



Europe Economics

Optimal Integration in the Single Market: A Synoptic Review

A Europe Economics report for BIS

April 2013

Europe Economics
Chancery House
53-64 Chancery Lane
London WC2A 1QU

Tel: (+44) (0) 20 7831 4717
Fax: (+44) (0) 20 7831 4515

www.europe-economics.com



Europe Economics is registered in England No. 3477100. Registered offices at Chancery House, 53-64 Chancery Lane, London WC2A 1QU. Whilst every effort has been made to ensure the accuracy of the information/material contained in this report, Europe Economics assumes no responsibility for and gives no guarantees, undertakings or warranties concerning the accuracy, completeness or up to date nature of the information/analysis provided in the report and does not accept any liability whatsoever arising from any errors or omissions © Europe Economics. All rights reserved. Except for the quotation of short passages for the purpose of criticism or review, no part may be used or reproduced without permission.

Contents

Summary.....	0
1 Introduction.....	7
2 What is the Single Market and what Policies are used to Create and Sustain it?	8
2.1 Trade and comparative advantage	8
2.2 Barriers to trade	8
2.3 International trade agreements	9
2.4 Non-tariff barriers	11
2.5 Customs union vs Single Market.....	13
2.6 Mutual Recognition, Harmonisation and Best Practice spreading.....	15
2.7 Alternative goals for the Single Market project and their import for mutual recognition versus harmonisation	18
3 How to Assess Optimal Integration in a Single Market.....	20
3.1 The Trade-offs in a Single Market.....	20
3.2 Procedure for Assessing How Optimal Integration is	27
4 Measuring Economic Integration	28
4.1 Methodological issues: “Input” vs “Output” Measures of Integration	28
4.2 “Input” Measures of Integration.....	31
4.3 “Output” Measures of Integration.....	35
4.4 Effects of Policy Inputs on Output Measures of Integration	49
4.5 So in which Sectors has Integration been Proceeding most?.....	51
4.6 Summary	53
5 Concrete Benefits from the Single Market	54
5.1 Gains from Trade Creation.....	54
5.2 Competition.....	58
5.3 Efficiency gains	60
5.4 Innovation.....	63
5.5 Indicative Quantitative Results	67
6 Concrete Costs of the Single Market	70
6.1 Trade diversion	70
6.2 Process costs	73
6.3 Costs of Regulation.....	74
6.4 Conclusion.....	77
7 Policy Costs and Benefits	78
7.1 How can one Measure Sovereignty Costs and Benefits?	78
7.2 Sovereignty costs dimension I: Over-rule and dissent	79

7.3	Sovereignty costs dimension 2: Changing balance of your influence over others versus their influence over you — Case study: The financial services sector	82
8	Conclusions	97

Summary

This report was commissioned by BIS from Europe Economics, and is an input to BIS' synoptic review of the Single Market. That review has three key objectives:

- to consider the broad issues and main debates underlying the Internal Market as a whole, in particular exploring the level of market integration thought to be necessary for an effective Internal Market, and the mechanisms (such as harmonisation or mutual recognition) for achieving it;
- to explore the interrelationships between the Internal Market and other areas of competence, and to assess the strength of the arguments that certain other areas of competence are needed to enable the Internal Market to operate effectively;
- as a result, to assess the implications for the UK national interest of the current state of integration and EU competence in the Internal Market field.

This report has considered the following questions:

- ***What is the Single Market and what are its goals?***

The Single Market can be regarded as a trading relationship, extending the European customs union to encompass the stripping away of non-tariff barriers and free movement in capital and labour as well as goods and services, and that has been the main basis of our analysis here. However, the promotion of trade is not the only (or even, arguably, the main) goal of the Single Market — from the beginning its architects have openly identified other goals for the project such as the deepening of political and social linkages between the peoples and regions of Europe.

- ***What are the tools by which integration in the Single Market is promoted?***

Key tools include

- the stripping away of internal tariffs and the imposing of a common external tariff
 - Treaty commitments by governments to the principles of free movement of goods, services, capital and labour, to the liberalisation of markets, and to common principles of competition and the addressing of externalities
 - mutual recognition of the regulatory and other requirements of other Member States
 - harmonisation of regulatory and other requirements across the EU
 - the spreading of best practice
 - common frameworks for economic regulation (e.g. of utilities)
- ***How should we understand the question of whether integration within the Single Market is optimal?***

Membership and development of the Single Market entails a number of trade-offs, between numerous benefits and costs of participation. In order to evaluate how optimal Single Market integration is (allowing consideration of in which sectors integration should go further and in which sectors integration has already achieved all it can or even, perhaps, gone too far), it is necessary to assess the balance within these trade-offs.

We identify the following positives of enhancing the Single Market:

- **gains from trade** — by stripping away tariffs and non-tariff barriers, trade with Single Market partners increases (the “trade creation” effect of a customs union, amplified by the additional reduction in barriers in a Single Market), increasing the gains from trade from that source.
- **gains to competition** — increased trade means increased competitive pressure from abroad, reducing prices for consumers and increasing technical and allocative efficiency within and between firms and industries.
- **gains to efficiency from economies of scale and scope** — through more straightforward access to larger markets (the whole Single Market) firms can operate at a larger scale, and the free movement of capital and labour allows international relocation to where production is most efficient in scale (bigger often equals cheaper) and scope (the same production inputs might be used for multiple purposes).
- **gains to innovation** — the deep interchange of ideas and methods across different settings and cultures facilitated by a Single Market can be a driver of increased creativity in innovation.
- **policy synergies where effects spill over borders** — in areas such as an environmental policy or higher education.

Other positives are more subtle. For example, a key gain from involvement in a Single Market project may be **the opportunity to improve policy-setting in other countries**. We explore in some detail the case of the Markets in Financial Instruments Directive in the Financial Services sector (considered in close detail in Section 7.3.1.3), whereby, via the EU the UK may have influenced how financial services regulation is set for, say, Italy. That may not simply be a matter of optimal policy-setting being different if determined at EU rather than the Italian governmental level. It could be that UK ideas would have been better for Italy even if simply adopted by the Italian government absent the EU.

We identify four key categories of potential negative from the Single Market:

- **trade diversion losses** — as in any customs union, from the gains from trade created by a Single Market one must net off the losses from trade diverted inefficiently into the Single Market from outside.
- **sovereignty/democracy costs** — it was noted above that a positive of the Single Market is that it allows us to improve policy-setting elsewhere. The flip-side is that we may find our own policies improved, in ways that clash with our sovereign autonomy and democracy — our ability to make our own mistakes in our own way
- **subsidiarity costs** — we have understood by “sovereignty costs” the loss of our ability to make our own mistakes in our own way. Subsidiarity costs are distinct, in being those costs intrinsically associated with harmonised and centralised policy-setting as opposed to more locally-determined policy, not because of autonomy of the policy-setting process but because the final policy itself becomes less close to (locally) optimal.
- **process costs** — the creation and maintenance of the institutions of the EU have to be funded, the rules and regulations of the EU must be adapted to and complied with, infringement proceedings must be responded to. Insofar as they are additional to national regulatory process costs that would be entailed anyway, these are all processes that entail cost.

We represent various options for how benefits and costs evolve graphically, and how they might combine into net benefits/costs, as per the following graphs (for a fuller explanation of the patterns and their implications see Section 3).

Figure 1: Possible benefit curves for four phases of economic integration: customs union (CU), predominance of non-tariff barriers (NTB), single market (SM) and total harmonisation (TH).

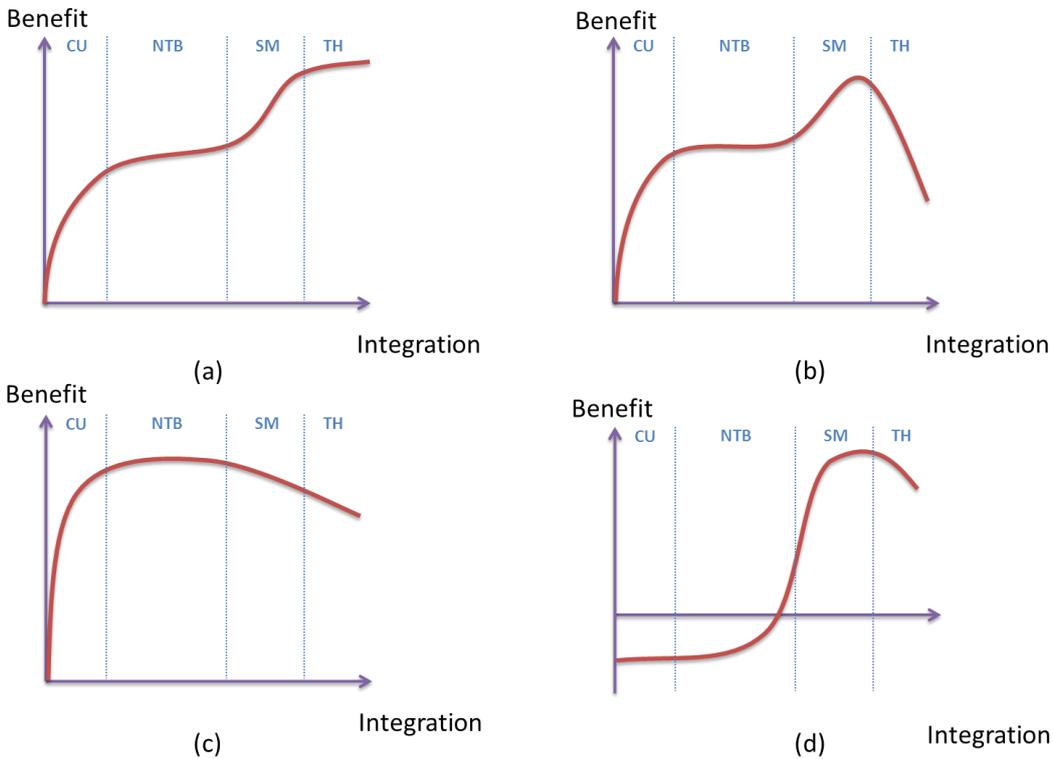


Figure 2: Possible cost curves for four phases of economic integration: customs union (CU), predominance of non-tariff barriers (NTB), single market (SM) and total harmonisation (TH).

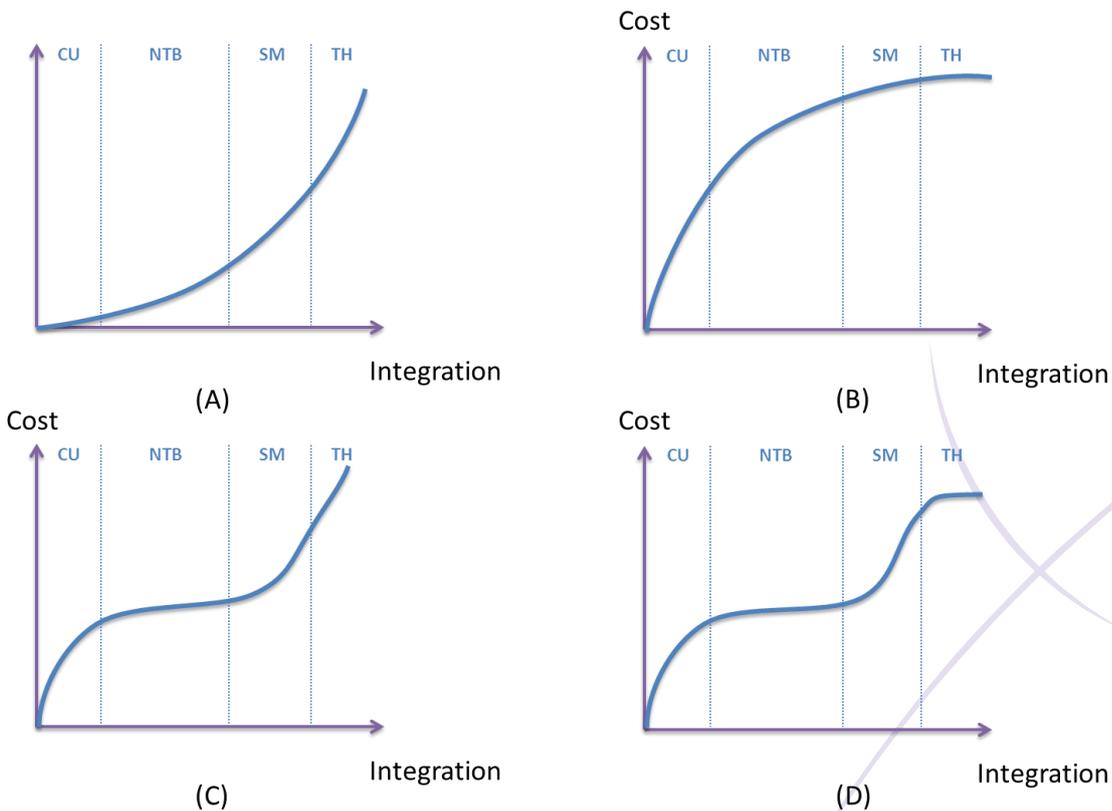
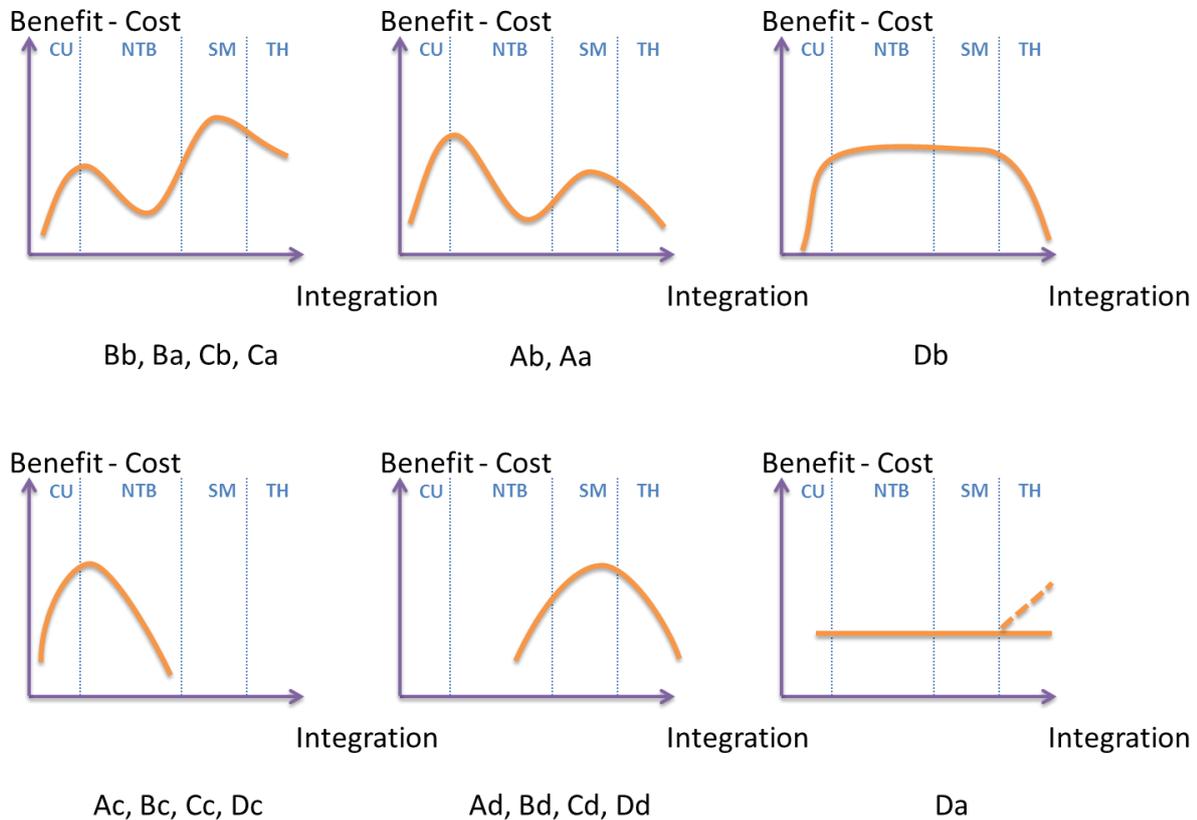


Figure 3: Possible net benefit curves for four phases of economic integration: customs union (CU), predominance of non-tariff barriers (NTB), single market (SM) and total harmonisation (TH).



