more rational and cost-reflective incentives for the use of the infrastructure

- Financial services Fragmentation is a function of lingering access barriers in specific segments, such as retail banking, mortgages and cross-border mergers, and the failure to ensure a trusted and robust regime to minimise 'systemic risks', resulting in financial instability (in and outside the Eurozone), in turn severely discouraging cross-border exchanges, if not dismantling cross-border positioning (and even ownership of some banks). The latter may be restored, eventually, by recent measures, including the banking union as well as EU-wide supervision and other provisions in the fourth generation of EU financial services regulation
- Professional services Regulation is national and not sufficiently disciplined by
 e.g. a public-interest proof of market failures and proportionality; only
 qualifications for major health professions are harmonized; mutual recognition
 has gradually improved (in some professions) but many barriers remain; national
 reforms, inspired by key EU principles, are essential
- Sensitive sectors Security services and gambling also present substantial barriers mainly concerning the current national nature of (many) standards and rules
- Cross-cutting economic activities retail services, the digital single market, logistics services across the EU/EEA and the horizontal consumer acquis face disparate issues and different level of fragmentation

While the above mentioned gaps might well be successfully tackled by the EU legislative intervention, other ones represent barriers to cross border exchange of services that cannot be addressed by the EU. The authors have identified the following barriers remaining outside the formal single market remit: regulatory heterogeneity; private law issues; tax issues; language; networking and trust; informational asymmetries. However, for European business and, sometimes, consumers, these barriers do matter as they may reflect real trading costs when acceding markets.

A considerable part of the report deals with the empirical evidence of 'market integration deficits' and the gains of overcoming them. It is critical to include both quantitative and

qualitative studies in order to appreciate the potential gains of 'more single services market'. The literature is not always able to quantify the economic impact of gaps defined above, especially at sectoral level. We survey the main quantitative and qualitative contributions providing the costs 'of non-Europe' in the single market for services.

The table below provides a summary of the sectoral quantifications that are known from the recent literature.

Sector	Cost of Non-Europe
Services directive	+0.3 to +1.9% in EU GDP
Financial markets	+0.3 to 0.92% in EU GDP (+other minor
	benefits)
Rail freight	No estimation provided
eComms	+ 0.52 to +0.89% (= + € 110bn) in EU GDP from
	the Connected Continent initiative
	+ € 40bn for electronic invoicing
Gas and Electricity	+ € 12.5 to 40bn for net market integration in
	electricity
	+ € 30bn for net market integration in gas
	(+other minor benefits)
Professionals Services	No estimation provided
Retail	No estimation provided

Note: without (a) several forthcoming quantifications in studies in progress (e.g. in rail); (b) Digital market (estimates of + 4% in EU GDP widely discussed since the CE 2010 report); (c) without infrastructure effects and interaction with EU policy; (d) public services procurement

The longer run benefits of fully implementing and exploiting the 2006 *services directive* and its follow up amount to a range of 0.3% - 1.5% of EU GDP. Gains could augment with another 0.4% if EU countries would move to the EU restrictiveness average and with no less than 1.6% if all the member states would adopt services regulation no more restrictive than the five least-ones. Note that the follow-ups are sector-specific and might eventually bring further insights. However, we do warn that the typical "Brussels" way of portraying the services directive as covering some 43 % of EU value-added, though formally correct, is rather misleading from an economic point of view, as many economic agents in these services are bound to keep their business local, by the very nature of their activities (e.g. small local retail, non-tradable like services from barbers, etc.). In fact, only a relatively small part if this huge value-added will potentially be a candidate for cross-border activity, hence, the gains can never be more than a few percent at most.

The further gains from the new 2014 EU regime of *public procurement in services* have not been quantified. The specifications for services have been simplified but no studies have been made on this aspect. In principle, this regime should exclude the existence of intra-EU barriers, but it is known that the actual practice in public procurement can be difficult.

The benefits of the reforms of EU *financial regulation* since the crisis, including institutions and funds for the Singe Resolution Mechanism (Banking Union) as a critical

confidence building measure, have partially been quantified, as follows. In the SWD (2014) 158, the net benefits of 3 elements of financial EU reform (higher capital requirements, bail-in and the EU resolution regime) being 0.51 % of EU GDP for the capital requirements and 1.07 % for all three, minus the costs of these stricter measures, some 0.3 % of GDP, leaving some 0.3 % to 0.8 % of GDP or € 37 - € 100bn a year; subsequently, the benefits of the new requirements for derivatives trade (e.g. counterparties) amounting to net benefits of some 0.12 % of GDP a year; the improved efficiency of equity markets yields some € 2 bn - € 5 bn by avoiding excess costs of post-trading (clearing, settlements & custody), plus € 700mn for consolidation, plus a range of cost savings following the intro of the ECB T2Securities tool. This should be read together with a very long list of qualitative benefits in SWD (2014) by the Commission and many of those also noted by the ECB. The more important issues are summarised in our study.

The quantitative benefits of deepening the EU gas & electricity market amount to the following gains: (i) net market integration gains by 2030 of some \in 12.5 - \in 40 bn for electricity; (ii) plus smaller gains of \in 0.4 bn for sharing balancing reserves and \in 4 bn for introducing smart grids on a wide scale; (iii) net market integration gains of some \in 30 bn in gas, be it that this requires extra infrastructure on top of what ENTSO-G foresees until 2022 to the amount of \in 1.5- \in 3 bn. It should be noted, however, that the 'single' electricity market is seriously distorted by allowing single-agenda issues (renewables) to be pursued at Member States level without the slightest discipline for subsidies, with problematic and wasteful consequences for generation incentives and capacity markets. We also show and warn for price distortions in supplying energy at the company level in energy-intensive industries in the EU, which undermine the gains for market integration (and in uneven ways).

The eComms market and the Digital Single Market (the latter usually being defined as the demand side, except for broadband, and its constraining rules/practices) has also been studied with respect to quantitative effects. Thus, the enormous price disparities in eComms are not only distortive but also costly; overcoming them would yield gains for all. The welfare gains of EU regulation of Mobile Termination Rates are in the range of € 2.8 - 11.8 bn, and those of the EU regulation of EU mobile roaming rates are around € 4.5 bn. Of course there are many more services with price disparities, hence, the overall gains are presumably much higher. We recall the estimates of the Impact Assessment of the Connected Continent proposals, ranging up to some € 110 bn per year or 0.89 % of EU GDP. The authors also make a careful qualitative assessment of these proposals, too. The Digital Market has been said (in 2010) to yield some 4 % of EU GDP on the basis of a highly aggregate model with some daring assumptions. Estimates about the numerous details (the Digital Agenda has 132 items!) have hardly been made, except for example a Commission study suggesting gains up to € 40 bn for electronic invoicing. It should be realised that eComms and Digital involve many dynamic implications which are extremely hard to foresee.

In freight rail (the only transport sector where the single market is hard to discern, despite the fact that - by its very nature - it is a European, not a national business), no quantitative studies are available (but one is in progress). The single market idea is still far removed and we show in some detail why that is so; it will take many measures and considerable and sustained infrastructure investment for it to be realised, but that may well take decades. The rail freight corridors have just begun operating (6 out of 9) and they may help achieving better quality and less costly rail freight. No quantitative benefits are known so far. Note that there also benefits in terms of climate strategy because rail is relatively green. Freight rail is linked with the EU logistics business which is impatient to see an internal market for freight (and its inter-modality where desirable) emerging. The costly and large installed base of infrastructure (including technical and administrative rules, still often nationally distinct) is one major problem that militates against going fast. The opening up of domestic passenger rail will eventually have a major pro-competitive effect, with large economic gains after some adjustment; it is unclear whether this would generate indirect benefits for freight rail as well since overall efficiency gains might be offset by greater congestion on the tracks in some parts of the networks.

Professional services fall under the services directive but their qualifications and access to practicing a profession has remained under national competence. Partly because of market failures and partly for other reasons, regulation of many professions in Member States is often quite restrictive, leading to cumbersome access issues. The single market for professional services is therefore at best incomplete and probably also distorted in many ways which are only partly understood at the moment (there are great data problems to begin with). There is some literature attempting to quantify (with PMRs) the restrictiveness of national markets but economic effects of opening up are unknown, e.g. because of the difficulty of knowing what the 'right' regulatory restriction level would be. The cooperative method having been agreed between the Member States and the Commission, culminating in a 2 years calendar (until 2016) of discussing restrictions as to their justification in the EU public interest, is probably the only way to make progress at the moment, following some initial national reforms. It might also yield insights and data, enabling economic studies in future.

We distinguish three *cross—cutting services markets*, one being digital services (see above). The other two are retail and logistics. Further initiatives in deepening the internal market for *retail services* are indicated but it appears that no empirical studies providing integration gains have been published. The *logistics sector* has so far had limited success in getting the cross-cutting policies approach adopted by EU institutions. The High Level Group in Logistics (started in 2012) has not produced its final report, for example. The EU seems to have a difficulty in coordinating effectively across many policy fields, here, across distinct transport modes and wholesale.

Finally, the authors have attempted to collect empirical evidence on the impacts for individual Member States and for SMEs but this proved to be disappointing. Only

scattered or highly general empirical evidence has been found, in part because this type of analysis is demanding, in part because data limitations in services are often crippling.

The present report is focused on the coherence of EU policy views or strategy with respect to the internal market for services, the identification of today's "market integration deficits" in services and quantitative and qualitative "costs-of-Non-Europe" caused by these deficits. The report is not written with particular policy objectives in mind – this was not the assignment given to the authors. However, some more general considerations for EU policy recommendations can be provided. We outline six of these, as follows:

- 1. There is no doubt that a credible strategy to overcome the 'market integration deficits' in services, that is, removing their 'costs-of-Non-Europe', would lead to appreciable GDP gains for the Union. Going by what we know in quantitative terms, even though these estimates are of course not exact forecasts (given model restraints and data issues), and ignoring for the moment qualitative aspects, a very rough range of some 4 % to perhaps up to 7 % or even 8 % of EU GDP can reasonably be expected from such a strategy. The inference is clear: it is definitely worth pursuing such a strategy on this (rather limited) account only!
- 2. At the same time, one has to include, of course, the numerous (positive) qualitative aspects, even when these effects cannot be added up to single value-added figures. As noted, some of what is still qualitative in our report, may well be quantified by more specialist studies in the very near future (e.g. for rail). In other words, the overall economic benefits for the EU are significantly larger than the range of 4 % (say) 8 % of EU GDP. Important as single value-added figures are, their convenience for press releases and political speeches is also a drawback, because the many benefits from a better functioning of the single services markets are often qualitative as well and they do matter.
- 3. EU policy-makers have therefore every reason to pursue a renewed single services market strategy. However, one should be conscious of two problematic properties of such a strategy that political leaders will have to accept and deal with. One is timing. Many of the 'market integration deficits' are not easy to resolve or overcome, and in any event are bound to take time. The single services market strategy is not one of 'quick fixes' and early harvest. The early harvests have already been accomplished by the Union, by and large. Making further progress in the market of professional services will take time and require adjustment, solving a number of 'deficits' in network industries is usually complex (and time-consuming), getting the digital internal market to function properly is a matter of addressing numerous legal and technical issues that cannot be expected to be done overnight, the fourth regime of financial market regulation (including the banking union, and related funding and fiscal issues), these are all time-consuming. But this is also true for some other cross-cutting issues e.g. logistics and retail.

- 4. The other property has to do with infrastructure. A number of services markets with relatively large potential gains from overcoming the 'costs-of-Non-Europe' can only realize these gains, partly or entirely, once infrastructural investment are made on a cross-border or truly European basis. This creates a major complication because Member States and not or only very partially, the Union have competences in this area, and they also control public infrastructural spending, whilst strongly influencing private infrastructural spending for network industries. EU spending (outside the Structural and Cohesion Funds) on infrastructure for network industries is still very small and almost certainly far below what is needed for a credible single services market strategy.
- 5. Although the overall notion of 'completing' the single services market remains as valid as before, as this report shows in considerable detail, political leaders and MEPs might nevertheless wish to prioritise. The authors cannot assume a political view on this. But a few points can be made which might be of some help in this respect. One is to prioritise on the basis of the size of expected gains, quantitative or qualitative. Candidates for priority would include the internal market for digital services (including eComms here), the internal market for rail, the internal energy market and probably the financial services market, both in terms of lingering barriers as in terms of restoration of trust. Still, such prioritization should not be too one-sided, as if there were no value in (say) further pursuing the follow-ups of the horizontal services directive, for example. Another is to prioritise on the basis of what is most needed for internal and external competitiveness of European business. The external side is especially concerned with the quality and costs of inputs into the manufacturing process over global value chains; hence, the internal market of services ought to ensure low energy costs, competitive prices and high quality of professional services, high quality and innovativeness of digital services over the whole of Europe and the efficiency of European logistics. A third theme which might determine prioritization is the view of what is politically 'feasible' or at least not too constrained. This would seem to be a dangerous, probably futile, strategy, as immediately vested interests and rigid, defensive views of the demarcation between national and EU powers as well as control of e.g. infrastructure funding will render an effective strategy next to impossible. Some top-level political leadership is indispensable for this huge area of EU policy-making. That leadership has to be pursued over several years and its determination should facilitate the action even where lower-level political constraints might be in the way. However, if the EU leadership would once again shy away from providing greater infrastructure funding, it might thereby narrow down the options for an effective services strategy.
- 6. The coherent, conceptual but nonetheless practical approach of the present report might help to design a strategy at the highest political level with the entire single services in mind. It might inspire an approach whereby prioritization is combined with a strategic and comprehensive perspective of what it takes to realise a fully-fledged and properly functioning internal services market for the good of the Union.

References

- ACER (2013), Annual report on the results of monitoring the Internal Electricity and Natural gas Markets in 2012, ACER/CEER, November 2013.
- Andrea Renda (2013) Net Neutrality and Mandatory Network Sharing: How to disconnect the continent, CEPS Policy Brief, 18 December 2013
- Arnold, J., Scarpetta, G. and Nicoletti, S., (2008) Regulation, Allocative Effciency and productivity in OECD Countries: Industry and Firm-Level Evidence, OECD Economics Department Working Papers 616, OECD Publishing.
- Balta, N. and J. Delgado (2009) Home Bias and Market Integration in the EU, CESifo Economic Studies
- Barone, G. and Cingano, F. (2011) Service Regulation and Growth: Evidence from OECD Countries, Economic Journal, Royal Economic Society, vol. 121(555), pages 931-957, 09.
- BEREC (2013a), "International Roaming BEREC Benchmark Data Report July 2012 March 2013", September, BoR (13) 125.
- BEREC (2013b), "Integrated Report on Mobile Termination Rates and SMS Termination Rates", November, BoR (13) 178 rev2.
- BEREC, (2011) "BEREC Report on Alternative Voice and SMS Retail Roaming Tariffs and Retail Data Roaming Tariffs", February, BoR (11) 08.
- CER, UIP, ERFA and UNIFE (2012), Position Paper on the Future role of ERA
- Citroen P. (2014), Will the Technical Pillar of the Fourth Carpenter, Knepper, Erickson & Ross (2012),
- CLECAT, Position Paper on the Fourth Rail Package, May 2013
- Combes, P., Lafourcade, M. and T. Mayer (2004) Can Business and Social networks Explain the border effect puzzle, Econometric Society 2004 North American Winter Meeting 330, Econometric Society.
- Commission Guidelines on certain state aid measures in the context of the greenhouse gas emission allowance trading scheme post 2012 (2012/C 158/04).
- Commission Memo/14/352 of 15 May 2014, Economic Review of the financial regulation agenda, frequently asked questions, Annex. See also COM (2014) 279 of 15 May 2014, A reformed financial sector for Europe.
- Commission of the European Communities (1988) The Cecchini report SEC(88) 524 final
- Commission Staff Working Document, Workplan for reporting on national reforms in services markets, SWD (2014), 31 March 2014

- Commission SWD (2014) 158 final, Economic Review of the Financial Regulation Agenda" accompanying the document "Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: A reformed financial sector for Europe {COM(2014) 279 final}", Annex II, p.300
- Commission Working Document, The internal energy market, COM(88) 238 final, 2 May 1988.
- Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on "The Fourth Railway Package Completing the Single European Railway Area to foster European Competitiveness and Growth".
- Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee of the Regions. Setting up a European Retail Action Plan. COM(2013)36 final Brussels, 31.01.2013
- Communication from the Commission, Annual Growth Survey 2013, COM (2012) 750 final. Brussels 28.11.2012
- Communication from the Commission. Annual Growth Survey 2014. COM (2013) 800 final. Brussels, 13.11.2013. http://ec.europa.eu/europe2020/pdf/2014/ags2014_en.pdf
- Conway, P. and G. Nicoletti (2006), "Product market regulation in the non-manufacturing sectors of OECD countries: measurement and highlights", OECD Economic Department Working Paper No. 530, OECD, Paris, December.
- Conway, P. and G. Nicoletti (2006), "Product market regulation in the non-manufacturing sectors of OECD countries: measurement and highlights", OECD Economic Department Working Paper No. 530, OECD, Paris, December.
- Copenhagen Economics (2010), The economic impact of a European digital single market, study for EPC, Brussels, March.
- Correia de Brito, A. and J. Pelkmans (2012), Pre-empting Technical Barriers in the Single Market, CEPS Policy Brief, July
- Council Directive (2003/96/EC) restructuring the Community framework for the taxation of energy products and electricity.
- CSES (2001), Barriers to trade in business services, Brussels, report for the European Commission.
- CSES (2012), Study to provide an inventory of reserves of activities linked to Professional Qualifications Requirements in 13 Member States & assessing their economic impact, for DG Markt, Delgado (2006)
- DG Competition, Report on Energy Sector Inquiry, SEC(2006) 1724, January 2007
- Directive 2001/12/EC of 26 February 2001 amending Council Directive 91/440/EEC on the development of the Community's railways

- Directive 2001/13/EC of 26 February 2001 amending Council Directive 95/18/CE on the licensing of railway undertakings; Directive 2001/14/EC of 26 February 2001 on the allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure and safety certification
- Directive 2001/14/CE on the allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure and safety certification;
- Directive 2001/14/EC on the allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure
- Directive 2001/16/EC of the European Parliament and of the Council on the interoperability of the trans-European conventional rail system
- Directive 2003/54/EC of the European Parliament and of the Council of 26 June 2003 concerning common rules for the internal market in electricity and repealing Directive 96/92/EC Statements made with regard to decommissioning and waste management activities
- Directive 2004/49/EC of 29 April 2004 on safety on the Community's railways and amending Council Directive 95/18/CE on the licensing of railway undertakings
- Directive 2004/50/EC of 29 April 2004 amending Council Directive 96/48/EC on the interoperability of the trans-European high-speed rail system
- Directive 2004/51/EC of 29 April 2004 amending Council Directive 91/440/EEC on the development of the Community's railways
- Directive 2005/36/EC of the European parliament and the Council of 7 September 2005 on the recognition of professional qualifications; Official Journal L 255, 30/09/2005.
- Directive 2007/58/EC of the European Parliament and of the Council of 23 October 2007 amending Council Directive 91/440/EEC on the development of the Community's railways
- Directive 2007/59/EC of the European Parliament and of the Council of 23 October 2007 on the certification of train drivers operating locomotives and trains on the railway system in the Community
- Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC
- Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC
- Directive 2011/24 of 9 March on The application of patient rights in cross-border healthcare, OJEU L 88 (p. 45 ff) of 4 April 2013
- Directive 2012/34/EU of the European Parliament and of the Council of 21 November 2012 establishing a single European railway area (recast).