• **How should one measure the degree of integration within Europe?**

We have considered how to measure integration, developing a set of indicators by which to assess not only whether policy has sought to promote integration, e.g. through regulatory measures (what we term the “inputs” to integration), but also whether increased integration, in the economic sense (what we call “output measures”), has actually occurred. Our outputs approach measures integration by the features that an integrated market would exhibit — for example:

- Prices of outputs and inputs. In a successful Single Market, where the Four Freedoms function well, we would expect to see convergence in prices. The relevant prices are:
 - Goods and services (final and intermediate).
 - Wages. This might apply to overall integration (e.g. convergence in the hourly wage for the total economy) or for specific sectors (e.g. hourly wages in those sectors).
 - Cost of capital. In a Single Market with free movement of capital we expect to see convergence in both retail borrowing rates (such as rates available for housing, consumer or enterprises) and lending/investment rates (such as money market and day-to-day money rates) — though the speed of convergence might differ for retail and lending rates.
- Trade and labour migration. As with prices, further integration would be expected to translate into larger quantities moved within the European Union, either through trade of goods and services or worker migration. The relevant measures might include the amount of trade among countries in the Single Market and the amount of trade with comparable partners outside Europe.

- Efficiency. We propose as measures of efficiency the related variables of labour productivity and unit labour cost. These measures are interesting for two reasons. First, free movement of labour would imply that in an integrated market the differences in efficiency disappear over time. Second, one of the expected benefits of the Single Market is a general increase in efficiency.

For these measures, we are primarily concerned with their levels, dispersion across regions and sectors, volatility over time and the direction in which these variables evolve.

We conduct our analysis at the level of the economy as a whole and also of some particular sectors, as these offer instructive information. The four main sectors we use here for illustrating our thoughts and methods are motor vehicles, patented pharmaceuticals, energy and financial services.

The key lessons regarding integration are as follows:

- The degree of integration can be measured, especially in respect of “output” measures such as the degree of price and wage dispersion, and output measures are correlated with input measures (though not always in the direction policymakers might have expected).
 - There is evidence of increased integration — in particular in the form of wage convergence in the 1970s and 1980s and labour productivity convergence in the 2000s.
 - Integration, measured on outputs, is not a one-way process. Integration can reach a plateau (as with wage dispersion from the 1990s onwards) or even, in some cases, be reversed (as with pharmaceuticals price dispersion and interest rate dispersion during the 2000s).
- ***In which sectors has integration proceeded least?***

We apply our output criteria to consider integration in the twelve largest sectors for the UK, finding the following. The key salient features are as follows:

- In the period since the Accessions of the mid-2000s, there has been convergence in labour productivity (increased integration in the Single Market) in most main sectors, with the notable exceptions of manufacturing, wholesale & retail trade and education.
 - This convergence has been driven overwhelmingly by convergence between the new Member States and the EU15, rather than amongst EU15 Member States.
 - For almost all sectors (excepting public administration (etc) and education – both relatively unaffected by the Single Market), there has either been very little convergence since the early 1980s or what convergence there has been has been less than or entirely explicable in terms of global convergence.
 - The four sectors in which EU15 convergence relative to global convergence is least positive / most negative are: manufacturing, wholesale/retail trade, construction and transport.¹
- ***How can the concrete benefits of integration be measured in particular sectors?***

Armed with our criteria to assess how much integration has occurred and how much various regulatory changes have contributed to integration in various dimensions, we move on to the concrete fruits of integration — setting out how to measure the ways in which increased integration contributes to trade creation, competition, efficiency gains, and innovation.

The first and most direct benefit from a free trade area, customs union or single market is the free movement of goods and services. Hence we now consider whether UK trade has been increased by its membership to the European Union’s Customs Union and Single Market. We conclude the following:

¹ Again, one might speculate on a number of factors marking out these sectors, such as perhaps their role in globalisation of supply chains.

- In our estimations, an increase of 1 per cent in foreign GDP translates into an increase of trade between 1.02 per cent and 1.07 per cent. The elasticity of trade with respect to domestic GDP ranges between 0.81 per cent and 1.58 per cent. An increase in the distance between the UK and its trading partner of 1 per cent is associated with a decrease in trade of between 0.56 per cent and 1.03 per cent.
- Price dispersion measured at the EU level is negatively correlated with trade, whilst there a positive but small correlation between trade and bilateral price dispersion. The elasticity of trade with respect to EU price dispersion is -0.32.
- The benefits from trade continue to increase after the introduction of Single Market phase, which would provide evidence against scenarios in which the optimal level of integration occurs at the customs union stage.
- We cannot exclude our findings as indicative of how important the removal of non-tariff barriers is relative to tariffs.

One of the expected benefits of the Single Market is an increase in the competitive pressure in domestic markets reducing prices for consumers and increasing technical and allocative efficiency within and between firms and industries. Our findings are consistent with the hypothesis that competition increases with further integration. In sectors where integration has been more successful, as with motor vehicles, improvements in the Hirschman-Herfindahl index can be seen across the board. In sectors in which there is only partial integration, such as pharmaceuticals, the benefits from the Single Market might become tangible only in some regions, such as those with, initially, the lowest levels of competitive pressure.

Other potential benefits of the Single Market include gains in efficiency from sources such as economies of scale and scope. We measure these efficiency gains using unit labour costs. Unlike the case with labour productivity in the previous chapter, there seems to be no clear trend in the unit labour costs for the total economy, energy and financial services sectors.

Higher levels of innovation are among the expected benefits of European integration. We measure innovation through expenditure in Research and Development (R&D). There are two main conclusions that can be drawn. First, a significant part of the Member States that joined the EU on or after 2004 have seen a very substantial increase in their R&D expenditure. This fact is consistent with the benefits of the Single Market in terms of innovation. Second, a number of established economies in the EU have either low levels or low growth in their R&D spending. These Member States include France, the Netherlands and the UK. This fact, however, might not necessarily indicate that those countries do not reap the benefits from innovation in the Single Market for two reasons. First, integration might lead to specialisation and those Member States might not have their comparative advantage in sectors that are R&D intensive. Second, innovation in sectors such as financial services, which represent a significant part of the economies of some Member States as the UK, might not be best captured through R&D expenditure.

Thus, using a combination of general reflections upon data, econometrics, and analytical judgement, we have illustrated how one might explore the relationship between integration in the Single Market and trade, competition, efficiency and innovation for the pharmaceuticals, financial services, motor vehicles and energy sectors. In general we believe one should be optimistic regarding the scope for drawing fairly objective quantitative results in respect of these benefits in respect of trade, competition and efficiency. In respect of innovation, we believe some quantification is worth attempting but the likelihood of producing robust and definitive results is limited.

- ***How can the concrete costs of integration be measured in particular sectors?***

We have explored trade diversion and process costs, including the costs of regulation. Regulatory costs can be measured quite concretely, but there is an inevitable element of judgement involved in determining how much additional regulatory costs the EU creates that would not have been incurred anyway through national regulatory interventions. We also note that the ways regulatory costs are typically analysed in

regulatory impact assessments is not precisely suited to our purpose here, in that many EU regulations are intended to be deregulatory or liberalising — the very essence of the stripping away of non-tariff barriers is that doing so should have the net effect of *reducing* regulatory costs, not increasing them.

Of the concrete costs, although the rising trend in process costs within the EU should not be ignored and there does appear to be an accelerating trend in the volume of regulation associated with the EU (a trend that counterfactual analysis suggests might not be fully duplicated by the UK alone), we consider the most significant dynamic aspect of recent and forthcoming years has been the shifts in trade diversion. Although the removal of non-tariff barriers should allow the EU, in principle, to achieve deeper cost reduction than is feasible under customs union or free trade agreements, in practice the EU has not kept pace with international competitiveness trends — not necessarily through any failings of its own but perhaps simply because of successes elsewhere. The implication is that trade diversion is a rapidly increasing cost of EU membership and could eventually become a threat to its economic efficacy, and thus that the focus upon EU competitiveness amongst EU-level policymakers is a concern well founded.

The functioning of the Single Market requires dedicated administrative bodies together with utilisation of a significant part of the EU government. The associated considerable processing cost must be funded by Member States. We observe that there is a rising trend in gross UK contribution to administrative expenditure, even relative to GDP. In general, the gross UK contribution would adjust according to the goals of the EU government and fluctuate between 0.04 and 0.07 per cent to GDP level. After the introduction of Single Market in 1993, there was a gradual fall in gross UK contribution until the financial crisis in 2007.

Besides the annual contribution each Member States make, another major component of the cost of EU membership is the cost of complying with EU regulations. Regulatory costs to businesses could include: administrative costs, policy costs, financial costs and wider costs on the economy created by regulatory distortions.

- ***How can policy costs and benefits be assessed?***

We consider policy costs and benefits to be potentially as large as or even larger than the concrete costs and benefits of the Single Market, bearing in mind especially the point that the key goals of the Single Market project may be political (and hence directly related to policy influence) as much as trade-oriented. We explore how measures of dissent, such as occasions the UK has been outvoted via QMV, might supplement more widely-used coarser-grained measures of policy costs, such as the number of “lost vetoes”. Noting the perils of drawing too firm a conclusion from the scarce data available, our numbers suggest that not only do brute sovereignty costs rise as harmonisation measures are extended (as is, in a sense, inevitable) but that over time the costs to the UK have increased faster than those for other Member States.

In respect of particular sectors, we suggest that detailed reflection upon the dynamic of policy-making can reveal the UK’s influence or lack thereof and how this changes through time. We explore the specific case of the Financial Services Sector, showing how the UK’s past influence can be seen through detailed consideration of the structural similarities between key EU and UK financial regulations and the differences between these and previous regulation in other Member States. We also argue that once one understands the factors that drove high UK influence over financial services regulation in the past, it seems likely (in our judgement — others are invited to draw their own conclusions) that the UK’s policy influence, at EU level, in this area has recently declined markedly and should be expected to be weak over the next decade — implying that we are in a phase of relatively high policy costs, especially in terms of the risk of being over-ruled, in respect of that sector.

In conclusion, the key lessons of this analysis are thus methodological and synoptic — establishing an overall framework of analysis for the Single Market and showing how it can be applied in other sectors.

1 Introduction

This report was commissioned by BIS from Europe Economics, and is an input to BIS' synoptic review of the Single Market. That review has three key objectives:

- to consider the broad issues and main debates underlying the Internal Market as a whole, in particular exploring the level of market integration thought to be necessary for an effective Internal Market, and the mechanisms (such as harmonisation or mutual recognition) for achieving it;
- to explore the interrelationships between the Internal Market and other areas of competence, and to assess the strength of the arguments that certain other areas of competence are needed to enable the Internal Market to operate effectively;
- as a result, to assess the implications for the UK national interest of the current state of integration and EU competence in the Internal Market field.

In this report we begin with a consideration of what the Single Market is and what its objectives are (Section 2). We move on to think about the question of what constitutes “optimal” integration in a Single Market as a whole and within individual sectors, in particularly setting out the trade-offs (costs and benefits) involved in enhancing market integration (Section 3). We then consider how to measure integration, developing a set of indicators by which to assess not only whether policy has sought to promote integration, e.g. through regulatory measures (what we term the “inputs” to integration), but also whether increased integration, in the economic sense (what we call “output measures”), has actually occurred (Section 4).

Armed with these criteria to assess how much integration has occurred and how much various regulatory changes have contributed to integration in various dimensions, we move on the concrete fruits of integration — setting out how to measure the ways in which increased integration contributes to trade creation, competition, efficiency gains, and innovation (Section 5). In Section 6, similarly, we consider the concrete costs of integration, specifically the risk of trade diversion, the costs of the Single Market's institutions, and compliance costs.

Whilst Sections 5 and 6 consider the concrete costs and benefits of integration, Section 7 reflects upon the more intangible, but potentially just as large, “policy” costs and benefits — the ways the EU allows the UK to influence policy in other EU Member States and the risk that UK preferences are over-ridden or poorly reflected.

Section 8 concludes.

We understand that BIS intends there to be a number of sector-specific studies in adding to the synoptic review. Hence, although in this report we do investigate issues concerning the degree and optimality of integration in particular sectors, our remarks about particular sectors should be interpreted as clarifying and vivifying our methodological remarks — nothing we write here should be taken as committing BIS to particular findings in its sectoral studies, nor to be potentially in conflict with those findings.

The four main sectors we use here for illustrating our thoughts and methods are: Motor vehicles; Patented pharmaceuticals Energy; and Financial services. We also sometimes use other sectors where convenient and appropriate. However, to repeat, this report is part of a synoptic overview, rather than a sectoral or multi-sectoral study. In many cases our key objective in quoting results from specific sectors is a “proof of concept” for a proposed method.

2 What is the Single Market and what Policies are used to Create and Sustain it?

The EU's Single Market can be regarded as promoting a number of economic and political goals, and we shall reflect upon some of those alternatives later. But the standard way to analyse the EU Single Market in economic terms is to treat it as a form of trading relationship.

2.1 Trade and comparative advantage

Trade allows the exploitation of what economists call “comparative advantage”. Comparative advantage can be thought of as simply the trade version of the division of labour. Suppose everyone required two vital products: food and football. Is it better if everyone produces her own food and football, or is it better if some people specialise in producing one or the other? The best footballer in the country might also be the best farmer. And of course the footballer needs some of the output of farming (e.g. food). But if the second best farmer's skills are very specialised (say, she is much less good at football), it will be most efficient if the best footballer sticks to football and lets the second-best farmer do the food production. In other words, even though the footballer has an absolute advantage in both farming and football, his comparative advantage lies in football whilst the second-best farmer's comparative advantage lies in farming. Efficiency is increased and everyone is better off if the footballer sells the farmer the chance to view his skills in exchange for the farmer selling the footballer food.

In much the same way, countries are likely to have a comparative advantage in the production of certain goods and services and a comparative disadvantage in others. Trading allows countries to specialise in where their comparative advantage lies, exporting the goods and services in which they have that comparative advantage and importing others.

2.2 Barriers to trade

However, absent international agreement to promote trade, international markets could potentially be highly segmented (e.g. there might be an effectively different market in each country, rather than, say, one global market) by many different barriers restricting trade, for example:

- tariffs (taxes — “customs duties” — on the import or export of goods or services)
- subsidies (favouring domestic businesses over foreign imports)
- quotas (maximum amounts of imports or exports)
- special regulations (e.g. environmental, health and safety, or labour conditions rules favouring domestic over foreign production methods).