- Directive 2014/23/EU of the European Parliament and of the Council on the award of concession contracts, in OJEU L 94 of 28 March 2014, pp. 1 64.
- Directive 2014/24/EU of the European Parliament and of the Council on public procurement and repealing Directive 2008/18/EC in OJEU L 94 of 28 March 2014, pp. 65 ff
- Directive 2014/25/EU of the European Parliament and of the Council of 26 February 2014 on procurement by entities operating in the water, energy, transport and postal services sectors and repealing Directive 2004/17/EC Text with EEA relevance
- Directive 96/71/EC of the European Parliament and of the Council of 16 December 1996 concerning the posting of workers in the framework of the provision of services.
- Directive 96/92/EC of the European Parliament and of the Council of 19 December 1996 concerning common rules for the internal market in electricity
- Directive 98/30/EC of the European Parliament and of the Council of 22 June 1998 concerning common rules for the internal market in natural gas.
- European Parliamentary research Services (2013) The Cost of Non- Europe in the Single Market for Energy, p. 11
- Ecorys, TU Delft, TNO (2011), "Steps towards a truly Internal Market for e-communications In the run-up to 2020", November, Final Report.
- Egenhofer C, Schrefler L. et al. (2014) Final Report for a Study on Composition and Drivers of Energy Prices and Costs in Energy Intensive Industries: the Case of Ceramics, Flat Glass and Chemical Industries. CEPS Report for DG Enterprise and Industry of the European Commission
- European Central Bank (2014), Financial Integration in Europe, April 2014
- European Commission (2001), "White Paper European transport policy for 2010: time to decide", Brussels, 12.9.2001, COM (2001) 370 final;
- European Commission (2006) 336 of 28 June 2006, Freight transport logistics in Europe, key to sustainable mobility
- European Commission (2007) 607 of 18 Oct. 2007, Freight Transport Logistics Action Plan
- European Commission (2010) 712 [Brussels, 2.12.2010] Reaping the benefits of electronic invoicing for Europe
- European Commission (2011) 144 of 28 March 2013, Roadmap to a single European transport area
- European Commission (2011) 942 of 11 Jan 2012, A coherent framework for building trust in the Digital Single Market for e-commerce and on-line services
- European Commission (2011), "White Paper Roadmap to a Single European Transport Area Towards a competitive and resource efficient transport system", Brussels, 28.3.2011, COM (2011) 144 final, both clearly embraced by Council and European Parliament

- European Commission (2011), On the process of mutual evaluation of the services directive, SEC (2011) 102 of 21 January 2011
- European Commission (2012) 596 of 23 November, Towards a comprehensive European framework for online gambling
- European Commission (2012) 784 of 18 Dec 2012, The digital Agenda for Europe, driving European growth digitally
- European Commission (2012) 784 of 18 Dec. 2012, The Digital Agenda for Europe driving European growth digitally
- European Commission (2012), On the implementation of the services directive, COM (2012) 261 of 8 June 2012 and SWD (2012) 147 of 8 June 2012, Results of the performance checks of the internal market for services
- European Commission (2013) 627 of 11 September 2013, Proposal for a Regulation of the European Parliament and of the Council laying down measures concerning the European single market for electronic communications and to achieve a Connected Continent
- European Commission (2013) 676 of 2 Oct 2013, On evaluating national regulations on access to professions; the revised Professional Qualifications directive is Dir. 2013/55/EU of 20 Nov.2013 in OJEU L 354 of 28 Dec 2013, pp. 132 ff.
- European Commission (2013) Commission Staff Working Document on the outcome of the peer review on legal form, shareholding and tariffs requirements under the Services Directive, SWD (2013) final 402 of 2 Oct 2013
- European Commission (2013) The fourth railway package completing the single European railway area to foster European competitiveness and growth", COM (2013) 25 final.
- European Commission (2013), "New EU transport infrastructure policy background", Memo/13/897 of 17 Oct. 2013
- European Commission (2014) Commission Staff Working Document Access to insurance for services provided in another Member State, SWD (2014) 130 of 31 March 2014
- European Commission (2014) Commission Staff Working Document, Workplan for reporting on national reforms in services markets, SWD (2014) 131 of 31 March 2014
- European Commission paper of May 2010 on the Digital Agenda
- European Economic Social Committee, the Single market Observatory (2014), The Workings of the Services Directive in the Construction Secto, INT/SMO-EESC-2014-02466-00-01-TCD-TRA.
- European Parliament (2012) Roadmap to Digital Single Market, DG for internal policies, Dep. A, Economic and Scientific Policy

- Giovannini A. (2010), "Why the European Securities Market is Not Fully Integrated", chapter in A. Alesina and F. Giavazzi (eds.) (2010), Europe and the Euro, The University of Chicago Press
- Green Paper on Unfair Trading Practices in the Business-to-Business Food and Non-Food supply Chain in Europe. COM (2013) 37 final. Brussels, 31.01.2013
- Griffith, R., Harrison, R. and G. Macarteney (2007) Product market reforms, labour market, Institutions and unemployment, Economic Journal. Royal Economic Society, vol. 117(519).
- Head, K. and T. Mayer (2000) Non-Europe: the magnitude and causes of market fragmentation in the EU, Review of World Economics, Springer, vol. 136 (2) pages 284-314, June
- Javorcik, Beata and Yue Li. 2013. "Do the Biggest Aisles Serve a Brighter Future? Global Retail Chains and Their Implications for Romania," Journal of International Economics, forthcoming.
- Kapff, L. and J. Pelkmans (2010), "Interconnector Investment for a Well-functioning Internal Market: What EU regime of regulatory incentives?", BEER Briefing Paper No. 18, College of Europe, Bruges, August Kox and Lejour (2005)
- Kox, H. (2006), "The effects of the services directive on intra-EU trade and FDI", Revue Economique, Vol. 57, No. 4, pp. 747-769.
- Kox, H. (2012), "Unleashing Competition in EU Business Services", CEPS Policy Brief No. 284, Centre for European Policy Studies, Brussels, 24 September.
- Kox, H. and A. Lejour (2005), "Regulatory heterogeneity as obstacle for international services trade", CPB Discussion Paper No. 49, CPB Netherlands Bureau for Economic Policy Analysis, The Hague.
- Kox, H. and H. Nordås (2007), "Services Trade and Domestic Regulation", OECD Trade Policy Working Paper No. 49, OECD, Paris.
- Lejour, A. (2008), "Economic aspects of the internal market for services", in J. Pelkmans, D. Hanf and M. Chang (eds), The EU internal market in comparative perspective, Brussels/New York, PIE Lang.
- Maincent, E., Lorenzani, D. and A. Eordogh (2013), "Market functioning in Network Industries - Electronic Communications, Energy and Transport", DG ECFIN Occasional papers No. 129, February 2013
- Marcus, J. S. *et al.* (2013), "How to build a Ubiquitous EU Digital Society Directorate General for Internal Policies"
- Maslauskaite, K. (2014), "Posted Workers in the EU: State of the play and regulatory evolution", Notre Europe Jacques Delors Institute Policy paper No. 107, 24 March 2014.
- Mason, DotEcon, Hogan and Hartson (2009), Exploiting the digital dividend A European Approach

- Mazziotti, G. (2013), Copyright in the EU Digital Single Market, CEPS Task Force Reports, 27 June 2013
- Mazzocchi, M., Hansstein, F. And M. Ragina (2010) The 2010 Volcanic Ash Cloud and its financial Impact on the European airline industr, CESifo Forum Volume 11, No 2, Summer 2010
- Monteagudo, J., A. Rutkowski and D. Lorenzani (2012), "The economic impact of the services directive: a first assessment following implementation", European Economy, Economic Papers No. 456, European Commission, June.
- Monteagudo, J., A. Rutkowski and D. Lorenzani (2012), "The economic impact of the services directive: a first assessment following implementation", European Economy, Economic Papers No. 456, European Commission, June.
- Mustilli, F. and J. Pelkmans (2012), Securing Eu Growth from Services, CEPS Special Report No 67, October 2012
- Nicoletti, G. and S. Scarpetta, (2003). Regulation, productivity and growth: OECD evidence, Economic Policy, no. 36, pp. 9-72
- Paterson, I, and R. Sellner (2012), Professional business services and their role in the EU economy, SERVICEGAP Discussion paper, November,
- Paterson, I., B. Brandl & R. Sellner (2012), Regulation of professional services in EU Member States, SERVICEGAP Discussion paper November, Pelkmans (2011a; 2011b)
- Pelkmans J. and M. Vanheukelen (1988), "The Internal Markets of North America: Fragmentation and Integration in the US and Canada", Vol. 16: Research on the Costs of Non-Europe: Basic Findings. Luxembourg: Office of Official Publications of the EC.
- Pelkmans J. and P. White (2000), Sustainable mobility in Europe (CEPS Task Force), CEPS Working Party Report n. 26, September.
- Pelkmans, J. and A. Winters, (1988), Europe's Domestic Market, London, Routledge (for the Royal Institute of International Affairs)
- Pelkmans, J. & G. Luchetta, (2013), Enjoying the Single Market for Network Industries, Paris, Notre Europe, Studies and Reports no. 95, February
- Pelkmans, J. (2010), "Product Market Reforms in EU Countries: Are the methodology and evidence sufficiently robust?", CEPS Working Document No. 332, Centre for European Policy Studies, Brussels, 16 July.
- Pelkmans, J. (2011a), The EU Single Market: design and development, New Palgrave Dictionary of Economics, www.dictionaryofeconomics.com
- Pelkmans, J. and A. Renda (2011), "Single eComms market? No such thing...", Communications & Strategies, No. 82, second quarter.

- Pelkmans, J. and M. Simoncini, (2014) Mellowing Meroni: How ESMA can help build the single market, CEPS Commentaries
- Pelkmans, J., (2011b), The European Single Market: How far from Completion?, Intereconomics Volume 46, No2, pp. 64-81.
- Piette, C. and J. van der Linden (2009), De Economische gevolgen van de Dienstenrichtlijn in Belgie: een verkennig, Federal Planbureau
- Ramboll and HTW Chur (2011), "Final report: cross-border procurement above EU thresholds", Copenhagen: Ramboll.
- Regulation (EC) 713/2009 establishing an Agency for the Cooperation of Energy Regulators (ACER)
- Regulation (EC) 714/2009 on conditions for access to the network for cross-border exchanges in electrity
- Regulation (EC) 715/2009 on conditions for access to the natural gas transmission
- Regulation (EC) No 1370/2007 of 23 October 2007 on public passenger transport services by rail and by road and repealing Council Regulations (EEC) Nos 1191/69 and 1107/70
- Regulation (EC) No 1371/2007 of 23 October 2007 on rail passengers' rights and obligations
- Regulation (EC) No 1372/2007 of 23 October 2007 amending Council Regulation (EC) No 577/98 on the organisation of a labour force sample survey in the Community
- Regulation (EC) No 1775/2005 of the European Parliament and of the Council of 28 September 2005 on conditions for access to the natural gas transmission networks
- Regulation (EC) No 881/2004 of the European Parliament and of the Council of 29 April 2004 establishing a European Railway Agency
- Regulation EC/913/2010 of the European Parliament and of the Council of 22 September 2010 concerning a European rail network for competitive freight
- Regulation No 1228/2003 of the European Parliament and of the Council of 26 June 2003 on conditions for access to the network for cross-border exchanges in electricity
- Report of the European Investment Bank (2014) Annual Report 2012. Committee on Budgetary Control, Rapporteur Marian Jean Marinescu, March 2014
- Retail and Wholesale: key sectors for the European Economy. Understanding the role of retailing and wholesailing within the European Union'' Institute of retail management, SAID Business School and University of Oxford.
- Sanchez-Graells, A. (2013 The AG Villalón of the CJEU deals in his opinion with the exceptions to the right of access to public documents implying that it cannot be excluded that the commercial interests of the leniency applicants may be damaged by disclosure, Institut de droit de la concurrence
- Speech of Mr. Kallas at the 5th European Logistics Summit, 17 Oct. 2012 in Brussels

- Study on "The cost of non-Europe: the untapped potential of the European Single Market" Final Report April 2013.
- Manca, F., Morena, R. and J. Surinach (2011) The role of the EU internal market in the Adoption of Innovation, European Planning Studies Vol 19, No. 6
- Transport, new EU infrastructure, press release IP/13/948 of 17 Oct 2013
- Van Gorp, N., M. Canoy, and E. Canton. (2010). Mobile spectrum policy in the Netherlands. Ecorys position paper presented at the KPN seminar Wie biedt? Veiling van mobiel spectrumbeleid in Nederland,
- September 2010. The Hague/RotterdamVan Reenen, J. et al. (2010), "The Economic Impact of ICT", study for the European Commission, DG INFSO, SMART N. 2007/0020, LSE Enterprise.
- Van Wee B., J.A. Annema and D. Banister (2013), The Transport System and Transport Policy, Massachusetts, Edward Elgar Publishing
- Van Welsum, D., W. Overmeer and B. Van Ark (2013) Avoiding the digital desert Four Scenarios and the Challenge of Unlocking the Information and Communication Technology's Growth potential in Europe, The Conference Board Executive Action 421
- Zachmann, G. (2013) Electricity without border: a plan to make the internal market work, Bruegel Blueprint 20

ANNEX I

OECD Product Market Regulation Indicators 2013

The OECD released the 2013 version of Product Market Regulations (PMRs) indicators. This dataset provides a synthetic evaluation, expressed in quantitative terms (ranging from 0 to 6), of policies, regulations, administrative or procedural requirements affecting providers, both national and foreign, in a specific country.¹⁴⁴

Fitted for macro-analysis, OECD PMRs may not be ideal for fully grasping the details of the "acquis communautaire", and for identifying the exact issues hampering the EU services market integration. Nevertheless, they serve as a complementary (macro) approach with respect to the comprehensive exercise of description of the "acquis deficits" in selected relevant markets, done in Chapter 2. OECD PMRs possess the advantage of providing a user-friendly numerical indicator quantifying a country "level' of regulation. In order to be able to give some hints on the barriers influencing the functioning of the Single Market for Services, we have to make some assumptions:

- When the level of regulation is different, i.e. when the OECD PMR indicator is not equal between two countries, we suppose that there is regulatory heterogeneity, i.e. the presence of barriers (Kox and Lejour, 2005)
- Deriving from the condition above, the higher the standard deviation among countries surveyed, the higher the probability of incurring in the presence of barriers;
- The higher the level of regulation, the higher the probability of incurring in (or at least the absolute number of cases of) regulatory heterogeneity, i.e. presence of barriers.

Thus, it is useful to keep in mind that OECD PMRs analysis may result imprecise in identifying specific problems but may be useful for signalling where exists (or persists) the higher probability of detecting barriers impeding the Single Market (full) functioning.

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¹⁴⁴ For further description and explanation of the OECD PMRs indicators see Nicoletti and Scarpetta (2003) and Woelfl *et al.* (2009), particularly for the methodology. Additional information may be found in Arnold et al. (2011). For a critical discussion of PMRs when applied to EU countries see Pelkmans (2010). At this stage, 2013 data available for the following EU countries: Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Ireland, the Netherlands, Portugal, Slovak Republic, Slovenia, Spain, Sweden and United Kingdom. Partial coverage available also for Bulgaria. When referring to time series comparison (i.e. comparison among different years, e.g. to analyse trends) the research team included only those countries whose data are available for 1998, 2003, 2008, 2013, in order to avoid possible distortions relative to the inclusion of certain countries in the sample only for some years. Therefore, countries under scrutiny, when analysing trends, are: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Ireland, the Netherlands, Portugal, Spain, Sweden, United Kingdom. Future data release may extend data availability to EU28.

Network industries

The OECD PMR dataset collects useful information on three major sectors of the economy such as Energy (electricity, gas), Transport (air, rail and road), and Communication (post and telecoms).

Since 1998 the absolute level of regulation decreased notably. The overall (across-sector) score was equal to 3.64 in 1998. 15 years later, in 2013, it (almost) halved, being equal to 1.85. In relative terms, (de)regulation evolved steadily across sectors, e.g. sectors that were lagging behind (in terms of regulatory levels) in 1998 remained in the last positions in 2013. Airlines and Telecoms are the sectors where most substantial deregulation occurred, whereas Road, Rail and Post are the network industries where de(regulation) progressed the least. This means, following our aforementioned assumptions, that these last three sectors are the ones where the probability of EU market fragmentation is higher (Figure 31).

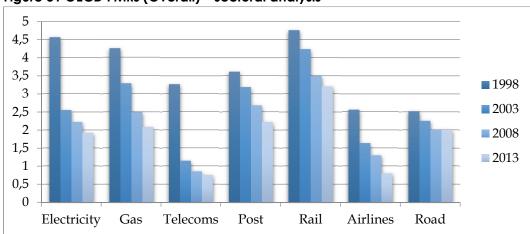


Figure 31 OECD PMRs (Overall) – sectoral analysis

Source: Authors elaboration on OCED (2013)

Further analysis focuses on entry barriers, public ownership,¹⁴⁵ vertical integration and market structure. When parcelling out every sub-sector from the "overall" indicator, trends do not change much. We assist to an absolute reduction in the level of regulation, and to a relative reduction which is proportional to the initial level of regulation. Entry barriers (road excluded) constitute a significant exception. Being highly regulated in 1998 (>3 in average), they do not constitute anymore a regulatory issue in 2013. It means that at the present time, surveyed EU MS face no (substantial) entry barriers, i.e. they enjoy a higher degree of market competition with respect to the past. (De-) regulation is proportionate across MS, therefore (positively) influencing the correspondent standard

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 $^{^{145}}$ It will not be considered in this report as public ownership is not detrimental to a proper market functioning *per se*.

deviation,¹⁴⁶ i.e. standard deviation in 2013 is lower than in 1998. The probability of facing less regulatory heterogeneity is therefore higher.

4 3,5 2,5 2 1,5 1 0,5 0 1998 2003 2008 2013

Figure 32 OECD PMRs: Comparison "Overall" and "Entry Barriers"

Note: "Overall" in blue; "Entry Barriers" in red Source: Authors elaboration on OCED (2013)

Other sub-sectors, namely vertical integration and market structure, seem to be more problematic. Vertical integration registers very high level of regulation particularly in electricity and gas, whereas market structure records high regulatory provisions in post, rail and gas (OECD, 2013).

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¹⁴⁶ Standard deviation measures the variation (or dispersion) of a numeric sample from its average. In this case it is used to test "regulatory heterogeneity", on the basis of the assumptions spelled out above.

ANNEX II

Given full access to OECD sources, the authors analysed the datasets which contain a comprehensive and detailed mapping of several hundreds of regulatory provisions at member state level.

In order to transform qualitative judgments to a single number, they first compared every answer to questions dealing with regulatory issues, per pair of countries. They assign a score of 1 to countries where the answers were different and 0 where the answers coincided. In order to reduce the multidimensionality, they finally calculated the (non-weighted) average bilateral regulatory heterogeneity per country pair. Table 11 provides an explanatory summary.

Table 11 Kox and Lejour average bilateral regulation heterogeneity indicator - procedure

Regulation attribute (R)	implementation mode (p)	Regulation in Country 1	Regulation in Country 2	Hetero- geneity count for item	Cumulative hetero- geneity count	Average bilatera heterogeneity count
License or permit required for operating in service sectorX.	a) No requirement b) Always c) Only firms in activity Y d) Only firms larger than Z	No requi- rement	Only firms in activity .Y.	1	1	1
Nationality requirements for management of companies operating in service sectorQ	a) Yes b) No	No	No	0	1	0.5
Existence of restrictions (other than capital and technical) for participation in public tendering for service contracts	a) No restric- tions b) Always c) Often d) Sometimes	Some- times	Always	1	2	0.67

Source: Kox and Nordas (2007).

The formula of the indicator used in the (coloured) matrices below is the following:

$$h_{ij}^{a} = \frac{1n}{n} \sum_{s=1}^{n} |X_i - X_j|$$

where h_{ij} is the bilateral regulatory heterogeneity indicator for services sector a (e.g. retail, professional services - architects, professional services - accounting, etc.) and its value is determined by the unweighted average of the absolute differences, i.e. the absolute value of the difference, between X_i and X_j (both indexed to 1), two correspondent subsectors (s from 1 to n) of one PMR indicator for country i and j. For example, the retail PMR indicator has 6 subsectors that lead to its final value: the research team took the absolute difference of each pair of them (e.g. regulation of shop opening

hours in country i and j; or price controls in country i and j), and calculated the unweighted average.