If each of these individual national markets were reasonably large, competitive, and had the same costs and methods of production and tastes of consumers, segmentation may be relatively unimportant economically. But where these national markets differed — where costs or tastes differed, or competition were limited — or national demand is too small to allow exploitation of economies of scale, segmentation reduces

efficiency by restricting (damaging) the gains from trade. It will be important to remember this point in what comes later: **trade is most advantageous precisely where there is difference, not homogeneity.**

2.3 International trade agreements

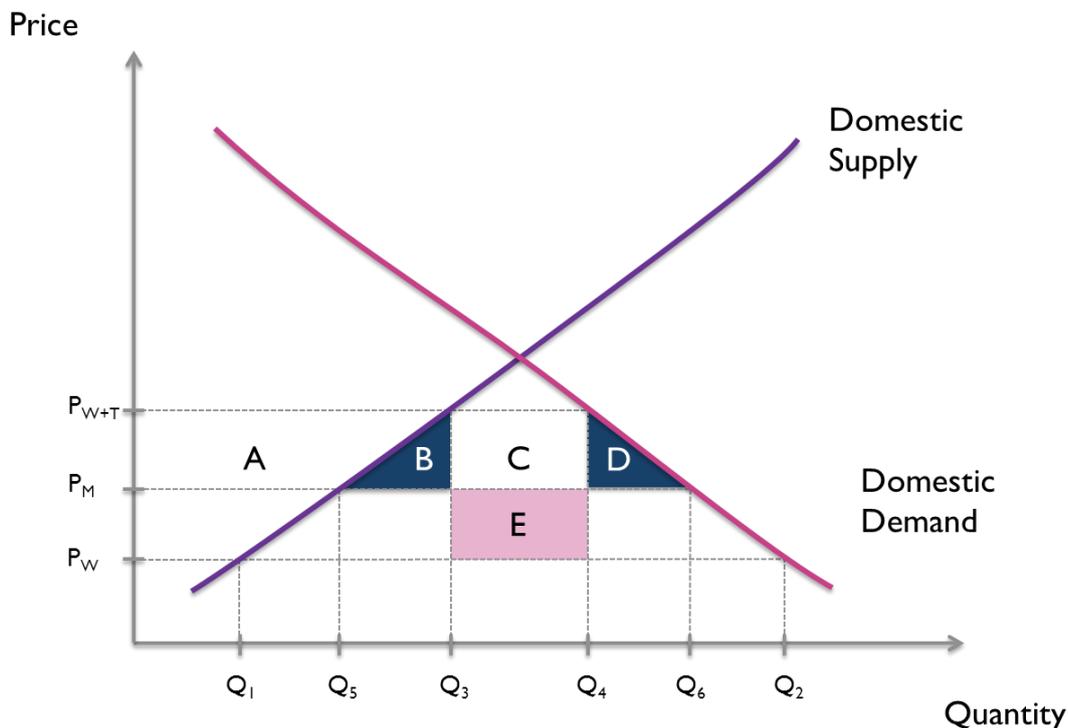
International trade agreements can take a number of forms. A simple form is called a “free trade agreement”. Member countries of a free trade agreement agree to remove or reduce tariffs (usually in particular sectors — e.g. agriculture or manufactured goods, but it could be across the board) and might also undertake not to impose quotas on imports from or exports to each other.

In a free trade agreement, member countries may still have different tariffs on imports (say) from third countries (non-members of the free trade area). That creates the risk that third country exporters send their products to the country, inside the free trade area, with the lowest external tariffs, and once the product is inside the free trade area it is traded on to high-external-tariff countries, undermining those higher tariffs and tending to create a race to the bottom on external tariffs. As an attempt to counter this, free trade areas often include complex “rules of origin” restricting tariff-free exporting to goods and services originally produced all or overwhelmingly within the free-trade area rather than imported from outside. Such rules create considerable complexity and enforcement challenges, and can often be by-passed or even sometimes openly flouted.

To avoid this scenario, an alternative type of trade agreement specifies that, in addition to having no tariff on imports from or exports to each other, all members must have the same external tariff (the same tariff on non-members). Such a trade agreement is called a “customs union”. The European Union is a customs union. Article 28 of the Treaty on the Functioning of the European Union (TFEU) states that: *“The Union shall comprise a customs union which shall cover all trade in goods and which shall involve the prohibition between Member States of customs duties on imports and exports and of all charges having equivalent effect, and the adoption of a common customs tariff in their relations with third countries.”*

In the case of a free trade area, the removal of or reduction in tariffs leads (if there are differences or scale economies to be exploited) to an increase in trade, thereby increasing efficiency by exploiting comparative advantage. But the efficiency gains from a customs union are more ambiguous. To see why, consider the following diagram.

Figure 2.1: Trade creation and trade diversion in a customs union



In Figure 2.1, we imagine that domestic demand is given by the downwards-sloping curve and domestic supply is the upwards-sloping curve. The product could be imported internationally at a world price of P_w . But only a modest portion (Q_1) of potential domestic supply could compete if the price were P_w . To partially protect the domestic industry from competition whilst allowing some trade, the government sets a tariff of t , so the domestic sale price is actually P_{w+t} and so the amount sold is Q_4 of which Q_3 is produced domestically and the rest imported. On those imports ($Q_4 - Q_3$) a tariff of t is paid to the government. So the total value of the tariff is $(Q_4 - Q_3) \times t$, equivalent to boxes C and E in Figure 2.1.

Next, let us suppose that the country joins a customs union and that the sale price within the customs union is P_m whilst the tariff on non-customs union exports (the external tariff) remains at t , meaning that the cost of importing from customs union members (P_m) is now lower than the post-tariff cost of exporting from outside (P_{w+t}) and so all imports are from within the customs union and none from outside. Total sales rise to Q_6 , domestic production falls to Q_5 and imports rise to $Q_6 - Q_5$ on which no tariffs are now paid. But the rise in total sales comes from two sources. First, there is trade creation — extra trade occurring at the lower price of P_m because of the absence of tariffs against imports from customs union partners. Domestic consumers gain from this trade creation whilst the previously-protected domestic producers lose out, but there are trade gains overall. The trade gains are given in the diagram by boxes B, C and D. On the other hand, the customs union producers are less efficient than those in the rest of the world (the no-tariffs customs union price is P_m which is higher than the no-tariffs world price of P_w). By introducing a common tariff trade has been diverted away from non-customs-union countries to members of the customs union. In the diagram, the efficiency cost of this trade diversion is measured in terms of the foregone tariffs — boxes C and E. Box C also appeared in the trade creation gains, so cancels out, and the net overall effect — the question of whether the customs union increases or diminishes efficiency — is given by the comparison of trade creation gains from boxes B and D with trade diversion losses in box E. Which of these is bigger depends on the slopes of the demand and supply curves, the difference between the customs union and world import prices, and the tariff. If, for example, P_m is close to P_w whilst the

domestic supply curve is very steep, so box E is very small compared to boxes B and D, trade creation gains may significantly exceed trade diversion effects.

But overall the key messages to note for later are these:

- A customs union is a more credible arrangement than a free trade area when members of a trade agreement wish to retain some tariffs to protect their producers, because absent a common external tariff in a free trade area external tariffs will tend to be undermined or, if they are to be protected, imply complex and expensive rules of origin to be devised, monitored and enforced.
- In a customs union, trade is diverted from the rest of the world to the other members of the customs union. Sometimes those debating the significance of the Single Market report that this or that percentage of trade is with the EU. But such discussions rarely acknowledge that that is the percentage of trade *after* trading has been diverted towards the EU by tariff differentials.
- The economic advantages of a customs union will be greatest when:
 - production within the customs union is nearly as efficient as that in the rest of the world (this is the issue of maximising “EU competitiveness”) — so trade diversion costs are low. (A corollary of this is that the economic value of a customs union that was initially beneficial could diminish, or even become negative, if the competitiveness of the rest of the world rises markedly, relative to that of the customs union.²)
 - the gains from trade via comparative advantage are large — so trade creation gains are high

2.4 Non-tariff barriers

Our discussion of the pros and cons of a customs union focused upon tariff barriers to trade. But there are many other non-tariff factors that might segment markets and restrict trade. Some of these are “natural” barriers — e.g. oceans; mountain ranges, language differences³. Others are barriers created consciously or unconsciously as a result of policies in areas such as regulation or state aid (there would, for example, obviously no more be a Single Market if countries used state aid to subsidize domestic versus imported production than if imports were subject to tariffs and quotas). Policy-induced barriers to trade that are not tariffs are called “non-tariff barriers” (NTBs).

The first thing to note about NTBs is that even after tariffs are stripped away, trade may not be free within a customs union because of these other barriers. A subsidy to a domestic producer will have much the same effect on trade as a tariff on imported product — it lowers costs for the domestic supplier, relative to the imported product, protecting the domestic supplier from proper competition. A product standard or an environmental or health and safety regulation that requires products to be made as they are already made domestically and bans those made via foreign techniques will effectively forbid trade.

But that is not the end of the story, for NTBs are not simply a passive given. When tariffs are stripped away, it will become tempting for policymakers to increase non-tariff barriers so as to try to keep in place that protection of domestic producers that a tariff barrier can no longer provide. This was the experience within the European Economic Community. After internal tariffs were removed, there was an enormous growth in non-tariff barriers, maintaining the segmentation of markets. We can see this especially in the European Commission communication of 6 November 1978, “*Safeguarding free trade within the Community*”.⁴ This document noted that “*The free movement of goods...has been and continues to be the subject of an ever increasing number of restrictive measures of all types taken by national public authorities to favour one or another national industrial sector or to restrain imports coming from other Member States....At present [the Commission] is*

² See Section 6.1 below for more discussion on this point.

³ See below (p7ff) for some further consideration of how “natural” a barrier language differences really are.

⁴ Brussels, 6.XI.1978, SG(78) D/12882

investigating more than four hundred dossiers on hindrances to the free movement of goods... This figure which has more than quadrupled compared to four or five years ago represents a small sample of the reality.”⁵

This leads us to another important lesson for what comes later. British commentators sometimes find mysterious the idea, commonly expressed amongst European policymakers, that if the Single Market project does not keep moving forwards, it will begin to unravel. Obviously the motives behind this idea are complex and multi-faceted, impinging upon territory that falls outside our scope here, such as the role of the “ever closer union” commitment. But one reason European policy-makers hold to this idea is their historical experience. Creating an area without barriers to trade is not a matter of passing certain laws and then resting on one’s laurels. Without a continuous programme of reform, driving non-tariff barriers out, new non-tariff barriers will arise and the market will be re-segmented.⁶

By the time of the 1988 Cecchini Report⁷ the author described the then-Common Market as one where:

- *“customs-related costs put a charge on companies equal to a major portion of their profits from intra-EC trade; first in effect pay a penalty dividend (around 25% of profits in many sectors) to national border controllers for the privilege of going European;*
- *“industry in areas like motor manufacturing and telecommunications is losing billions of Ecus because of inefficiencies imposed by divergent product standards or protectionist procurement;*
- *“smaller companies are to a significant extent debarred from transborder business activity by administrative costs and regulatory hassles;*
- *“a bewildering array of price differences faces consumers of essential services: car insurance may vary by as much as 300% between high and low price countries; tariffs for telephone services can vary 50% from one EC country to another; the range of price differences for some key financial services can be even greater;*
- *“the public authorities, year in year out, pay around Ecu 17,500m more than they should in purchasing the goods and services they need, because of protective procurement systems over which they themselves preside.”*

Cecchini divided non-tariff barriers into three broad types:

- *Physical barriers* — e.g. customs controls
- *Technical barriers* — e.g. differing product standards, or protectionist public procurement policies
- *Fiscal barriers* — specifically, differing rates of VAT and excise duties

⁵ Amongst the “restrictive measures” identified, the Commission communication noted:

- Documents requirements
- Technical conditions
- National minimum and maximum prices
- Frontier checks
- Preferential procurement systems favouring national suppliers and more general “Buy national” campaigns
- Taxes, and fees for checks

Many of these points were taken up in more detail in the Cecchini Report (see below).

⁶ On this point, it is also worth noting the many EU institutions that deal with ongoing enforcement of Single Market rules. The most obvious are the competition authorities (e.g. DGCOMP) and courts (the European Court of Justice). But many individual Directorates General have the power to hear complaints brought against Member States by individual companies or other Member States and bring infringement proceedings, and a significant proportion of DGMARKT staff deal with the processing of infringement allegations rather than the development of new policy.

⁷ Cecchini et al (1988), “*The European Challenge, 1992 – The Benefits of the Single Market*”, http://ec.europa.eu/economy_finance/emu_history/documentation/chapter12/19880301en127eurochallen92_a.pdf

The central task of European measures to develop and promote the Single Market has, since that time, been the breaking down of non-tariff barriers of these kinds. Much the greatest focus has been upon technical barriers, especially those created by regulation.

2.5 Customs union vs Single Market

In itself, the removal of non-tariff barriers to trade in goods and services could be seen as falling within the broad ambit of a customs union. But a Single Market is more than a customs union. For in a customs union there is freedom of movement of the *outputs* of production — goods and services (often including intermediate goods and services). But in a Single Market one adds to that the free movement of *inputs* — capital and labour. So the Single Market is often defined in terms of its “four freedoms”: the free movement of goods, services, capital and labour.

Box 1: Some Key Treaty Articles Defining the Single Market

The Treaty on the Functioning of the European Union contains the principles that govern the Single Market. The key articles are the following

- Article 28 states that “The Union shall comprise a customs union which shall cover all trade in goods and which shall involve the prohibition between Member States of customs duties on imports and exports and of all charges having equivalent effect, and the adoption of a common customs tariff in their relations with third countries.”
- Articles 34 and 35 prohibit quantitative restrictions on imports and exports between Member States.
- Articles 45 and 46 mandate freedom of movement for workers
- Article 101 prohibits practices that may affect trade between Member States or prevent free competition within the internal market.
- Article 102 prohibits the abuse of dominant position from undertakings within the internal market.

Free trade in the Single Market includes practices such as parallel trade and regulates many others, such as procurement.

Trade allows the efficient re-allocation of the outputs of production, given how they were produced. But if capital and labour move freely, then they can be located efficiently such that production methods are optimally efficient.

The precise border between the promotion of certain of these freedoms and others is a little unclear. For example, to what extent is the promotion of a Single Market in financial services a measure that promotes the free movement of services, and to what extent is it promoting the free movement of capital? However, although there is a vagueness here, because the Single Market has a commitment to promoting all four freedoms, the main significance of this vagueness arises when it comes to questions such as “How should we measure how much progress has been made in promoting trade in services?” (do the financial services count as in or out?), rather than in everyday policymaking.

There might be fairly explicit barriers to the movement of capital and labour, such as capital controls or immigration restrictions, that are close analogues of tariffs or quotas. But, just as there are many non-tariff barriers to trade, there are also many similar more implicit and complex barriers to the movement of capital and labour. For example, if pension funds must invest a certain proportion of their resources in domestic assets, the ability of that capital to be placed abroad is limited. If a worker could not port pension or benefits entitlements to another country, that constitutes a barrier to the movement of labour.

In this way, the promotion of the Single Market can imply action in a wide range of policy areas not immediately obviously connected to trade or production. Indeed, carried to its logical limit there is almost

no policy area that could not be seen as in some way connected with the Single Market. For example, if labour is allowed to move freely, that might be conceived as implying no border guards checking people entering or leaving countries, no showing of identity cards or passports, etc.. But that also may mean no guards preventing criminals skipping outside the reach of the legal authorities where they committed their crimes. If countries are to be happy not to restrict movement across borders, they may also want to achieve a high level of agreement about the pursuit and return of criminals that enter other Member States. In this way, the criminal law, extradition, and policing principles could all in principle be seen as affected by the Single Market.

Such extensions of the reach of the Single Market lead on to the question of what is a “natural” barrier as opposed to one that is either the creation of policy or could and should be removed by policy.

Box 2: Example — Natural vs policy-induced barriers in equity markets

Oxelheim (2000) enumerates the following factors that maintain differences between (or within) equity markets:⁸

1. “asymmetric information available to investors resident in different countries. This includes not only financial data on corporations but also the analytical methods used to evaluate the validity of a security
2. different tax regulations, especially with regard to the treatment of capital gains and the double taxation of dividends;
3. regulations on security markets;
4. alternative sets of optimal portfolios from the perspective of investors resident in one equity market compared to investors resident in other equity markets;
5. different agency costs for firms in bank-dominated markets compared to firms in the Anglo-American markets;
6. different levels of risk tolerance, such as debt ratios, in different countries;
7. differences in perceived foreign exchange risk, especially with respect to operating and transaction exposure;
8. political risk such as unpredictable government interference in capital markets and arbitrary changes in rules;
9. take-over defenses that differ widely between the Anglo-American market, characterized by one-share-one-vote, and other markets featuring dual classes of stock and other take-over barriers; and
10. the level of transaction costs involved in purchasing, selling and trading securities.”