A country-specific indicator of regulatory heterogeneity (with respect to all other countries) was additionally calculated as follow:

$$H_i^a = \frac{1}{m} \sum_{j=1}^m h_{ij}$$

therefore, it corresponds to the unweighted average of all bilateral indicators of regulatory heterogeneity related to country i.

Following the same procedure, an overall indicator for identifying the presence of sector-specific regulatory heterogeneity was calculated as follow:

$$H^a = \frac{1}{z} \sum_{i=1}^z H_i^a$$

Table 12 Regulatory Heterogeneity - Electricity

	AT	BE	CZ	DK	EE	FI	FR	DE	EL	HU	ΙE	NL	PT	SK	SI	ES	SE	UK	BG	Н		PMRs
AT	0	0.19	0.11	0.12	0.31	0.01	0.24	0.16	0.18	0.04	0.15	0.04	0.25	0.07	0.16	0.15	0.15	0.16	0.21		0.15	1.75
BE		0	0.24	0.25	0.32	0.18	0.31	0.25	0.25	0.17	0.27	0.23	0.14	0.20	0.21	0.18	0.28	0.25	0.22		0.23	1.84
CZ			0	0.06	0.27	0.12	0.13	0.20	0.18	0.13	0.17	0.07	0.29	0.04	0.12	0.25	0.17	0.20	0.19		0.16	2.39
DK				0	0.20	0.14	0.12	0.27	0.23	0.15	0.11	0.11	0.31	0.07	0.05	0.27	0.11	0.27	0.25		0.17	2.49
EE					0	0.32	0.13	0.47	0.18	0.35	0.17	0.32	0.37	0.27	0.15	0.39	0.16	0.47	0.27		0.28	3.23
FI						0	0.25	0.14	0.19	0.03	0.17	0.06	0.23	0.08	0.18	0.13	0.17	0.14	0.19		0.15	1.66
FR							0	0.34	0.12	0.27	0.22	0.20	0.36	0.17	0.11	0.39	0.23	0.34	0.13		0.23	3.19
DE								0	0.29	0.12	0.31	0.15	0.16	0.19	0.32	0.08	0.31	0.00	0.25		0.22	1.17
EL									0	0.21	0.33	0.17	0.30	0.15	0.22	0.33	0.33	0.29	0.09		0.22	2.83
HU										0	0.19	0.07	0.22	0.09	0.20	0.12	0.20	0.12	0.18		0.16	1.59
ΙE											0	0.16	0.32	0.18	0.12	0.24	0.02	0.31	0.36		0.21	2.19
NL												0	0.29	0.04	0.17	0.19	0.16	0.15	0.20		0.15	2.00
PT													0	0.25	0.27	0.10	0.34	0.16	0.27		0.26	1.02
SK														0	0.13	0.21	0.18	0.19	0.18		0.15	2.15
SI															0	0.29	0.12	0.32	0.24		0.19	2.63
ES																0	0.24	0.08	0.30		0.22	0.87
SE																	0	0.31	0.36		0.21	2.30
UK																		0	0.25		0.22	1.17
BG																			0		0.23	2.66

Table 13 Regulatory heterogeneity - Gas

	AT	BE	CZ	DK	EE	FI	FR	DE	EL	HU	ΙE	NL	PT	SK	SI	ES	SE	UK	BG	Н]	PMRs
AT	0	0.09	0.19	0.08	0.26	0.35	0.08	0.18	0.25	0.23	0.14	0.09	0.26	0.08	0.09	0.18	0.22	0.37	0.40		0.20	2.24
BE		0	0.22	0.16	0.30	0.40	0.14	0.10	0.35	0.26	0.21	0.11	0.29	0.16	0.18	0.21	0.25	0.28	0.48		0.23	1.68
CZ			0	0.25	0.08	0.30	0.11	0.13	0.32	0.15	0.31	0.26	0.11	0.13	0.15	0.13	0.03	0.31	0.45		0.20	1.88
DK				0	0.33	0.43	0.16	0.26	0.24	0.29	0.06	0.09	0.32	0.12	0.13	0.25	0.28	0.44	0.32		0.23	2.63
EE					0	0.25	0.19	0.21	0.27	0.20	0.38	0.34	0.16	0.21	0.23	0.18	0.08	0.36	0.37		0.24	2.16
FI						0	0.27	0.42	0.19	0.32	0.48	0.40	0.37	0.31	0.30	0.42	0.33	0.61	0.22		0.35	3.67
FR							0	0.23	0.21	0.21	0.21	0.17	0.18	0.04	0.04	0.23	0.14	0.42	0.36		0.19	2.52
DE								0	0.43	0.22	0.31	0.21	0.25	0.26	0.27	0.14	0.16	0.20	0.58		0.25	1.17
EL									0	0.38	0.30	0.24	0.39	0.19	0.18	0.44	0.35	0.63	0.15		0.31	3.77
HU										0	0.35	0.26	0.11	0.23	0.26	0.10	0.12	0.29	0.36		0.24	1.75
ΙE											0	0.15	0.38	0.18	0.18	0.30	0.34	0.49	0.38		0.29	2.96
NL												0	0.33	0.13	0.14	0.26	0.29	0.39	0.38		0.23	2.31
PT													0	0.20	0.23	0.11	0.08	0.24	0.41		0.25	1.43
SK														0	0.02	0.25	0.16	0.44	0.32		0.19	2.64
SI															0	0.27	0.18	0.46	0.33		0.20	2.79
ES																0	0.10	0.19	0.46		0.23	1.14
SE																	0	0.28	0.42		0.21	1.69
UK																		0	0.65		0.39	0.00
BG																			0		0.39	3.91

Table 14 Regulatory heterogeneity - Rail

	AT	BE	CZ	DK	EE	FI	FR	DE	EL	HU	ΙΕ	NL	PT	SK	SI	ES	SE	UK	BG	Н		PMRs
AT	0	0.31	0.06	0.19	0.25	0.42	0.31	0.06	0.44	0.33	0.38	0.33	0.33	0.21	0.31	0.35	0.19	0.48	0.31		0.29	2.63
BE		0	0.25	0.25	0.19	0.10	0.00	0.25	0.13	0.10	0.19	0.10	0.10	0.10	0.00	0.04	0.13	0.58	0.00		0.16	3.75
CZ			0	0.13	0.19	0.35	0.25	0.00	0.38	0.27	0.44	0.27	0.27	0.15	0.25	0.29	0.13	0.42	0.25		0.24	2.25
DK				0	0.06	0.35	0.25	0.13	0.38	0.15	0.44	0.15	0.27	0.15	0.25	0.29	0.13	0.42	0.25		0.23	2.25
EE					0	0.29	0.19	0.19	0.31	0.08	0.38	0.08	0.21	0.21	0.19	0.23	0.06	0.48	0.19		0.21	2.63
FI						0	0.10	0.35	0.10	0.21	0.17	0.21	0.08	0.21	0.10	0.06	0.23	0.69	0.10		0.23	4.38
FR							0	0.25	0.13	0.10	0.19	0.10	0.10	0.10	0.00	0.04	0.13	0.58	0.00		0.16	3.75
DE								0	0.38	0.27	0.44	0.27	0.27	0.15	0.25	0.29	0.13	0.42	0.25		0.24	2.25
EL									0	0.23	0.06	0.23	0.10	0.23	0.13	0.17	0.25	0.71	0.13		0.25	4.50
HU										0	0.29	0.00	0.13	0.13	0.10	0.15	0.15	0.48	0.10		0.18	3.13
ΙE											0	0.29	0.17	0.29	0.19	0.23	0.31	0.77	0.19		0.30	4.88
NL												0	0.13	0.13	0.10	0.15	0.15	0.48	0.10		0.18	3.13
PT													0	0.13	0.10	0.15	0.15	0.60	0.10		0.19	3.88
SK														0	0.10	0.15	0.15	0.48	0.10		0.17	3.13
SI															0	0.04	0.13	0.58	0.00		0.16	3.75
ES																0	0.17	0.63	0.04		0.19	4.00
SE																	0	0.54	0.13		0.18	3.00
UK																		0	0.58		0.55	0.25
BG																			0		0.16	3.75

Table 15 Regulatory Heterogeneity - Telecoms

	AT	BE	CZ	DK	EE	FI	FR	DE	EL	HU	ΙE	NL	PT	SK	SI	ES	SE	UK	BG	Н		PMRs
AT	0	0.09	0.10	0.10	0.12	0.08	0.01	0.02	0.06	0.13	0.10	0.09	0.08	0.05	0.16	0.11	0.05	0.13	0.16		0.09	1.02
BE		C	0.19	0.18	0.19	0.17	0.10	0.07	0.15	0.20	0.18	0.19	0.16	0.12	0.07	0.19	0.06	0.22	0.23		0.15	1.57
CZ			0	0.00	0.02	0.06	0.10	0.11	0.04	0.03	0.01	0.00	0.03	0.12	0.26	0.02	0.14	0.03	0.07		0.07	0.45
DK				0	0.02	0.06	0.10	0.11	0.03	0.03	0.01	0.00	0.03	0.11	0.25	0.02	0.14	0.03	0.06		0.07	0.47
EE					0	0.08	0.12	0.12	0.05	0.01	0.01	0.02	0.03	0.09	0.25	0.00	0.13	0.05	0.04		0.08	0.58
FI						0	0.07	0.09	0.03	0.09	0.07	0.06	0.05	0.10	0.24	0.08	0.12	0.05	0.12		0.09	0.56
FR							0	0.03	0.06	0.13	0.10	0.10	0.09	0.05	0.17	0.11	0.06	0.12	0.16		0.09	0.96
DE								0	0.08	0.13	0.11	0.11	0.09	0.05	0.14	0.12	0.03	0.14	0.17		0.10	1.13
EL									0	0.06	0.04	0.03	0.02	0.08	0.22	0.05	0.11	0.07	0.10		0.07	0.66
HU										0	0.02	0.03	0.04	0.08	0.26	0.01	0.14	0.06	0.03		0.08	0.65
ΙE											0	0.01	0.02	0.11	0.25	0.01	0.13	0.04	0.06		0.07	0.50
NL												0	0.03	0.12	0.26	0.02	0.14	0.03	0.06		0.07	0.45
PT													0	0.08	0.22	0.03	0.11	0.06	0.07		0.07	0.65
SK														0	0.18	0.10	0.06	0.15	0.11		0.10	1.15
SI															0	0.24	0.12	0.29	0.29		0.21	1.98
ES																0	0.13	0.05	0.05		0.07	0.56
SE																	0	0.17	0.17		0.11	1.30
UK																		0	0.10		0.10	0.27
BG																			0		0.11	0.84