As Europe Economics argued in another report, “Many of these ten represent differences in natural economic factors such as costs, preferences or endowments, rather than differences explicitly intended to protect markets. For example, this will be the case for (1) (information differences — a cost difference); (2) (tax differences — insofar as these arise from differences in public expenditure preferences they are simply differences in political preferences); (4) (investment preferences differences); (5) (market structure differences — bald facts, unrelated to barriers); (6) (differing risk preferences); (8) (political risk — insofar as this simply represents more volatile political preferences).”⁹

⁸ Oxelheim, L., (2000) “Routes To Equity Market Integration — The Interplay Between Politicians, Investors And Managers”, Forthcoming, Journal of Multinational Financial Management, footnote 2, referring to Oxelheim, L., Stonehill, A., Randøy, T., Vikkula, K., Dullum, K.B. and K-M. Modén, (1998) Corporate Strategies to Internationalise the Cost of Capital (Copenhagen Business School Press, Copenhagen).

⁹ Financial Services Authority (April 2006) “The Benefits of MiFID”, a report prepared by Europe Economics.

Whilst some factors segmenting markets appear to be natural characteristics, even then they might be influenced (and even created) by policy. Hence, it could be debated whether to take them as given when designing the rules of the Single Market. For example, language differences could be seen as segmenting certain product markets (e.g. those in which health warnings are required on packets) and in restricting the movement of labour. Indeed, in many countries the use of the standard national language has been explicitly encouraged through compulsory teaching and use in schools. So does the pursuit of the Single Market imply that all children in Europe should be taught one common language? If not, and language difference is declared to be a “natural” barrier even though it could be changed by policy, why are other differences not similarly just accepted?

A well-known example illustrating the potential arbitrariness of the “policy-induced”/“natural” barriers distinction is currency differences. The euro project had many motivations — for some advocates, creation of a credible fixed exchange rate regime; for others, delivering an improvement in monetary policy management; for yet others, promoting eventual political union. But there were those that argued that differences in currencies and in monetary management techniques constituted a non-tariff barrier to trade and to the free movement of capital. However, it could alternatively be argued that a difference in currencies is not materially less natural than a difference in languages.

Box 3: The Italian language vs the Italian currency — which is natural and which is policy?

As an example of the discussion above, the Italian lira was introduced in 1861 as a common currency for the new Italian state, but at that time only 2.5 per cent of the Italian population spoke the Italian standardized language fluently. The Italian language was diffused more widely, as a matter of policy, via compulsory use in schools, over subsequent decades.

One implication of the presence of “natural” barriers to integration is that we should be cautious about assuming that full integration is feasible — or, if it is feasible, that the measures required to achieve it and then sustain it against its natural tendency to fall back would not themselves be highly artificial, distortionary and expensive to maintain. For example, some quantitative studies of the potential gains from further development of the Single Market use estimates of the difference between current and perfect integration as their measure of the potential for gains, and then arbitrarily assume that some portion of those gains (say, half or three quarters) could be realised by policy. But insofar as residual barriers to integration are “natural”, such an approach is subject to the criticism that it may not be feasible to remove natural barriers, and, if it is, it might be counterproductive. We should not naïvely assume that increased integration is axiomatically beneficial and in principle achievable.

2.6 Mutual Recognition, Harmonisation and Best Practice spreading

Policymakers have a number of different tools available to strip away non-tariff barriers. The two best-known are called “mutual recognition” and “harmonisation”.

Under mutual recognition, there is agreement at an EU-wide level that Member States will accept the rules, definitions, requirements and standards imposed by other countries. The legal principle of mutual recognition within Europe famously first arose in the Cassis de Dijon case.¹⁰ In that case, the company Rewe-Zentral AG sought to import a liqueur from France into Germany but was forbidden to do so because of a German law forbidding the sale of spirits with an alcohol content below 32 per cent, whilst Cassis de Dijon had only 15-20 per cent. The European Court of Justice ruled that barriers to free trade within the Community included “any national measure capable of hindering, directly or indirectly, actually or potentially, intra-Community trade” and that this includes technical and commercial rules. As the

¹⁰ http://ec.europa.eu/enterprise/policies/single-market-goods/files/goods/docs/mutrec/cassisdijon_en.pdf

Commission put it¹¹, the principle of mutual recognition meant that “Any product imported from another Member State must in principle be admitted to the territory of the importing Member State if it has been lawfully produced, that is, conforms to rules and processes of manufacture that are customarily and traditionally accepted in the exporting country, and is marketed in the territory of the latter.” So under mutual recognition, rules could differ across the EU but each Member State would accept imported products produced under the rules other countries imposed.

Mutual recognition is usually contrasted with “harmonisation”. When rules are harmonised across the EU, there is some Treaty commitment, EU Directive or EU Regulation that requires all Member States to implement the same rules.

There are, as one would expect, pros and cons to mutual recognition versus harmonisation. First, harmonisation of rules risks destroying that difference that is the main basis of mutually advantageous trade. Mutual recognition, by contrast, allows the setting of rules to occur “locally”, i.e. close to those most affected by the rules, meaning that rules and enforcement thereof is most aware of specific local circumstances that might mean a rule set far away for hundreds of millions of people was irrelevant or disproportionately burdensome. (Recognising the advantage of setting rules closer to those affected by them is called the principle of “subsidiarity”.)

However, mutual recognition can lead to regulatory competition taking the form of a race to the bottom. Whichever Member State is willing to impose the laxest rules will attract all the producers to locate their business there and from there export to the rest of the EU. The consequence could then be that mutual recognition results in health and safety or environmental or quality standards being unsustainable at any but the sparsest level. If most citizens of the EU would prefer to have higher standards, it seems paradoxical that freedom of trade and factor movement should mean an end to high standards. To sustain higher standards, harmonisation may be the required route. In this sense, mutual recognition can be seen as the non-tariff-barrier version of a free trade area whilst mutual harmonisation is like a customs union with a “harmonised” external tariff. Much those same kinds of pressures that lead countries to prefer a customs union over a free trade area — namely the desire to avoid race-to-the-bottom pressures — will lead them, within a customs union, to prefer harmonisation over mutual recognition.

Another reason for favouring harmonisation might be that the EU allows harmonised collective action that creates synergies compared with purely domestic policy. For example, if weather patterns meant that sulphur or other chemical emissions from French factories tended to blow across borders, being deposited in the UK or Spain or Italy, French regulations to restrict such emissions might naturally be less restrictive than if all those chemicals fell in France. Policy seeking to take account of environmental externalities is affected by where policy is set. The natural first priority of policymakers will be their own citizens, so there might be two types of externality here: the environmental damage done by the polluter that does not affect the firm itself; and environmental damage done external to the borders of the policymaker. Similar considerations might apply to pollution from British or Spanish or Italian companies that affected France. By acting in a harmonised way, policymakers can internalise (to policymaking) a wider range of cross-border impacts.

Although we have used environmental impacts to illustrate this point, it is of wider application — for example, systemic effects of financial crises may apply across borders. Externalities can of course be positive as well as negative — if some academics trained in the UK go to work in Italy and some trained in Italy come to work in the UK, although the UK could be said to have “subsidized Italy” by funding academic training, collectively the effects net out.

Synergies also favour harmonisation, via the Treaty, in areas such as competition policy, merger policy, or market liberalisation policies. Products imported from elsewhere in a customs union might be a key driver

¹¹ [http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31980Y1003\(01\):EN:HTML](http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31980Y1003(01):EN:HTML)

of competition with a domestic producer. So a merger between that domestic producer and the foreign supplier might damage domestic competition. But domestically-located competition or merger authorities may have little influence over or ability to block such a foreign merger. By contrast, for the Single Market as a whole we can have, established via harmonised Treaty principles and enforced via both national competition authorities and EU-level authorities (e.g. DGCOMP and the European Court of Justice), competition and merger policies that take account of competitive pressures within the Single Market collectively.

Following from this, it may seem inevitable that achieving a high degree of integration in a Single Market will entail a high degree of harmonisation.

On the other hand, not all regulatory competition is damaging, and not all regulatory competition proceeds by “less” regulation competing with “more”. Instead, sometimes regulatory competition occurs between simply “different” regulation that is neither greater nor less. And sometimes such differences in regulation allow policymakers to observe what works best in practice and then copy that best practice.

This leads us to a third EU-level policy option. Rather than harmonising initially, it could be advantageous to proceed via mutual recognition for a period until there a policymaker consensus as to what constitutes best practice, and only *then* to introduce harmonisation. One example of this might be the Markets in Financial Instruments Directive (MIFID). The previous regulatory framework (the Investment Services Directive) had left in place considerable scope for national policymakers to reflect national preferences and national theories about best practice. This meant, for example, that whilst in some countries (e.g. France, Italy and Spain) there were “concentration rules” requiring certain sorts of trade to pass through so-called “regulated markets” (e.g. the main stock exchange), in other countries (e.g. Britain) large investment banks were permitted to match “buy” and “sell” orders amongst their own customers without proceeding via the exchange (in the jargon this is called “systematic internalising”). By the time of MIFID, policymakers had decided that the British practice was the best practice, and the MIFID closely reflected British norms and policy theories, and so harmonisation occurred by imposing British best practice as the harmonised requirement across the EU.¹²

However, even regulatory competition based on difference, rather than quantity, may not be valuable. It could be, for example, that two different regulatory approaches are simply different but equally good but that matters will be more efficient if one is chosen from the outset. An example might be some technical standard in mobile telephony or information technology — there may be lots of different possible standards that are all fairly similar in their merits. Perhaps a phase of regulatory competition might reveal that one has some minor advantage over the others, but by that stage there will be considerable transitional costs involved in forcing others over to a newly-instituted common standard. Establishing a harmonised way forward from the beginning might avoid such costs.

In summary, such an approach — mutual recognition to permit regulatory competition to identify best practice, then impose best practice via harmonisation — will work well if (a) the period of competition proceeds via difference, not simply more versus less; (b) difference entails a difference in quality (something is better and something else worse as opposed to them being merely different) which cannot be seen (or not seen decisively) before observing different practical outcomes in different countries and yet can be seen (or seen more clearly) after observing those practical outcomes; (c) if regulatory best practice and the context in which regulation is set (e.g. market conditions, tastes) means that best practice is stable once identified (otherwise ending regulatory competition via harmonisation will forego later gains from regulatory competition).

¹² For much more detail on how MiFID reflected British policy concepts, see later, Section 7.3.1.3.

2.7 Alternative goals for the Single Market project and their import for mutual recognition versus harmonisation

Our discussion so far has proceeded as if the only proper goal of the Single Market were the facilitation of trade between its members. But it is far from clear that this is the only or even the main goal of the European Single Market, or indeed of other past trading arrangements.

In his Foreword to the famous 1988 Cecchini Report that provided the analytical underpinning for the Single Market Programme, President of the European Commission Jacques Delors wrote this:

“The countries of the European Community needed a common objective which could raise their sights above daily routine problems and thereby concentrate their energies. It was for this reason that my colleagues and I in the Commission proposed...that we should create a truly unified economic area in Europe by 1992....It is revolutionary, but it will be achieved both because it is absolutely necessary and because it carries with it the goal of a united and strong Europe.”

(Emphasis added)

Many trading arrangements are fundamentally political in purpose. For example, the German Customs Union of the 19th century was intended to be a building block towards the creation of the state of Germany. Other trading relationships are intended to divert trading and migratory activity to friendly powers and away from unfriendly powers. It would be naïve to divorce the development of the EEC customs union from the geopolitical struggle between the Warsaw Pact and the West. Again, policies such as the Common Agricultural Policy arose at least partly in response to the famines in Europe of the 1940s¹³ and had at their core the goal of re-assuring the populations of Western Europe that Western Europe could feed itself.

The Single Market project may already have anticipated the development of the Single Currency — which could be understood and defended as a monetary project (e.g. a robust extension of a fixed exchange rate regime, building upon ERM and earlier ventures, or a means to export monetary policy-making best practice — often assumed to be that of the Bundesbank¹⁴ — to Member States with poor histories of inflation management). The euro might even have anticipated later fiscal union, and been intended to enable and prepare the ground for recent developments in that area.

The above points are not of mere historical interest. For in considering whether, for example, mutual recognition or harmonisation is the best approach in a particular policy area, or whether in some other area subsidiarity considerations outweigh “level playing field” ambitions, which option is best might depend on whether the goal is to facilitate the functioning of a single currency, fiscal union, and further political deepening (which might naturally favour harmonisation over mutual recognition), or whether the goal is to maximise trade, competition and innovation.

Another weakness of the trade-only approach set out above is that it might fail to recognise dynamic aspects of policy-setting, having a tendency to treat the policy-making process as given and optimal.

¹³ During World War II there were occupation-related famines in Greece (1941-44), Poland (1940-43), and the Netherlands (1944), but after the war Germany came very close to famine and the British instituted two years of bread rationing from 1946 so as to have grain available to send to the Continent to avert famine there — for an interesting contemporary perspective see: <http://www.britishpathe.com/video/germanys-food-the-truth-aka-germans-food-the/query/bread+rationing>

¹⁴ e.g. Consider the following quote from Kaltenthaler, K. (2005) “The Bundesbank and the formation of the ECB’s monetary policy strategy”, *German Politics*, 14(3): “The ECB is almost a complete copy of the Bundesbank’s organization, having adopted the Bundesbank’s definition of price stability and its monetary targeting strategy. But rather than following simply from coercive power attached to the relative size of the German economy and EU budget contribution, the decision to emulate the German monetary policy model was the result of the persuasive power of the Bundesbank, the domestic success of the German model, and the hope held by European central bankers and many European politicians that success could be replicated on the European level.”

The above caveats notwithstanding, in the more detailed analysis that follows we shall consider the Single Market mainly from what we understand as a UK policy perspective — thus focused upon trade, competition, the diffusion of innovation, and collective action in respect of environmental externalities, whilst recognising that such objectives may not be the only or even central goals of the institutions of the European Union themselves. However, where such analysis suggests that policies are not optimal from a UK policy perspective, it could be important to understand whether that is because they are optimal from some other perspective, or whether it is simply that they are not optimal at all.

3 How to Assess Optimal Integration in a Single Market

In Section 2 we have seen that a Single Market can be treated as a form of trading area, extending the principles of a customs union from a narrow focus on explicit barriers to trade, such as tariffs, quotas, and state aid, to more implicit potential barriers such as health and safety rules or product standards, and from a focus upon the outputs of production (goods and services) to the inputs (capital and labour). We have also seen that involvement in the development of a Single Market involves compromises and trade-offs.

In this paper we shall analyse the trade-offs involved in a Single Market in more detail, and show how the presence of such trade-offs implies that, in principle (though it may be challenging to identify empirically with any indisputable precision), there may exist an “optimal” level of integration that is less than total integration.

3.1 The Trade-offs in a Single Market

In Section 2 we saw that any customs union involves pros and cons, and qua customs union the Single Market is no different.

3.1.1 The positives

Certain of the positives of involvement in a Single Market are fairly straightforward to set out. They will include:

- **gains from trade** — by stripping away tariffs and non-tariff barriers, trade with Single Market partners increases (the “trade creation” effect of a customs union, amplified by the additional reduction in barriers in a Single Market), increasing the gains from trade from that source.
- **gains to competition** — increased trade means increased competitive pressure from abroad, reducing prices for consumers and increasing technical and allocative efficiency within and between firms and industries.¹⁵
- **gains to efficiency from economies of scale and scope** — through more straightforward access to larger markets (the whole Single Market) firms can operate at a larger scale, and the free movement of capital and labour allows international relocation to where production is most efficient in scale (bigger often equals cheaper) and scope (the same production inputs might be used for multiple purposes).
- **gains to innovation** — the deep interchange of ideas and methods across different settings and cultures facilitated by a Single Market can be a driver of increased creativity in innovation.
- **policy synergies where effects spill over borders** — in areas such as environmental policy or higher education.

These are what one might call “final goals” of Single Market development policies. An analogy here might be drawn with monetary policy. Economists used to believe that although consumers, workers and investors care about inflation, it was infeasible directly to control inflation. So although controlling inflation

¹⁵ As noted in Section 2, in a Single Market competition will be promoted in respect of retail goods and services, intermediate goods and services, and factors of production.

was the “final goal”, monetary policy should be directed at the “intermediate goal” of controlling some measure of the money supply. And that again was distinct from the “instruments” policymakers had available to control the money supply, such as interest rates or bank capital rules.

In much the same way, although what is of ultimate interest is the gains from trade, gains to competition, etc., in many practical analyses (e.g. impact assessments conducted for the European Commission or Parliament) the relevant “intermediate positives” are the four freedoms — **free movement of goods, services, capital and labour**. These are distinct from the methods used to promote these positives, such as mutual recognition, harmonisation, and those in turn distinct from the instruments used to implement the methods, such as Treaty articles, Competition rules, Directives, Regulations, and infringement proceedings.

Other positives are more subtle. For example, a key gain from involvement in a Single Market project may be **the opportunity to improve policy-setting in other countries**.¹⁶ As explored in Section 2 in the case of MIFID, via the EU the UK may have influence over how financial services regulation is set for, say, Italy.¹⁷ That may not simply be a matter of optimal policy-setting being different if determined at EU rather than the Italian governmental level. It could be that UK ideas would have been better for Italy even if simply adopted by the Italian government absent the EU. But the EU Single Market creates a mechanism whereby UK policy concepts can be exported to and adopted elsewhere in the EU (and vice versa). As we shall discuss further below, such influence to improve policy-making elsewhere, mediated via influence over the European Commission, is an oft-overlooked potential gain of the Single Market. On the other hand, such influence could also be lost over time — e.g. perhaps as a result of economic events shaking political confidence in a policy-making paradigm (e.g. perhaps the global financial crisis creating scepticism, amongst Continental politicians, of “Anglo-Saxon” concepts of financial regulation); or because those that participate in key EU projects are more influenced by those partners in those projects than by non-partners (e.g. it is sometimes suggested that euro members may eventually “bloc vote” on Single Market issues¹⁸).¹⁹

3.1.2 The negatives

We identify four key categories of negative from the Single Market:

- **trade diversion losses** — as explained earlier in our discussion of a customs union, from the gains from trade created by a Single Market one must net off the losses from trade diverted inefficiently into the Single Market from outside.
- **sovereignty/democracy costs** — it was noted above that a positive of the Single Market is that it allows us to improve policy-setting elsewhere. The flip-side is that we may find our own policies improved, in ways that clash with our sovereign autonomy and democracy — our ability to make our own mistakes in our own way. Paradoxically, although those acceding to the EU must meet high democratic standards, a central purpose of the European Union has always been understood as delivering policies that domestic political systems would be unable to deliver for themselves.²⁰

¹⁶ It could be argued that this should not be treated as a separate “positive” here, but instead is implicitly contained already in other benefits, in that the result of improved policy in other countries ought to be increased UK gains from trade, enhanced competition, increased gains to efficiency from economies of scale and scope, etc..

¹⁷ For much more detail on how MiFID reflected British policy concepts, see later, Section 7.3.1.3.

¹⁸ See, for instance, p4 of Open Europe (2012) “Safeguarding The Single Market: How to achieve a balanced European Banking Authority”, <http://www.openeurope.org.uk/Content/Documents/PDFs/EBAsafeguards.pdf>

¹⁹ For as much more detailed consideration of influence, see Section 7.

²⁰ EU membership can in this sense be seen as a commitment device to circumvent the problem that voters may will in general what they oppose in particular — e.g. they may prefer a general system of no non-tariff barriers to a system of widespread non-tariff barriers, but each particular non-tariff barrier seems attractive to maintain. It is therefore advantageous, to deliver the voter preference for the general system, to pre-commit to that general principle via the EU, which then shields policy-makers from the pressure to give way in each and every specific case.

Trade barriers were removed, competition was introduced, subsidies for businesses were reduced, regulations were liberalised via the EU in ways that would never have been voted for had they been proposed domestically. We treat such changes as positives, but their counterpart is the sovereignty/democracy costs they entail.²¹

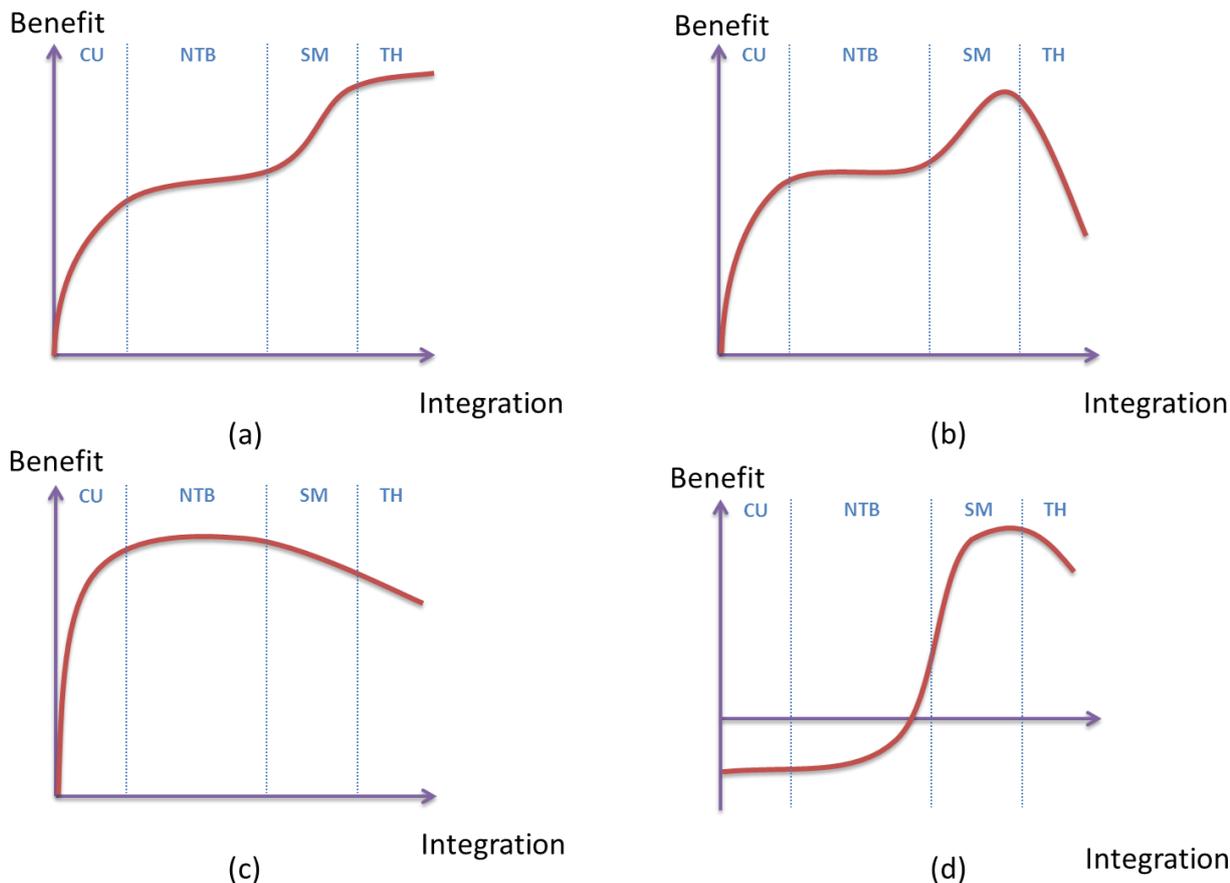
- **subsidiarity costs** — we have understood by “sovereignty costs” the loss of our ability to make our own mistakes in our own way. Subsidiarity costs are distinct, in being those costs intrinsically associated with harmonised and centralised policy-setting as opposed to more locally-determined policy, not because of autonomy of the policy-setting process but because the final policy itself becomes less close to (locally) optimal. To put the point more simply and concretely, consider a customs union, in which the external tariff is harmonised and set centrally or collectively. In our earlier discussion of customs unions we assumed, for simplicity, that the external tariff imposed by the customs union on imports from non-members would be the same as the tariff set by the domestic country (us) if it were not in the customs union. But suppose the customs union would (optimally) set a higher or lower external tariff than we would if left to ourselves, and that the tariff we would choose for ourselves would in fact be optimal from our point of view. Then one of the losses of membership of the customs union is that the external tariff that is optimal overall (as it were, “globally”) is not the same as what is optimal for us (as it were, “locally”). What is true here of tariffs is also potentially true of levels and natures of regulation, implementation timescales for regulatory changes, and all the other aspects of non-tariff-barrier tackling.
- **process costs** — the creation and maintenance of the institutions of the EU have to be funded, the rules and regulations of the EU must be adapted to and complied with, infringement proceedings must be responded to. Insofar as they are additional to national regulatory process costs that would be entailed anyway, these are all processes that entail cost.

3.1.3 Stylised graphical presentation of different ways benefits and costs might be affected by the degree of harmonisation

Let us describe the process of establishing a customs union and then Single Market and then more harmonised rules within the Single Market as entailing increasing degrees of integration. Let us pack together the positives of this process, net of trade diversion losses, and term them “benefits”. And let us pack together the rest of the negatives and term them “costs”. Then we could imagine drawing graphs of how benefits and costs changed as the degree of integration increased. There are a number of different possibilities for such evolution, as we explore in Figures 2 and 3. (Note (i) that these four scenarios are not intended to be comprehensive of all possibilities, but instead to describe four cases of interest; and (ii) that the four benefits scenarios and the four costs scenarios are independent — benefits scenario (a) could, in principle, be combined with costs scenario (B) just as much as with cost scenario (A).)

²¹ In much the same way, a super-independent central bank (e.g. the European Central Bank) might be a commitment device to deliver low inflation. The low inflation is a positive, but its counterpart is the loss (or “pooling”) of sovereign control of interest rates entailed.

Figure 3.1: Possible benefit curves for four phases of economic integration: customs union (CU), predominance of non-tariff barriers (NTB), single market (SM) and total harmonisation (TH).



In Figure 3.1, we consider four ways benefits might evolve:

- a) In this scenario, there is a steep increase in benefits from the gains of trade generated by the customs union. In the subsequent phases of increased harmonisation, the derived benefits are less significant, due to the countervailing rise of non-tariff barriers. After considerable progress in the integration process, a Single Market is created and further benefits are reaped. Total harmonisation continues to generate benefits, albeit smaller, at the margin, than those generated by the creation of the single market.
- b) This scenario is similar to Panel (a), except that further harmonisation beyond a functioning Single Market to total harmonisation in this scenario translates into a decrease in benefits due to excessive regulation and disincentives to innovation. This decrease in benefits might be large enough to outweigh the gains from a single market.
- c) In this scenario there are significant gains from trade as a consequence of the customs union, but further integration (even the creation of the single market) results in a mild but constant decrease in benefits.
- d) In this scenario there are no significant gains from trade from the customs union itself. This could be because trade creation and trade diversion compensate each other or because non-tariff barriers preclude significant trade. Gains from trade are nevertheless realised once the single market is functioning. As in panel (a), total harmonisation results in a decrease in benefits.

Emphasising again that these are only the benefits — we shall analyse the costs shortly — we could crudely characterise (a) as the “single state” or “harmonisation optimists” view, according to which increasing harmonisation always enhances benefits, even at the point of total harmonisation. Scenario (b) might

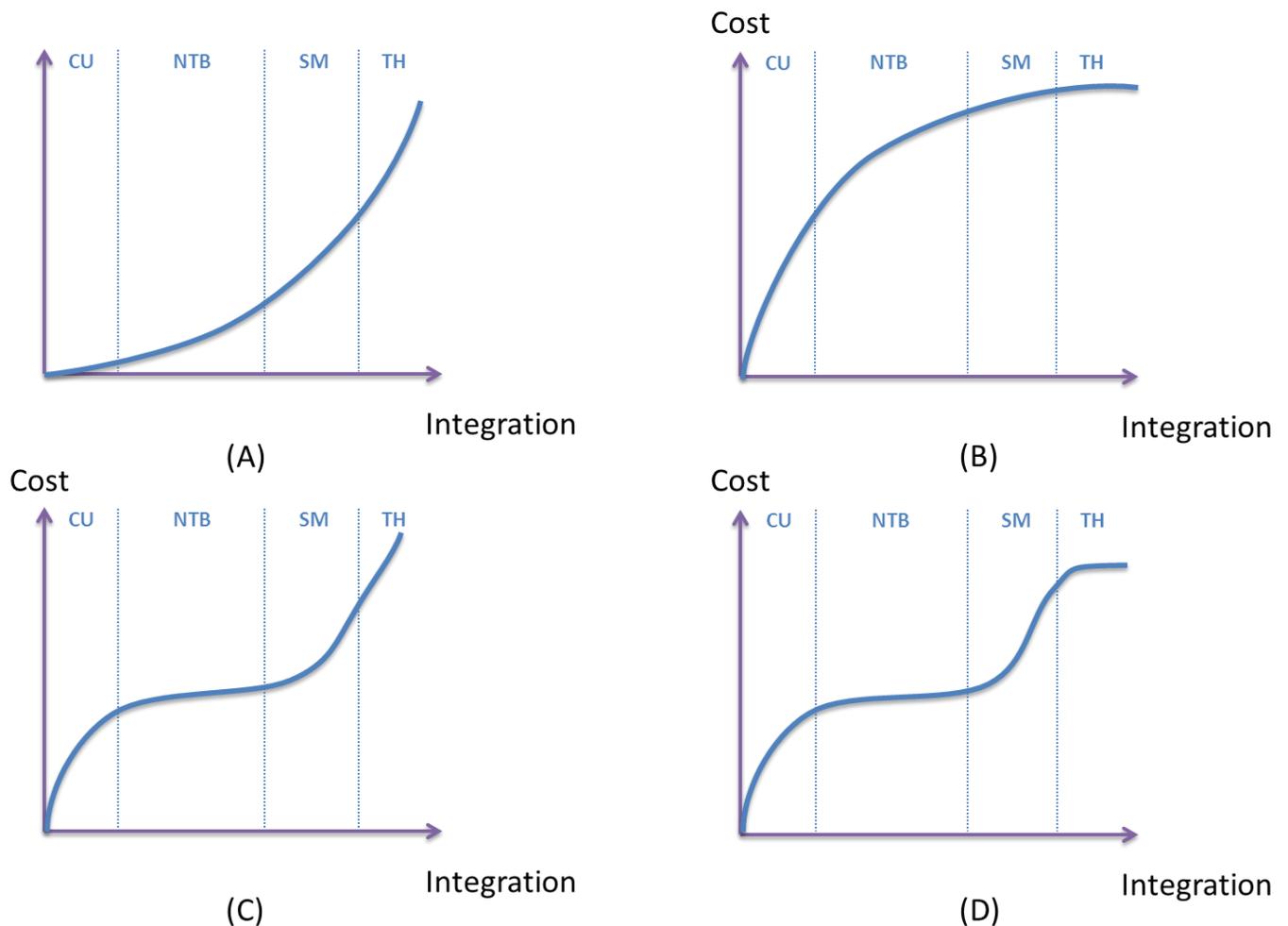
perhaps be called the “status quo view” — that both the customs union and the Single Market have had benefits, with there being a leap in integration required to overcome non-tariff barriers and move to a Single Market, but moving beyond them to total harmonisation would eventually entail damaging over-regulation.²² Scenario (c) might be said to be the “Common Market only” view, according to which membership of the customs union is beneficial but further integration beyond that is damaging. Case (d) is of potential interest to advocates of “unilateral free trade” who reject membership of any form of customs union as damaging, but might concede that the single market entails the stripping away of non-tariff barriers, eliminating deadweight costs, that the unilateral free trade approach cannot address.²³

Next, we consider scenarios for costs. (We emphasize again that these are independent of / orthogonal to the benefits scenarios — scenario (A) is not intended to be understood as the costs arising in benefits scenario (a).)