Table 16 Regulatory heterogeneity - Post

	AT	BE	CZ	DK	EE	FI	FR	DE	EL	HU	ΙE	NL	PT	SK	SI	ES	SE	UK	BG	Н		PMRs
AT	C	0.01	0.16	0.14	0.22	0.27	0.16	0.12	0.19	0.22	0.16	0.17	0.22	0.10	0.27	0.10	0.15	0.10	0.22		0.17	1.70
BE		C	0.17	0.13	0.22	0.28	0.17	0.11	0.20	0.22	0.17	0.17	0.22	0.11	0.28	0.11	0.16	0.11	0.22		0.17	1.67
CZ			0	0.30	0.17	0.33	0.11	0.28	0.19	0.17	0.11	0.33	0.17	0.06	0.22	0.06	0.28	0.06	0.17		0.18	2.00
DK				0	0.24	0.30	0.19	0.02	0.22	0.24	0.19	0.14	0.24	0.24	0.30	0.24	0.18	0.24	0.24		0.21	1.53
EE					0	0.17	0.06	0.22	0.02	0.00	0.06	0.39	0.11	0.11	0.06	0.11	0.12	0.11	0.00		0.13	3.00
FI						0	0.22	0.28	0.14	0.17	0.22	0.44	0.28	0.28	0.11	0.28	0.12	0.28	0.17		0.24	3.33
FR							0	0.17	0.08	0.06	0.00	0.33	0.06	0.06	0.11	0.06	0.17	0.06	0.06		0.12	2.67
DE								0	0.20	0.22	0.17	0.17	0.22	0.22	0.28	0.22	0.16	0.22	0.22		0.19	1.67
EL									0	0.02	0.08	0.37	0.13	0.13	0.08	0.13	0.09	0.13	0.02		0.14	2.87
HU										0	0.06	0.39	0.11	0.11	0.06	0.11	0.12	0.11	0.00		0.13	3.00
ΙE											0	0.33	0.06	0.06	0.11	0.06	0.17	0.06	0.06		0.12	2.67
NL												0	0.39	0.28	0.44	0.28	0.33	0.28	0.39		0.31	0.67
PT													0	0.11	0.17	0.11	0.23	0.11	0.11		0.17	3.00
SK														0	0.17	0.00	0.23	0.00	0.11		0.13	2.33
SI															0	0.17	0.12	0.17	0.06		0.18	3.33
ES																0	0.23	0.00	0.11		0.13	2.33
SE																	0	0.23	0.12		0.18	2.63
UK																		0	0.11		0.13	2.33
BG																			0		0.13	3.00

Table 17 Regulatory Heterogeneity - Airlines

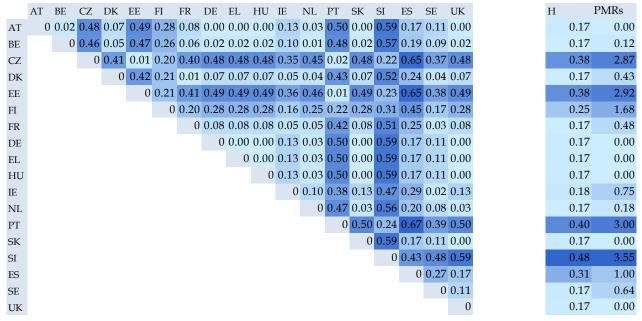


Table 18 Regulatory Heterogeneity - Road

	AT	BE	CZ	DK	EE	FI	FR	DE	EL	HU	ΙE	NL	PT	SK	SI	ES	SE	UK	BG	H	I	PMRs
AT	0	0.13	0.13	0.00	0.13	0.00	0.25	0.00	0.29	0.08	0.00	0.13	0.13	0.00	0.13	0.13	0.00	0.00	0.25		0.10	1.50
BE		0	0.00	0.13	0.00	0.13	0.13	0.13	0.17	0.04	0.13	0.00	0.00	0.13	0.00	0.00	0.13	0.13	0.13		0.08	2.25
CZ			0	0.13	0.00	0.13	0.13	0.13	0.17	0.04	0.13	0.00	0.00	0.13	0.00	0.00	0.13	0.13	0.13		0.08	2.25
DK				0	0.13	0.00	0.25	0.00	0.29	0.08	0.00	0.13	0.13	0.00	0.13	0.13	0.00	0.00	0.25		0.10	1.50
EE					0	0.13	0.13	0.13	0.17	0.04	0.13	0.00	0.00	0.13	0.00	0.00	0.13	0.13	0.13		0.08	2.25
FI						0	0.25	0.00	0.29	0.08	0.00	0.13	0.13	0.00	0.13	0.13	0.00	0.00	0.25		0.10	1.50
FR							0	0.25	0.29	0.17	0.25	0.13	0.13	0.25	0.13	0.13	0.25	0.25	0.00		0.19	3.00
DE								0	0.29	0.08	0.00	0.13	0.13	0.00	0.13	0.13	0.00	0.00	0.25		0.10	1.50
EL									0	0.21	0.29	0.17	0.17	0.29	0.17	0.17	0.29	0.29	0.29		0.24	3.25
HU										0	0.08	0.04	0.04	0.08	0.04	0.04	0.08	0.08	0.17		0.08	2.00
ΙE											0	0.13	0.13	0.00	0.13	0.13	0.00	0.00	0.25		0.10	1.50
NL												0	0.00	0.13	0.00	0.00	0.13	0.13	0.13		0.08	2.25
PT													0	0.13	0.00	0.00	0.13	0.13	0.13		0.08	2.25
SK														0	0.13	0.13	0.00	0.00	0.25		0.10	1.50
SI															0	0.00	0.13	0.13	0.13		0.08	2.25
ES																0	0.13	0.13	0.13		0.08	2.25
SE																	0	0.00	0.25		0.10	1.50
UK																		0	0.25		0.10	1.50
BG																			0		0.19	3.00

Table 19 Regulatory Heterogeneity - Retail

	ΑT	BE	CZ	DK	EE	FI	FR	DE	EL	HU	ΙE	NL	PT	SK	SI	ES	SE	UK	BG	Н		PMRs
AT	(0.45	0.17	0.45	0.24	0.42	0.47	0.39	0.21	0.39	0.59	0.25	0.29	0.18	0.33	0.36	0.47	0.43	0.37		0.36	2.40
BE		C	0.50	0.40	0.60	0.22	0.32	0.22	0.34	0.35	0.42	0.52	0.42	0.49	0.62	0.25	0.58	0.38	0.64		0.43	4.06
CZ			0	0.36	0.10	0.49	0.33	0.37	0.26	0.26	0.45	0.25	0.18	0.32	0.16	0.42	0.33	0.29	0.23		0.30	1.56
DK				0	0.35	0.20	0.19	0.17	0.31	0.27	0.19	0.27	0.19	0.44	0.27	0.20	0.18	0.23	0.25		0.27	1.69
EE					0	0.48	0.43	0.47	0.31	0.25	0.44	0.24	0.28	0.42	0.15	0.52	0.32	0.28	0.22		0.31	1.50
FI						0	0.39	0.30	0.34	0.40	0.22	0.37	0.38	0.44	0.47	0.22	0.38	0.36	0.44		0.36	2.86
FR							0	0.15	0.34	0.32	0.34	0.42	0.21	0.41	0.35	0.17	0.33	0.32	0.39		0.33	2.57
DE								0	0.24	0.28	0.36	0.32	0.19	0.43	0.39	0.19	0.35	0.29	0.42		0.30	2.71
EL									0	0.24	0.50	0.32	0.21	0.33	0.41	0.26	0.49	0.24	0.39		0.32	2.55
HU										0	0.42	0.33	0.24	0.51	0.29	0.43	0.41	0.04	0.31		0.32	2.06
ΙE											0	0.34	0.38	0.57	0.29	0.39	0.16	0.38	0.22		0.35	1.53
NL												0	0.24	0.28	0.10	0.38	0.22	0.34	0.12		0.29	0.91
PT													0	0.34	0.20	0.27	0.37	0.26	0.27		0.27	1.83
SK														0	0.38	0.24	0.45	0.47	0.35		0.39	2.31
SI															0	0.47	0.17	0.29	0.07		0.30	0.63
ES																0	0.38	0.40	0.45		0.33	2.88
SE																	0	0.37	0.10		0.34	0.60
UK																		0	0.27		0.31	1.79
BG																			0		0.31	0.20

Table 20 Regulatory Heterogeneity - Accounting

	AT	BE	CZ	DK	EE	FI	FR	DE	EL	HU	ΙE	NL	PT	SK	SI	ES	SE	UK	BG	Н		PMRs
AT	0	0.14	0.13	0.26	0.07	0.14	0.09	0.04	0.23	0.10	0.20	0.21	0.16	0.09	0.18	0.20	0.19	0.21	0.22		0.16	2.38
BE		0	0.14	0.39	0.20	0.27	0.07	0.10	0.37	0.11	0.35	0.21	0.18	0.22	0.18	0.20	0.27	0.27	0.36		0.22	3.23
CZ			0	0.26	0.07	0.26	0.21	0.16	0.23	0.10	0.20	0.08	0.03	0.09	0.05	0.20	0.31	0.21	0.22		0.17	2.38
DK				0	0.19	0.13	0.32	0.29	0.12	0.34	0.22	0.19	0.30	0.20	0.29	0.19	0.14	0.35	0.11		0.24	0.96
EE					0	0.19	0.14	0.09	0.17	0.16	0.15	0.14	0.10	0.02	0.11	0.26	0.26	0.15	0.17		0.14	2.04
FI						0	0.20	0.16	0.12	0.22	0.34	0.32	0.30	0.20	0.29	0.06	0.08	0.35	0.11		0.21	1.71
FR							0	0.05	0.32	0.16	0.29	0.27	0.25	0.15	0.24	0.26	0.21	0.21	0.31		0.21	2.90
DE								0	0.27	0.13	0.24	0.23	0.20	0.11	0.20	0.23	0.16	0.25	0.26		0.17	2.60
EL									0	0.33	0.23	0.31	0.24	0.19	0.28	0.18	0.17	0.23	0.01		0.22	1.00
HU										0	0.31	0.15	0.10	0.15	0.07	0.15	0.29	0.31	0.33		0.20	3.00
ΙE											0	0.16	0.21	0.17	0.26	0.41	0.33	0.20	0.23		0.23	1.15
NL												0	0.12	0.13	0.09	0.26	0.33	0.29	0.31		0.21	2.13
PT													0	0.13	0.05	0.24	0.35	0.22	0.23		0.19	2.42
SK														0	0.09	0.26	0.28	0.17	0.19		0.16	2.17
SI															0	0.23	0.36	0.26	0.27		0.19	2.69
ES																0	0.14	0.41	0.17		0.22	2.08
SE																	0	0.40	0.16		0.25	1.63
UK																		0	0.24		0.26	2.38
BG																			0		0.22	1.04

Table 21 Regulatory Heterogeneity - Legal

	AT	BE	CZ	DK	EE	FI	FR	DE	EL	HU	ΙE	NL	PT	SK	SI	ES	SE	UK	BG	Н		PMRs
AT	0	0.26	0.14	0.14	0.14	0.45	0.11	0.26	0.42	0.24	0.30	0.12	0.25	0.17	0.13	0.23	0.43	0.51	0.55		0.27	2.75
BE		0	0.17	0.24	0.22	0.47	0.18	0.13	0.28	0.10	0.24	0.25	0.20	0.23	0.14	0.28	0.50	0.52	0.35		0.26	3.56
CZ			0	0.19	0.04	0.42	0.05	0.12	0.28	0.14	0.24	0.08	0.15	0.15	0.09	0.27	0.45	0.48	0.51		0.22	3.27
DK				0	0.23	0.35	0.24	0.31	0.47	0.32	0.30	0.20	0.34	0.27	0.22	0.27	0.33	0.41	0.51		0.30	2.15
EE					0	0.38	0.05	0.12	0.28	0.18	0.24	0.04	0.19	0.19	0.14	0.27	0.41	0.43	0.55		0.21	3.02
FI						0	0.41	0.47	0.62	0.55	0.45	0.34	0.52	0.38	0.45	0.44	0.22	0.06	0.53		0.42	0.77
FR							0	0.15	0.31	0.14	0.19	0.07	0.14	0.16	0.10	0.31	0.44	0.47	0.50		0.22	3.23
DE								0	0.16	0.09	0.33	0.14	0.16	0.23	0.13	0.16	0.50	0.52	0.43		0.24	3.56
EL									0	0.18	0.42	0.30	0.31	0.39	0.29	0.32	0.65	0.68	0.34		0.37	4.48
HU										0	0.27	0.22	0.16	0.20	0.10	0.24	0.59	0.61	0.44		0.26	4.08
ΙE											0	0.26	0.18	0.34	0.29	0.49	0.49	0.51	0.42		0.32	3.48
NL												0	0.22	0.17	0.11	0.23	0.43	0.40	0.51		0.23	2.79
PT													0	0.22	0.12	0.32	0.55	0.58	0.36		0.27	3.88
SK														0	0.10	0.19	0.60	0.44	0.39		0.27	3.04
SI															0	0.22	0.55	0.51	0.42		0.23	3.46
ES																0	0.53	0.50	0.41		0.31	2.65
SE																	0	0.16	0.75		0.48	0.56
UK																		0	0.59		0.47	0.42
BG																			0		0.48	3.96

Table 22 Regulatory Heterogeneity- Architect

	AT	BE	CZ	DK	EE	FI	FR	DE	EL	HU	ΙE	NL	PT	SK	SI	ES	SE	UK	Н	I	PMRs
AT	0	0.18	0.07	0.37	0.23	0.40	0.14	0.30	0.08	0.13	0.37	0.40	0.19	0.06	0.14	0.11	0.40	0.28		0.23	2.42
BE		0	0.25	0.40	0.32	0.43	0.11	0.27	0.23	0.31	0.40	0.43	0.16	0.24	0.26	0.20	0.43	0.40		0.30	2.60
CZ			0	0.32	0.18	0.35	0.20	0.25	0.02	0.06	0.32	0.35	0.14	0.01	0.07	0.06	0.35	0.23		0.19	2.10
DK				0	0.14	0.03	0.51	0.41	0.30	0.38	0.00	0.03	0.34	0.31	0.33	0.26	0.03	0.09		0.25	0.19
EE					0	0.17	0.37	0.39	0.15	0.24	0.14	0.17	0.22	0.17	0.25	0.13	0.17	0.14		0.19	1.04
FI						0	0.54	0.44	0.33	0.41	0.03	0.00	0.38	0.34	0.36	0.29	0.00	0.12		0.27	0.00
FR							0	0.31	0.22	0.26	0.51	0.54	0.21	0.20	0.27	0.25	0.54	0.42		0.33	3.25
DE								0	0.24	0.22	0.41	0.44	0.19	0.24	0.21	0.27	0.44	0.33		0.30	2.63
EL									0	0.08	0.30	0.33	0.12	0.01	0.09	0.03	0.33	0.23		0.18	1.96
HU										0	0.38	0.41	0.16	0.07	0.05	0.12	0.41	0.29		0.23	2.46
ΙE											0	0.03	0.34	0.31	0.33	0.26	0.03	0.09		0.23	0.19
NL												0	0.38	0.34	0.36	0.29	0.00	0.12		0.27	0.00
PT													0	0.13	0.17	0.08	0.38	0.35		0.23	2.25
SK														0	0.08	0.05	0.34	0.22		0.18	2.04
SI															0	0.13	0.36	0.24		0.22	2.15
ES																0	0.29	0.27		0.18	1.75
SE																	0	0.12		0.27	0.00
UK																		0		0.23	0.73

Table 23 Regulatory heterogeneity - Engineer

	AT	BE	CZ	DK	EE	FI	FR	DE	EL	HU	ΙE	NL	PT	SK	SI	ES	SE	UK		Н	I	PMRs
AT	0	0.34	0.13	0.40	0.23	0.40	0.37	0.45	0.08	0.13	0.37	0.40	0.13	0.07	0.17	0.11	0.40	0.40			0.27	2.42
BE		C	0.35	0.06	0.24	0.06	0.03	0.34	0.39	0.38	0.09	0.06	0.34	0.41	0.39	0.35	0.06	0.06			0.23	2.60
CZ			0	0.28	0.11	0.28	0.38	0.34	0.08	0.13	0.25	0.28	0.14	0.06	0.17	0.12	0.28	0.28			0.22	2.10
DK				0	0.17	0.00	0.09	0.28	0.33	0.32	0.03	0.00	0.27	0.35	0.33	0.29	0.00	0.00			0.19	0.19
EE					0	0.17	0.27	0.23	0.15	0.15	0.14	0.17	0.15	0.17	0.28	0.13	0.17	0.17			0.17	1.04
FI						0	0.09	0.28	0.33	0.32	0.03	0.00	0.27	0.35	0.33	0.29	0.00	0.00			0.19	0.00
FR							0	0.38	0.42	0.41	0.13	0.09	0.37	0.44	0.42	0.39	0.09	0.09			0.26	3.25
DE								0	0.38	0.33	0.25	0.28	0.33	0.40	0.40	0.34	0.28	0.28			0.31	2.63
EL									0	0.05	0.30	0.33	0.05	0.02	0.13	0.03	0.33	0.33			0.22	1.96
HU										0	0.29	0.32	0.05	0.07	0.13	0.03	0.32	0.32			0.22	2.46
ΙE											0	0.03	0.24	0.32	0.30	0.26	0.03	0.03			0.18	0.19
NL												0	0.27	0.35	0.33	0.29	0.00	0.00			0.19	0.00
PT													0	0.07	0.18	0.02	0.27	0.27			0.20	2.25
SK														0	0.10	0.06	0.35	0.35			0.23	2.04
SI															0	0.16	0.33	0.33			0.26	2.15
ES																0	0.29	0.29			0.20	1.75
SE																	0	0.00			0.19	0.00
UK																		0			0.19	0.73

ANNEX III

The ECB in its report "Financial Integration in Europe" provides an overview of the four principal financial markets, namely money, bond, equity and banking. Specific indicators are available for each one of the markets. In Table 24 below, the research team schematised the results of further investigation on financial markets integration on the basis of the listed indicators.