²² Note that we are describing gross benefits here, not net benefits, so the point is not simply that the regulation required to deliver increased integration is costly to introduce and maintain — that may be true, but if so would appear in our “Costs” curves. Rather, here the concept is that even if increased integration could be achieved costlessly in itself, it would still entail disbenefits, perhaps because “natural” barriers to integration would have to be stripped away and those natural barriers had some efficacy (e.g. they may have protected something else, such as culture), or because the level of vigilance required to prevent integration from falling back from such a high level might stifle innovation and/or healthy competition.

²³ We observe that it is not uncommon in studies of the comparative advantage of the EU versus alternative trading relationships to regard the key advantage of the EU over alternatives not to be the presence of a customs union as such (which, as noted in Section 2 might have cons as well as pros, and alternative customs union or free trade agreement arrangements could be imagined — e.g. perhaps with NAFTA) but, rather the reduction in non-tariff barriers under the EU’s Single Market programme. For example, see BIS (February 2011), “The economic consequences for the UK and the EU of completing the Single Market”, <http://www.bis.gov.uk/assets/BISCore/economics-and-statistics/docs/E/11-517-economic-consequences-of-completing-single-market.pdf>

Figure 3.2: Possible cost curves for four phases of economic integration: customs union (CU), predominance of non-tariff barriers (NTB), single market (SM) and total harmonisation (TH).

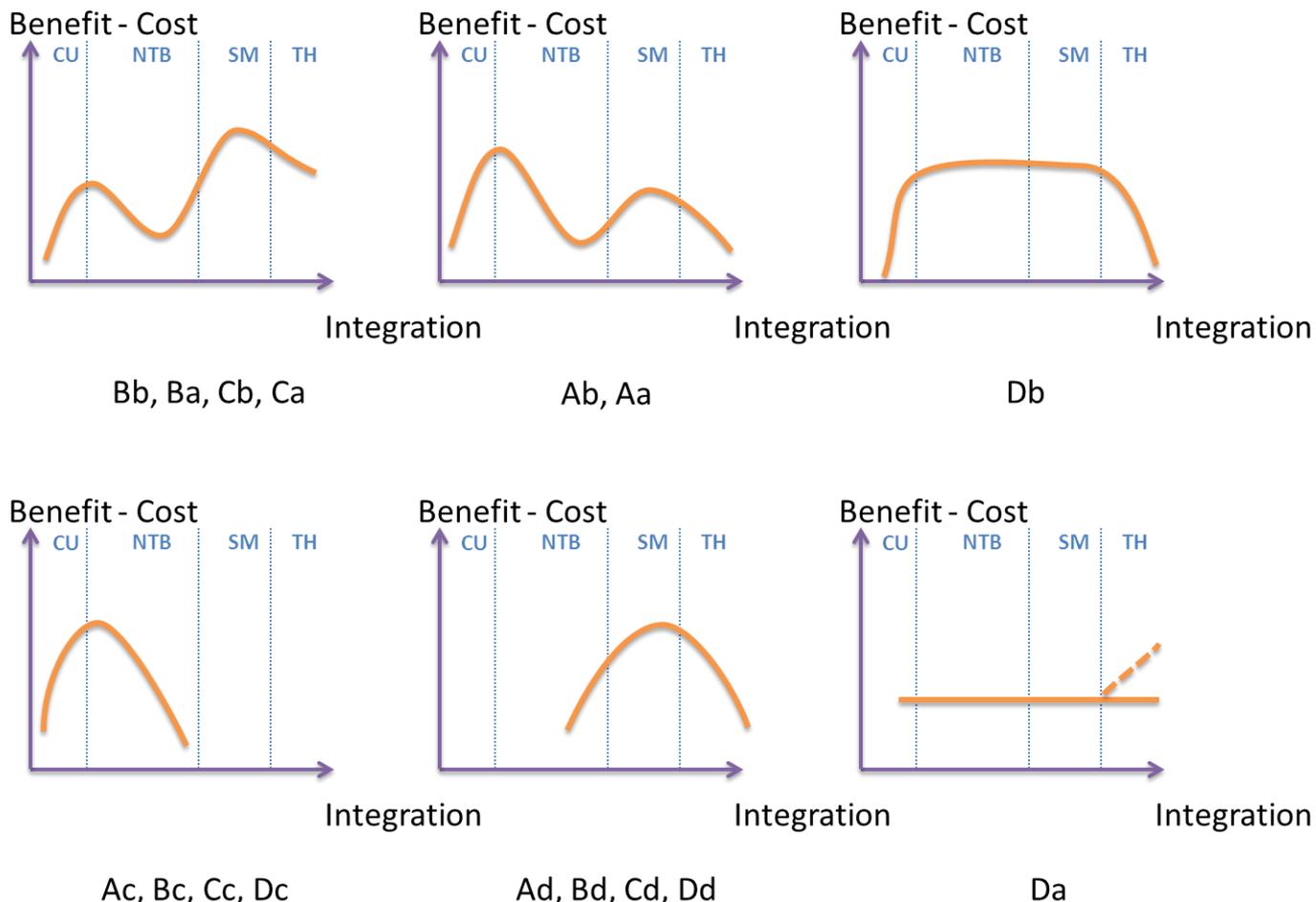


In Figure 3.2, we consider four ways costs might evolve with integration:

- It becomes more and more expensive to achieve increased degrees of integration, with each additional increment to integration being more expensive than the last. (We could imagine, for example, that “low-hanging fruit” is most naturally dealt with first, then built upon with increasingly more costly measures.)
- In this case, the initial costs of integration are considerable, since a significant number of institutions need to be put in place. But after this stage, although increasing integration is always costly, by contrast with case (A), each additional increment to integration is *less* expensive than the last.
- This case combines cases (A) and (B) in that there are initial set-up costs of achieving any integration, which are then followed by a flatter phase (we can think of this as a kind of economies of scale for integration). With the introduction of the single market, marginal costs start to increase again (the Single Market requires the establishment of additional new institutions and is more costly to create and enforce). The total harmonisation phase is characterised by increasing costs (we could interpret these as the costs of over-regulation required to deliver harmonisation).
- In this case, the first three phases are the same as in panel (C), but marginal costs diminish considerably in the total harmonisation phase (once the Single Market is sufficiently complete, the marginal additional costs of achieving total harmonisation are modest).

The benefits and costs can then be combined, to find a number of stylised possible alternative patterns relating net benefits (benefits minus costs) from integration, as in Figure 3.3.

Figure 3.3: Possible net benefit curves for four phases of economic integration: customs union (CU), predominance of non-tariff barriers (NTB), single market (SM) and total harmonisation (TH).



In Figure 3.3 we label our curves according to the combinations of benefits and costs curves they reflect. So, for example, the basic pattern in the panel marked “Bb, Ba, Cb, Ca” is that obtained if cost curve B from Figure 3 is combined with benefit curve b to produce a Bb scenario, or cost curve B is combined with benefit curve a, or cost curve C is combined with benefit curve b, or cost curve C is combined with benefit curve a.²⁴

These net benefits are instructive, showing how different combinations of costs and benefits can produce different forms of optimal integration. In the top left panel there are two “local” optima (peaks of the curves) — net benefits reach a local optimum at the establishment of the customs union, falling away with the non-tariff-barriers dominance phase, and reach their global optimum (the highest possible point for net benefits) in the midst of the Single Market phase. That implies that with this combination of costs and benefits, unless there is sufficient commitment to reach enough integration to make a Single Market work, it would be better to be content with a customs union, but with enough commitment a Single Market is beneficial.

²⁴ There would be some potential difference of pattern at the very end of the curve for case Ba — in principle the net benefit curve here could loop upwards towards the end, if the positive slope from increasing benefits of harmonisation from a were steeper than the positive slope from increasing costs in B. Similarly, curve Da might curve upwards at the very end — a point to which we shall return below.

In the top middle panel, we see a reverse case, in which although there is a local optimum for the Single Market, it would have been better to be content with a customs union. In the top right panel, from the establishment of the customs union up to very high levels of integration the additional benefits of integration are largely balanced by the additional costs.

In the bottom left panel, there is one peak for net benefits, at the establishment of the customs union, and the attempt to create a Single Market causes benefits to go negative. In the bottom middle panel, the costs of a customs union outweigh its benefits and it is only once a Single Market is in place that real benefits start to emerge, but the process of integration eventually entails over-regulation that causes net benefits to drop.

In the bottom right panel, once the customs union gets going, there are material net benefits, but the process of increasing integration entails costs that broadly offset benefits, except in the potential case illustrated with the dotted line, in which total harmonisation implies very high benefits, so that incremental benefits from further integration eventually outstrip incremental costs, and the optimal policy is to drive on to total harmonisation, regardless of the apparent lack of net beneficial progress until the very end.

These six net benefit shapes are, like the cost and benefit curves before them, not comprehensive, even as an expression of combinations of the subset of cost and benefit curves we have exhibited. In particular, the precise patterns depend to some extent on the relativities between the cost and benefits curves. For example, in A we exhibit a rising cost curve, but that in itself does not guarantee that, even at its highest point, the cost curve is not one one thousandth of, or alternatively one thousand times, the amount of the benefits curve at that point. The patterns we exhibit arise only if costs and benefits are at least of a similar order of magnitude, with the implication that the decision to proceed with additional integration at at least some stages of the process entailed a policy judgement, rather than being always an obvious “no-brainer” (one way or the other).

3.2 Procedure for Assessing How Optimal Integration is

These caveats noted, if we proceed on the assumption that at least some integration decisions required a policy judgement, our curves in Figure 4 point us to a broad strategy for assessing how close to optimal integration (i.e. the degree of “harmonisation” in our figures) in a particular sector is, namely:

- Estimate broad shape of benefits curves using trade, concentration (i.e. competition/liberalisation), and unit costs data.
- Estimate disbenefits from trade diversion using data on international competitiveness (e.g. unit labour costs data for EU vs non-EU countries)
- Estimate costs of implementing integration (e.g. costs of EU institutions) and costs of regulation to create integration (e.g. compliance costs)
- Proxy for the shape of curves by considering how these costs and benefits obtained above have changed over time as we moved through customs union to Single Market and beyond.
- Cross compare costs and benefits curves to identify which of the above patterns of net benefits we are in.
- Form a judgement as to which “phase” we are in — e.g. are we still in the NTB phase, or have we reached somewhere in the Single Market, or are we now approaching total harmonisation?²⁵

²⁵ We observe that this approach does capture policy synergies, if only implicitly, since policy synergies should typically enhance general welfare and efficiency and thus increase demand and output (and so be reflected in increased trade) whilst reducing costs. However, it is plausible that policy synergies produce their fruits over much

4 Measuring Economic Integration

In the previous section we have discussed potential patterns for how the costs and benefits of integration might vary with the degree of integration. To convert these thoughts into empirical practice we need some way to quantify or assess:

- The degree of economic integration
- How benefits vary with the degree of integration
- How costs vary with the degree of integration

In this section we consider the first of these, contrasting integration-promoting policy measures with economic integration.

4.1 Methodological issues: “Input” vs “Output” Measures of Integration

Much European policy discussion of “integration” treats it as a decision, the product of policy — the process of “integration” is seen as a series of “integrating” (de-)regulatory decisions. According to this concept, the degree of integration would be measured by progress in introducing and implementing the policy measures that create/constitute integration: removal of internal tariffs; removal of non-tariff barriers; enforcement of liberalisation and competition rules; and so on. Many regulatory programmes are complex (e.g. the Financial Services Action Plan to introduce a Single Market in financial services was made up of 42 measures introduced and implemented over at least an eight year period), making it complex to measure how much of the programme has been implemented at any one point in time. Nonetheless, in principle one approach to measuring the degree of integration is to assess progress in the introduction and implementation of policy measures. We might term these policy measures the “inputs” to integration.

Another approach would measure integration by its “outputs” — by the features that an integrated market would exhibit — for example:

- Prices of outputs and inputs. In a successful Single Market, where the Four Freedoms function well, we would expect to see convergence in prices. The relevant prices are:
 - Goods and services (final and intermediate).
 - Wages. This might apply to overall integration (e.g. convergence in the hourly wage for the total economy) or for specific sectors (e.g. hourly wages in those sectors).
 - Cost of capital. In a Single Market with free movement of capital we expect to see convergence in both retail borrowing rates (such as rates available for housing, consumer or enterprises) and lending/investment rates (such as money market and day-to-day money rates) — though the speed of convergence might differ for retail and lending rates.
- Trade and labour migration. As with prices, further integration would be expected to translate into larger quantities moved within the European Union, either through trade of goods and services or worker migration. The relevant measures might include the amount of trade among countries in the

longer timescales than we have data available to consider — e.g. higher education synergies might produce new blue skies ideas that find practical application only in 30 years; environmental policies might affect output in 100 years. Similarly, dynamic influence on the policy of other Member States should issue in benefits in terms of increased trade, efficiency, etc.

European Union (EU) / European Economic Area (EEA) / European Free Trade Area (EFTA) and the amount of trade with comparable partners outside Europe.

- Efficiency. We propose as measures of efficiency the related variables of labour productivity and unit labour cost. We measure labour productivity as the ratio of Gross Value Added (Euros, chain-linked volumes, reference year 2005) to Hours Worked. The unit labour cost is the ratio of the hourly wage to labour productivity. This measure is interesting for two reasons. First, free movement of labour would imply that in an integrated market the differences in efficiency disappear over time. Second, one of the expected benefits of the Single Market is a general increase in efficiency.²⁶

For these measures, we could look at their:

- Levels: Typically measured by their average or median level and their range from minimum to maximum values
- Dispersion: differences in prices across regions/sectors, typically measured by the coefficient of variation (CoV, the ratio of the standard deviation to the average)
- Volatility: changes in values over time
- Direction of changes: whether these changes coincide across regions/sectors and whether they can be explained by other variables

Box 4: Measures of European Integration

The academic literature measures/assesses the level of European integration in various ways. Key variables used in quantitative and econometric analyses include:

- GDP per capita — often used as the proxy for the level of European integration (a measure of wealth convergence).
- Trade —this takes various forms, such as the share of intra-EC trade in total trade, total or intra-trade as a percentage of GDP etc..
- The level of protectionism, is calculated as the sum of a weighted tariff and weighted “trade costs”.²⁷
- Foreign Direct Investment (FDI), empirical evidence has suggested that FDI is closely related to the level of economic integration within the region. One option pursued, therefore, has been to use a “gravity model” approach (explained in more detail in a later section below) to assess the impact of deepening integration on FDI flows.²⁸

On the other hands, non-academic discussion of the measures could be found across various political organisations and think tanks. Most of the researches provide qualitative analysis on the degree and impact of the European integration. European commission, for instance, has developed a methodology using four criteria tests to identify the key areas of the Single Market are the performance of the Single Market by sector. The tests include production benchmarking, Economic importance (economic scale), Dynamic factor (sector’s capacity) and single market factors which look at issues on disparate legislation across Member States and level of completion etc.²⁹

²⁶ A later section discusses this point in more detail.