Table 24 Financial Markets Situation

Markets		ECB Indicators	Туре	Integration status and potential problems
		Cross-country standard deviation (s.d.) of average unsecured interbank lending rates across euro area countries (EONIA, EURIBOR)	Price-based	INTEGRATION: Increasing trend towards fragmentation POTENTIAL PROBLEMS:
ì	≻	Cross-country s.d. of average interbank repo rates across euro areas countries (EUREPO)	Price-based	Integration in the money market is key for ensuring an equitable and fair transmission
	NON NO.	Geographical distribution of counterparties for secured and unsecured transactions	Quantity-based	of the ECB monetary policy (across the Euro area).Therefore a lack of
		Short-Term European Paper (STEP)	Other	integration might cause problems related to the
		TARGET 2 share of inter-MS payments in terms of volume and value	Other	effectiveness of the aforementioned transmission mechanisms.
		Dispersion of euro area sovereign bond yields	Price-based	
	þ	Sovereign debt ratings and their dispersion (s.d.) in the euro area	Price-based	INTEGRATION: de facto
	Sovereign bond	Spreads of liquidity premia for agency bonds compared with sovereign bonds	Price-based	fragmentation MAJOR PROBLEMS: Disparities
BOND	Sove	Bid-ask spread on ten-year sovereign bonds	Price-based	in accessing to long-term debt financing (both at country and
BC		Government issuance activity	Quantity-based	corporate level, i.e. sovereign
		Share of MFI cross-border holdings of debt securities (corporates and sovereigns)	Quantity-based	 and corporate bonds. The two are interrelated in the sense that country of issuance might play a role in determining the
	Corporate	Cross-country dispersion (s.d.) in covered bond, corporate bond and sovereign bond yields	Price-based	corporations' access to finance)
	Corl	Volume of issuance of senior unsecured bank bonds	Quantity-based	
	 >-	Equity market indices (dispersion of)	Price-based	INTEGRATION: suffering. Higher degree of resilience
Í		Equity market integration based on common factor portfolios	Price-based	than bond markets, i.e. (relatively) reduced impact on cross-country divergences
•	T	Proportion of variance in euro area country equity returns	Price-based	MAJOR PROBLEMS: Disparities

	explained by euro area and US stock market shocks		in accessing to long-term debt financing (both at country and corporate level, i.e. sovereign and corporate bonds. The two are interrelated in the sense that country of issuance might play a role in determining the corporations' access to finance)	
	Equity market segmentation	Quantity-based		
	Investment funds' holdings of equity ("other euro area countries and "rest of the world" comparison)	Quantity-based		
	Degree of cross-border holdings of equity issued by euro area residents	Quantity-based		
BANKING	Dispersion of the total assets of foreign branches and subsidiaries of euro area banks across euro area countries	Structural	INTEGRATION: fragmentation phase MAJOR PROBLEMS: cross-country disparities (i.a. on prices and conditions of loans and deposits, therefore hampering competition in the single market), negative effects on cross-border activities	
	Cross-border MFI loans to MFIs and non-MFIs in the EU	Activity-based		
	MFI loans to non-financial corporations	Activity-based		
	Changes in credit standards applied to the approval of loans or credit lines	Survey-based		
	Cross-country s.d. of MFI interest rates on new loans to non-financial corporations	Price-based		
	Interest rates on MFI deposits for households	Price-based		
	Credit transfer and direct debit transactions processed in SEPA format	Other		

Source: Authors' elaboration

ANNEX IV

The Bepa Report

Inception analysis

Table 25 Untapped potential" indicators

Factor	Number of indicators	Indicator	Weight	
Productivity	1	Labour productivity	0.25	
Innovation	2	Research and development investment	0.25 (0.125 per	
		Patents filed	indicator)	
Employment growth	1	Increased in hours worked divided by population	0.25	
		Energy Consumption per unit of output	0.25	
Sustainability	3	Material Inputs per unit of output	(0.833 per	
		Service Inputs per unit of output	indicator)	

Source: London Economics and PwC (2013)

The weighted average of the existing gap for each indicator constitutes the final sectoral gap. It should be noted that these indicators (and the MCA) are only applied for the first sector selection.

Four more tests are subsequently applied, mainly in order to determine which sectors to choose for the "six deep dives" into services sectors in the European economy. They put sectors under scrutiny following the criteria listed below:

- economic importance of the sector (i.e. its size);
- its dynamics (i.e. PwC/LE assumes that if a sector is already growing faster than
 expected in terms of employment creation and labour productivity
 convergence it means that the sector itself is already tackling effectively the
 "untapped potential");¹⁴⁷
- Information and data availability;
- Single Market relevance, derived from a set of quantitative and qualitative indicators.¹⁴⁸

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¹⁴⁷ Some sectors finally included in the "deep dives" do not pass this two-fold test. Some of them do not pass one part (namely "retail trade, except of motor vehicles and motorcycles; repair of household goods"; "Legal, technical and advertising"; "Wholesale trade and commission trade, except of motor vehicles and motorcycles") or both ("Inland Transport; Hotels and restaurants").

¹⁴⁸ Qualitative assessment of: 1. Regulatory heterogeneity; 2. Consumers dissatisfaction 3. Long-term demand evolution 4. Existing policy initiatives, all by PwC/ LE sectoral experts, Quantitative assessment of: 1. Market competition (i.e. mark-ups; concentration; volatility of sectoral leaders) 2. Integration measurement (i.e. intra-EU M&A; price dispersion; openness).

Selection

PwC/LE entirely dedicate their "phase 2" to the implementation of the methodology defined in "phase 1", thus selecting the sectors in which to make its "deep dives". In so doing, PwC/LE – under the guidance of a Steering Group – decided to concentrate on 6 specific services markets for their "deep dive" research, as markets – they write – are the ultimate objective of the analysis. Table 26 shows the sectors and the specific markets in these sectors which are the object of PwC/LE analysis.

Table 26 List of selected sectors and markets

Sectors	Markets	Applicable NACE Rev.2 code(s)	
Construction	<u>Construction</u> – Construction of residential buildings	41- Construction buildings	
Retail trade, except of motor vehicles and motorcycles; repair of household goods	Retail trade – General retailing, including e-commerce, and apparel retailing	47.1- Retail sale in non-specialised stores	
Legal, technical and advertising	<u>Business services</u> – Architectural and engineering activities	71 - Architectural and engineering activities; technical testing and analysis	
Wholesale trade and commission trade, except of motor vehicles and motorcycles	<u>Wholesale trade</u> – Construction materials	46.13 - Agents involved in the sale of timber and building materials 46.73 - Wholesale of wood, construction materials and sanitary equipment	
Inland Transport	Logistics – Land transport of freight	49.2 - Freight rail transport 49.4 - Freight transport by road and removal services	
Hotels and restaurants	<u>Hotels</u>	55.10 - Hotels and similar accommodation	

Source: London Economics and PwC (2013)

The six "deep dives"

Table 27 displays the indicators chosen to measure performances in each of the 6 markets.

Table 27 List of selected sectors and markets

Markets	Indicator	Unit
Construction – Construction of	Apparent labour productivity	EUR (thousands) per full-
residential buildings	Apparent labour productivity	time equivalent units
Retail trade – General retailing, including	Apparent labour productivity	EUR (thousands) per full-
e-commerce, and apparel retailing	Apparent labour productivity	time equivalent units
Business services – Architectural and	Apparent labour productivity	EUR (thousands) per full-
engineering activities	Apparent labour productivity	time equivalent units
Wholesale trade – Construction materials	Apparent labour productivity	EUR (thousands) per full-
<u>wholesale trade</u> – construction materials	Apparent labour productivity	time equivalent units
Logistics – Land transport of freight	Physical indicator of labour	Tons * kilometres
Logistics — Land transport of freight	productivity	
Hotels	Physical indicator of labour	Number of nights per full-
lioteis	productivity	time equivalent units

Note: Formulas used for calculating the "apparent labour productivity" are market-customised (i.e. they are different from market to market) even if the final units of measurement are the same. Source: Authors' elaboration on London Economics and PwC (2013).

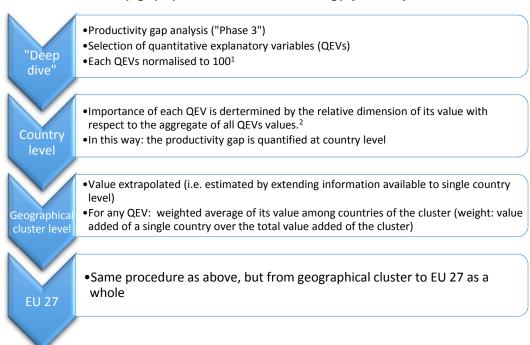
PwC LE does not proceed with a country-level market analysis for every EU MS, but has defined four clusters¹⁴⁹ in order to ensure the chosen set to be geographically representative.

However, the lengthy "phase 3" dedicated to the "deep dives" neither provides a quantification of the productivity gap and nor the relative importance of its determinants. Instead, it aims to identify only these root causes, through primary or secondary sources as interviews and surveys, mainly qualitative in nature, but also using quantitative indicators contained in different surveys and other sources (e.g. indicators of market concentration; OECD Product Market Regulation indicators; etc.). They also compare directly these quantitative indicators with the productivity indicator in order to verify if a presumable correlation exists.

Quantification of gap causes and policy suggestions

Table 28 attempts to provide a representation of the methodology used for quantifying those gaps

Table 28 Productivity gap quantification methodology (PwC/LE)



Note: ¹The procedure is meant to make the comparison possible among quantitative indicators that have different unit of measurement. It could be compared to expressing the value in percent points. ²Source: Authors' elaboration on London Economics and PwC (2013).

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¹⁴⁹ These clusters are: 1. Continental Social-Market Economy: Austria, Belgium, Cyprus, France, Germany, Greece, Italy, Luxembourg, Malta, Netherlands, Portugal and Spain (MS selected in each deep dive: 4 out of 12). 2. Anglo-Saxon: Ireland and the United Kingdom (1 out of 2). 3. Central and Eastern European: Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovenia and Slovakia (2 out of 10). 4. Nordic: Denmark, Finland and Sweden (1 out of 3).

Cost of Non-Europe Reports identify the possibilities for economic or other gains and/or the realisation of a 'public good' through common action at EU level in specific policy areas and sectors. This Cost of Non-Europe Report seeks to analyse the costs for citizens, businesses and relevant stake-holders of remaining gaps and barriers in the European Single Market, building on and updating the 1988 Cecchini Report, which quantified its potential benefits.

This particular study - the second in a series - attempts to take stock of the remaining gaps or deficits in intra-EU market access obligations in services, and the related deficits in the proper functioning of the internal market for services. It also tries to identify the quantitative and qualitative economic gains of overcoming the costs of non-Europe of the remaining fragmentation, insofar as the EU can address such deficits.

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