²⁷ Badinger (2001), “Growth effects of Economic integration – the case of the EU Member States (1950 – 2000), IEF working paper Nr. 40

²⁸ Brenton, et al (1999), “Economic Integration and FDI: An Empirical Analysis of Foreign Investment in the EU and in Central and Eastern Europe”

²⁹ European Commission (2012), “Better Governance for the Single Market”

4.1.1 Causality

Although “output” measures may be much more straightforward to assess in a fine-grained and quasi-contiguous way (as opposed to the step-change nature of assessing integration via the date of introduction of regulatory programmes, and the risk of arbitrariness of attaching weightings to different specific regulatory measures to attempt to achieve more fine-graining), one drawback of the “outputs” based approach to integration is that our focus in this report is not simply on the implications of integration in general — which might be the product of globalisation, sustained peace, technological trends, tastes, or many other things — but the implications of integration resulting from the Single Market in particular. Consequently, in using output measures one of the key challenges is to understand whether the trends observed can be attributed to the European Single Market (SM) / Customs Union (CU). One way to think about that is to consider the extent to which those trends would have taken place even without a Single Market — which can be estimated by considering the experience of relevant comparator countries outside the Single Market. In order to address this issue, in what follows we shall base our judgement on

- The trends observed in Member States before they became part of the CU/SM.
- The trends observed in comparable countries. We propose as benchmarks non-EU OECD countries that have been members at least since the 1970s. These include Australia, Canada, Iceland, Japan, New Zealand, Norway, Switzerland, Turkey and the United States.
- The trends observed within Member States at the regional level. For instance, as noted above in our discussion of “natural barriers”, while price dispersion is expected to diminish with further integration, it may not disappear altogether. A more appropriate measure of integration would compare price dispersion across Member States with the existent dispersion within them (e.g. across NUTS 2 regions).

4.1.2 Specific sectors

Integration into the Single Market is likely to affect Member State economies overall. However, integration-“outputs”-based data will often be more tractable (both conceptually and statistically) at a sectoral than a whole-economy level. For example, “price dispersion” is much more straightforwardly measured and interpreted within a particular sector — the dispersion of prices for this or that good.

Our approach below often focuses upon particular sectors or industries for which what are called “event studies” can be conducted. That is, when studying individual sectors, it is sometimes feasible to identify particularly relevant events (such as the introduction of Directives or court rulings) that may alter the functioning of the Single Market, and to assess their corresponding effect.

One should, however, be circumspect in drawing general lessons from experience in particular sectors. To enable more general lessons to be drawn, we include different sectors of the economy such as manufactures and services, diverse in their level of integration across the European Union. For example, we include markets that are widely regarded as already highly integrated (e.g. motor vehicles), as well as markets that are more partially integrated (e.g. energy and pharmaceuticals).

4.1.3 Countries

Whilst all Member States are in the process of integration into the Single Market, some countries may be at different stages of this process. These differences must be taken into account to assess the existing level of integration. One particularly important distinction is that between the EU Member States that joined before 2004 (the “EU15”) and those that joined at that date or later. There are two reasons to make this distinction. First, one would naturally expect both the effects and the fruits of economic integration to become more apparent the longer a country has been a member of the Single Market and, second, the

majority of the Member States that joined on or after 2004 had, prior to that, recently gone through a significant process of economic and political transformation (post-Communist transition), potentially materially affecting their degrees of internal integration as well as entailing some catch-up with international norms of economic integration with other countries, quite separately from their involvement in the Single Market.

4.1.4 Time period

Given the history of the European Union and the availability of relevant data, we identify, when feasible, three distinct periods in our analysis:³⁰

- **1968-1994:** Covers the period in which the European Union functioned as a Customs Union until the Single Market was created and it was enlarged to 15 members. From a statistical point of view, 1995 is also a relevant date because much of the available data becomes comparable starting only from 1995.
- **1995-2004:** Covers the early years of the Single Market up to the enlargement of 2004, which extended the EU to include ten additional Member States (and two further additional ones in 2007), mostly from Central and Eastern Europe.
- **2004-present:** Covers the Single Market as EU25 or EU27. Additionally, most detailed data is available for this period.

4.2 “Input” Measures of Integration

4.2.1 EU Policy Inputs

As noted above, the “degree of integration” could be seen in one sense as a matter of how much progress the EU has made in regulatory harmonisation. We identify the following key policy inputs.

- **Trade agreements:** Free trade agreements and Customs Union

Timeline of trade agreements:

1968: Formation of Customs Union. Inner six countries: Belgium, France, Germany, Italy, Luxembourg, Netherlands

1973: Denmark, Ireland and the UK join EC, Switzerland, Norway, Iceland and Liechtenstein FTA

1981: Greece joins EC

1986: Spain and Portugal join EC

1991: Andorra and San Marino members of Customs Union

1992: European Union formed (Maastricht Treaty)

1993: Single Market commences

1994: Hungary joins FTA

1995: Austria, Finland and Sweden join EU. Bulgaria, Czech Republic, Romania, Slovakia join FTA

1996: EU-Turkey Customs Union

1998: Estonia, Latvia, Lithuania, Slovenia, Tunisia join FTA

2000: South Africa, Mexico, Israel, Morocco join FTA

2003: Chile joins FTA

2004: Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia, and Slovenia join EU, Macedonia SAP (Stabilisation and Association Process), Egypt joins FTA

2005: Croatia SAP, Algeria joins FTA

³⁰ It would also be very useful, if feasible, to analyse a fourth period that includes Member States' performance before the European Customs Union that commenced in 1968. However, given the lack of data availability for most of the indicators mentioned here, we have been unable to pursue such an approach within the bounds of the current study.

2007: Bulgaria and Romania join EU, Lebanon joins FTA

2009: Albania SAP

2011: South Korea FTA

➤ **Single Market Programme** — This we sub-divide into:

- General provisions
- Competition policy
- State Aid policy
- Environmental policy
- Employment policy
- Trade policy
- Procurement policy
- Sector-specific regulatory frameworks.

The main underlying rationale for EU intervention in sectoral regulation is that differences might distort the single market, or impede the achievement of other EU objectives. The principle of subsidiarity applies so that EU Directives or other regulation should be limited to issues on which there is added value in comparison with national regulations.

Telecommunications, and the related area of broadcasting transmission, offers a clear example. The sector is characterised by networks access to which on efficient and equitable terms will allow the development of pan-EU competition by service providers. The basic principles according to which regulators should calculate access charges have been (largely) agreed at EU level, and reflected in the Access Directive, which accompanies the telecommunications Framework Directive.³¹ However, the calculation of the levels of charges, which includes taking into account the effects on factors such as the concentration of population, and local cost levels, is left to the national regulatory authorities (NRAs). As a result, in principle, investors can make efficient investment decisions throughout the EU.

In the case of energy, the focus is on measures to facilitate trade between member states, and so the development of an EU energy market. From some perspectives this is an objective in its own right as part of the “European project”; but there is also an economic justification if increasing the ease of energy flows across national boundaries help to reduce overall costs.

Where national regulators are left with discretion in applying, they and the sectors they regulate are still generally subject to more general EU law, such as competition law (including state aids), the procurement directives, and working time regulations. In some cases, therefore, the EU controls reflect social and environmental as well as economic objectives.

In our later analysis (especially in Section 5) we shall find it useful to control not only for overall events (such as the date of establishment of the EU customs union) but also for key regulatory or other events within sectors. Illustrative key events for particular sectors include:

³¹ The “Framework Directive” forms part of the “Telecommunications Package” designed to recast the existing regulatory framework for telecommunications in order to make the electronic communications sector more competitive. This new regulatory framework consists of this Directive plus four specific Directives, namely the:

- Directive on the authorisation of electronic communications networks and services (the “[Authorisation Directive](#)”);
- Directive on access to, and interconnection of, electronic communications networks and associated facilities (the “[Access Directive](#)”);
- Directive on the universal service (the “[Universal Service Directive](#)”);
- Directive on the processing of personal data (the “[Privacy and Electronic Communications Directive](#)”).
- Added to this list, there is also the recent Decision on a regulatory framework for radio spectrum policy (the “[Radio Spectrum Decision](#)”). The “Telecoms Package” was amended in December 2009 by the two Directives “[Better law-making](#)” and the “[Citizens' rights](#)”, as well as by a [body of European regulators for electronic communications](#). (source: Europa website, 18 March 2013)

Pharmaceuticals	Energy	Financial services	Motor vehicles
1989: Transparency Directive 89/105/EEC	1996-1998: First energy package of directives (Electricity: Directive 96/92/EC, Directive 98/30/EC) Gas:	2001: Money laundering, UCITS I	1970: Directive 70/156/EEC type-approval of motor vehicles and their trailers
1996: Court cases. Repackaging: Bristol-Myers Squibb v Paranova A/S and parallel trade: Merck v. Primecrown	2003: Second energy package (Directives 2003/54/EC and Directive 2003/55/EC)	2002: Solvency directive, IMD (insurance), Financial Conglomerates	2001: Directive 2001/116/EC (amendment)
2003: Communication on parallel trade COM(2003) 839	2006: Energy end-use efficiency and energy services (Directive 2006/32/EC)	2004: Markets in Financial Instruments Directive	2007: Directive 2007/46/EC framework for the approval of motor vehicles and their trailers
	2009: Third energy package (Directives 2009/72/EC and 2009/73/EC)	2006: Capital requirements directive	Proposed: motor vehicle registration
	2010: Energy performance of buildings (Directive 2010/31/EU)	2008: Credit agreements for consumers (Directive 2008/48/EC)	
		2009: Taking up and pursuit of the business of insurance and reinsurance (Solvency II) , (Directive 2009/138/EC)	

4.2.1.1

Policy tool forms

Setting aside General Provisions, the policy tools for promoting the Single Market could in principle take the following forms:

- Separate national or subnational (e.g. regional) regulation
- Separate national or subnational (e.g. regional) regulation with co-operation on cross-border issues
- National regulators with mutual recognition
- European-level regulation

Box 4: Current areas of debate regarding policies to further extend integration in the EU

Sector	Organisation	Examples	Criterion	Evidence	Judgement
Digital economy	European Commission	Digital agenda package	e-Business, e-Commerce and ICT lead high growth in labour productivity, lower transaction costs	Uneven penetration of ICT across EU, Regressions by DIW: positive effect of ICT on trade	Needs further development: ICT have larger effect when all partners possess them. Unawareness, privacy and trust issues prevent more widespread usage.
	Business for New Europe		Promote growth		More
Employment and Social	Open Europe, Fresh Start	Temporary Agency Workers, Working Time Directive	Cost	UK's IA	Inadequate and expensive (fails CBA), UK must repatriate power
	Business for New Europe		More employment translates in more growth		Many barriers in uncompetitive sectors, especially for young workers
Energy	Business for New Europe		Energy security, competition		Remove barriers
	Center for European Reform		Needs expansion and upgrade		Support liberalisation but low-carbon
	European Commission		Lower prices, more choice	Multiple providers (with price comparison tools), energy prices have been kept in check (primary energy up by 8-14% but wholesale electricity only by 3.4%). Taxes, and transmission & distribution charges also went up, so final household bills are up 22-28%	Existing directives need to be implemented, liberalise access to transmission infrastructure
Environment	Open Europe, Fresh Start	Climate Action and Renewable Energy policy (CAREP)	Cost, Effectiveness	EC and OE IAs, permits for ETS given liberally	Create carbon price mechanism (study), Member states should set their own targets
	Center for European Reform	ETS	Price should provide incentives for low-carbon and energy efficiency	Price too low €8	Lower cap, price floors and ceiling
Financial services	Open Europe, Fresh Start	AIFM, Banking Union	Influence on regulation decisions must be proportional to country's importance in the sector, now focuses on needs of eurozone	UK provides 35% of financial services, hard to block harmful regulation	Good, but risk of over-extend itself. UK must have more veto power
	Business for New Europe		Should be competitive, provide market confidence		Bank resolution needed
	Center for European Reform	AIFM	Must be supported by IA evidence	IA not properly conducted	Supports
	Center for European Reform	Banking Union	Need of appropriate regulation	UK Turner review of financial crisis	Need new regulation for single market

JHA	Open Europe, Fresh Start	EU crime and policing laws, European Arrest Warrant (EAW),	Effectiveness	EAW unfair, Opinion: Redundant or little improvement value	Eliminate redundancies, reform EAW
Services	Business for New Europe		Trade pattern should reflect relative importance of services in the economy		Remove barriers
	Center for European Reform	Services Directive	Must have free movement of services		Currently too many barriers, countries must implement Services Directive, SD gives too much room for MSs to put barriers
	European Commission	Services Directive	Lower barriers that translate in increase in GDP, productivity, FDI	preliminary IA: GDP effect is 0.3-1.5%	Successful so far, needs further implementation (directive not fully transposed in all MSs)
SMEs	Business for New Europe		Should be able to compete in a level playing field		Improve IP and access to capital
Social Policy	The Foreign Policy Center (FPC)		balance between protections for workers and flexibility for firms needs to be assessed	YouGov, there is little to suggest that the removal of existing protections would assist UK or EU firms to compete on grounds of cost with emerging markets, gold plating	There is room to gain employment flexibility without affecting workers rights
Transport	European Commission	Common Transport Policy (CTP), Single European Sky	More competitive markets, efficient use of infrastructure, benefit for consumers	Lower fares (through successful air liberalisation, also puts pressure on rail), new services	Replicate success from air market in rail

4.3 “Output” Measures of Integration

4.3.1 Price dispersion

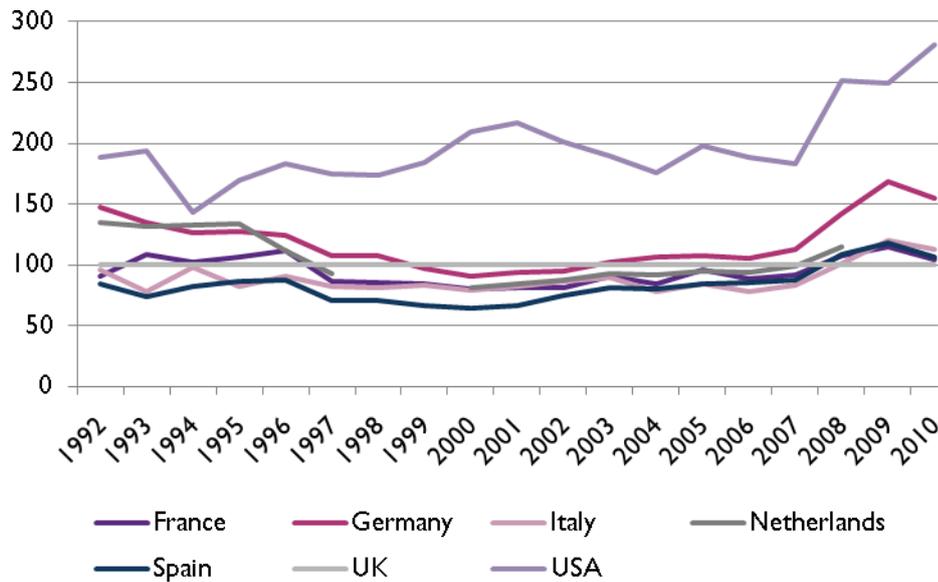
In a perfectly-functioning Single Market the “law of one price” would apply — any attempt to sell products at a different price to different consumers would result in resale arbitrage, closing price differentials. Hence the degree of integration can be measured by reference to the degree of price dispersion across countries.

We illustrate this point using the case of pharmaceuticals. The market for pharmaceuticals is an interesting example because it consists of a good that is in principle tradable, but subject to different regulations, standards and national price regulation schemes that either themselves sustain price differentials across countries or allow pharmaceuticals companies to price discriminate.³²

We identified two key dates. In 1996, there were two major court rulings regarding parallel trade (Merck v Primecrown) and trademarks/repackaging (Bristol-Myers Squibb v Paranova). In 2003, there was an EC Communication regarding parallel trade, reflecting largely the decisions of previous court rulings.

³² Whether it is fundamentally buyer power, through national price regulation, or monopoly power from patented pharmaceuticals manufacturers that is the key driver and sustainer of price differentials is a hotly disputed issue that it falls outside the scope of this study for us to offer a view on.

Figure 4.1: Average ex-manufacturer prices of pharmaceuticals



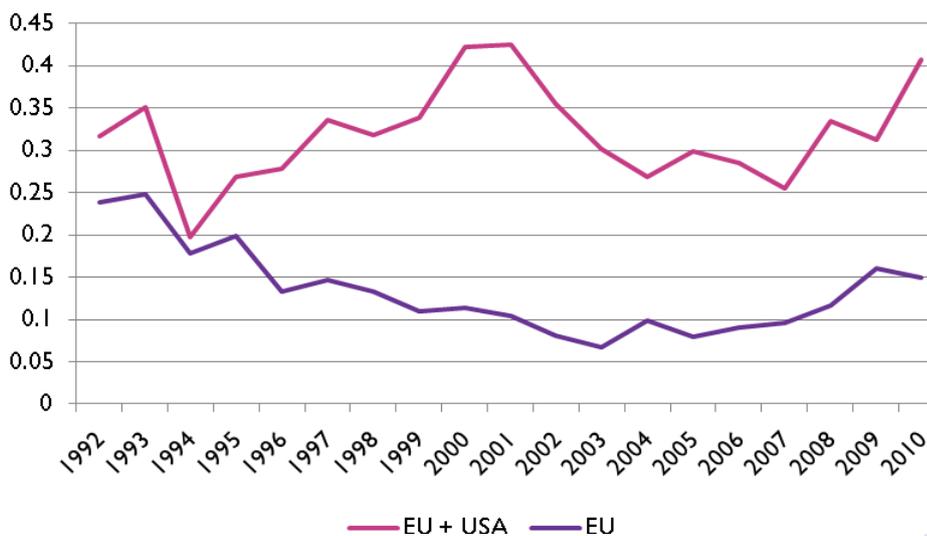
Source: Department of Health, Pharmaceutical Price Regulation Scheme: Reports to Parliament, 1998-2012. Price index constructed using a sample of branded products among the top-250 sellers in England. Base price: UK price set to 100. The European countries represented in the sample are: Austria, Belgium, Finland, France, Germany, Ireland, Italy, Netherlands, Spain and the UK

We can note the following:

- European countries and the US have materially different price patterns for pharmaceuticals, in levels, volatility and direction of movements.
- EU countries follow a similar pattern, especially after 1996, with the notable exception of the price increases in Germany after 2006.

In addition to average prices, it is possible to look at their dispersion, as in the figure below, measured by the CoV.

Figure 4.2: Price dispersion measured by the coefficient of variation



Source: Department of Health, Pharmaceutical Price Regulation Scheme: Reports to Parliament, 1998-2012. Price index constructed using a sample of branded products among the top-250 sellers in England. Base price: UK price set to 100. The European countries represented in the sample are: Austria, Belgium, Finland, France, Germany, Ireland, Italy, Netherlands, Spain and the UK

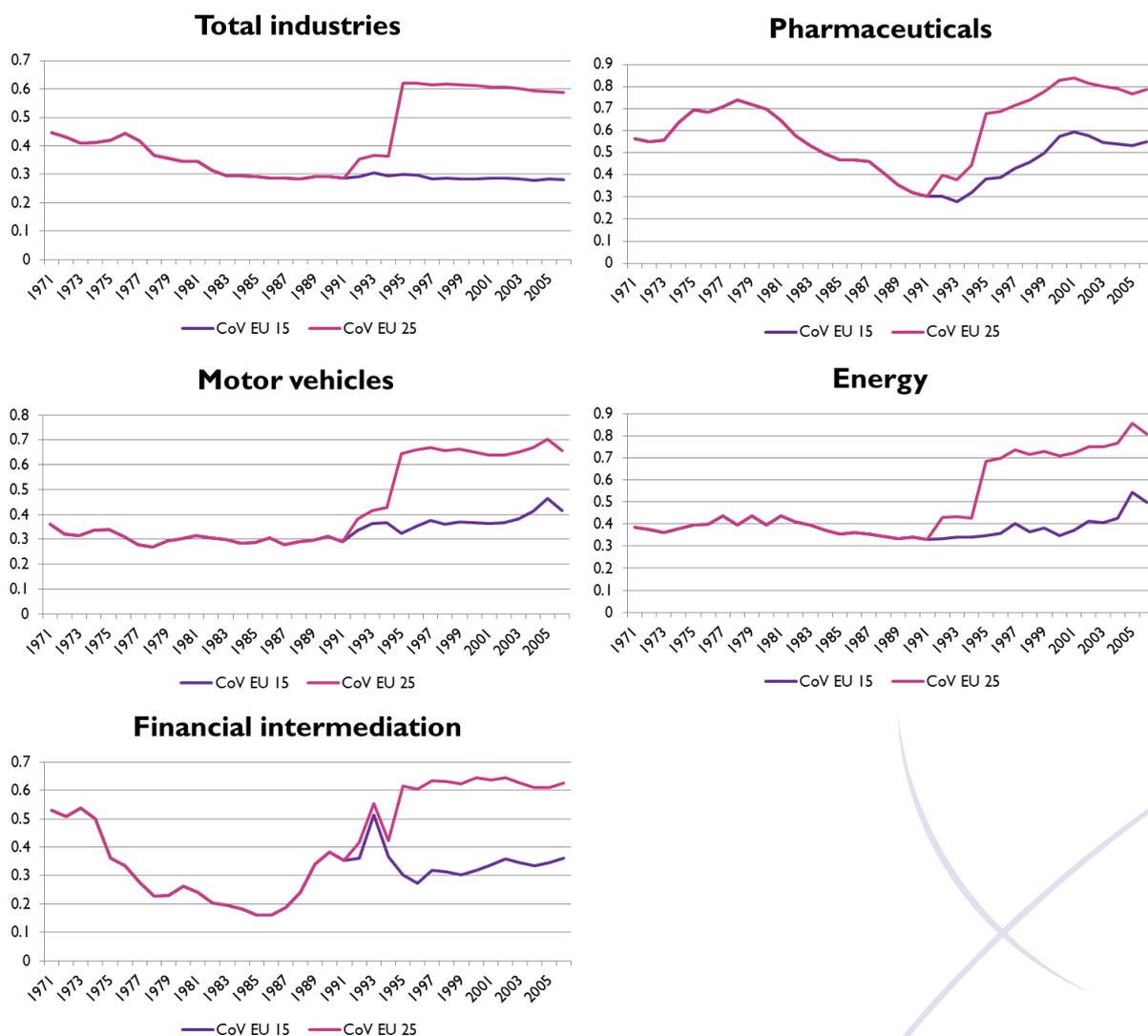
From Figure 4.2 we see that:

- Price dispersion in the EU declined steadily in the period 1992-2003, providing evidence in favour of increasing market integration during this period
- The EU and the US follow very different price patterns, moving in opposite directions, indicating that the EU pattern is not simply reflective of a global pattern.
- There was an increase in price dispersion in the second half of the 2000s decade.

4.3.2 Wage dispersion

Just as the free movement of goods and services would be expected to lead to reduced dispersion in the prices of goods and services, so one of the expected consequences of free movement of labour is convergence in wages, as significant wage differentials are undermined by worker migration. The figure below presents the wage dispersion for the Member States of the EU since 1991 and for the countries that were EU members before 2004 (EU 15) since 1970.

Figure 4.3: Dispersion of Hourly Wages for EU Member States

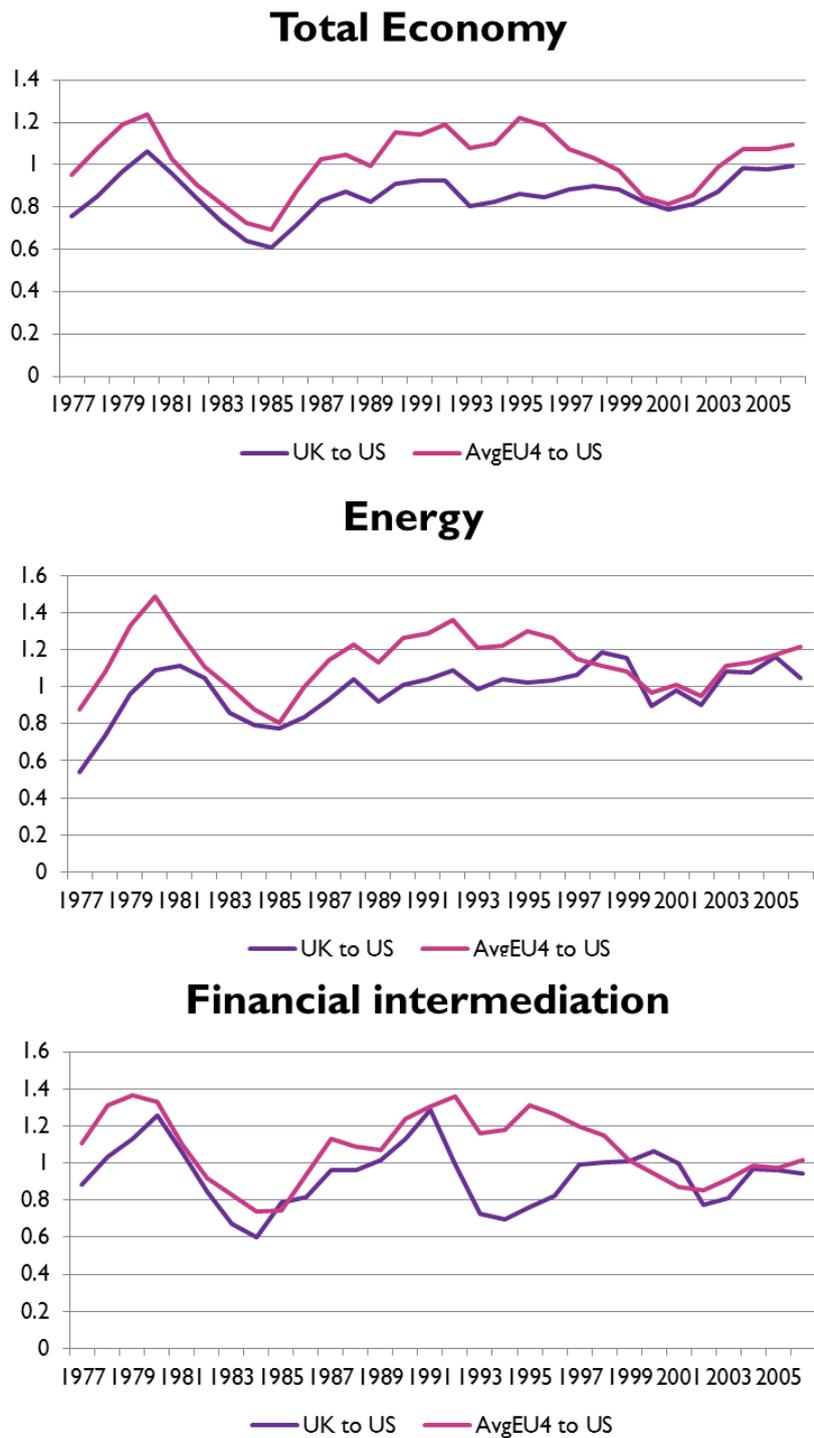


Note: Labour compensation per hour worked (Euros/ECUs), measures by the (unweighted) coefficient of variation.
 Source: EU KLEMS (hourly wage data expressed in national currencies and Gross Value Added price index), Penn World Table (exchange rates).
 Cyprus, Latvia, Portugal and the Slovak Republic were excluded due to non-comparability of the data.

Overall the dispersion in hourly wages decreased during the 1970s and 1980s, then in the 1990s the convergence process slowed down and even reversed for some sectors.

It is of interest to contrast the European pattern of convergence in the 1970s and 1980s then stabilisation thereafter with relative wages between the major European countries and the US. We show that in Figure 4.4.

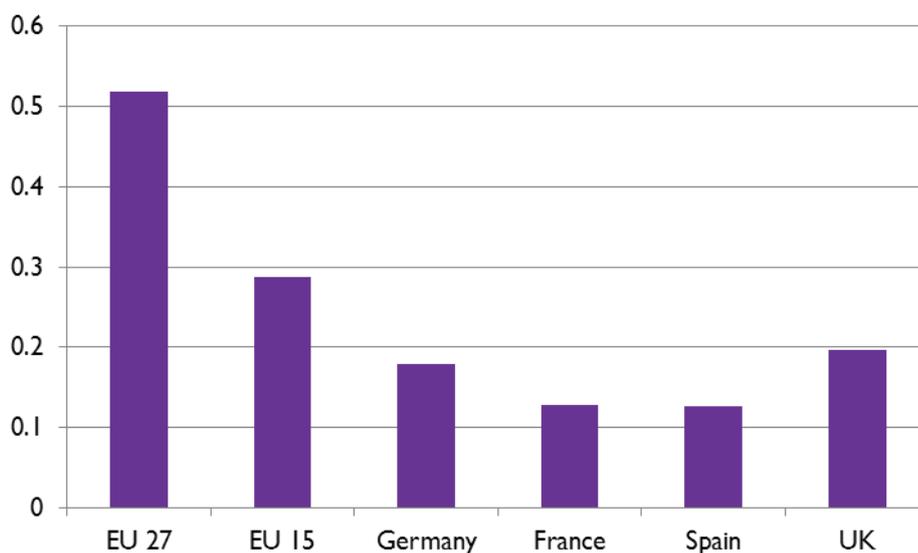
Figure 4.4: European wages relative to US wages (US hourly wage = 100)



Note: "European countries" = the average of UK, France, Italy and Germany. Wages expressed in ECU/euro
 Sources: EU KLEMS (Labour compensation, hours worked and price indices) and Penn World Table (Exchange rates)

As versus the pattern within Europe of convergence through the 1970s and 1980s then stabilisation from the 1990s onwards, relative to the US there appears to be relatively little convergence during the 1970s, some during the 1980s followed by a period of stabilisation into the early 1990s, then further volatility later. When comparing the UK and US hourly wages, UK wages have been lower for the total economy. However, differences in hourly wages during recent years have been minimal. Thus we see that the European experience in the 1970s and 1980s is unlikely to be attributed simply to global trends — the pattern relative to the US is materially different. But whilst the pattern of wage convergence seems Europe-specific and might thus be attributed to European integration in some way (e.g. theory predicts that trade and capital mobility could potentially led to some convergence in the marginal revenue product of labour even in a customs union), it is not clear that enhanced labour mobility associated with the Single Market, per se, could be the cause, as it started only in the run-up to 1993 and most of the convergence in wages occurs before that point.

Figure 4.5: Hourly wage dispersion in the EU and individual countries in 2006



Source: EU KLEMS, Eurostat and Structure of earnings survey 2006. Dispersion within countries was obtained by the unweighted CoV using NUTS I regions. Countries were selected due to the available data for a sufficient number of regions: Germany (16), UK (12), France (8) and Spain (7)

As discussed above, the dispersion information becomes more meaningful when compared to wage differentials within individual countries. Figure 4.5 compares the CoV computed for the EU with selected countries in 2006. Within-country dispersion is between .127 and .196, while the corresponding values for the EU 15 and EU 27 are .288 and .519, respectively. The natural conclusion is that (perhaps as one might expect given issues such as language differences and incomplete portability of public welfare entitlements) there are still significant wage differentials across EU countries that go beyond the differences expected within a well-integrated Single Market.

One factor limiting the closure of wage differentials within the EU may be its relatively limited labour mobility.

Box 5: Comparing the Labour Mobility of the USA and the EU

A 2008 study conducted by the European Union suggested evidence that labour mobility in 2006 between US states was much higher than both between and within EU member states³³:

	USA	EU-27	EU-15	EU-12
Share of working age residents who moved from a different region/state within the same country	1.98%	0.96%	1.12%	0.34%
Share of working age residents who moved from abroad	0.76%	0.30%	0.34%	0.16%
Net migration	0.40%	0.32%	0.40%	-0.03%

Source: Regional Focus (2008), "Labour mobility between the regions of the EU-27 and a comparison with the USA", European Union Regional policy

The EU regions where the largest proportions of people were leaving were found to have high unemployment rates and low wages relative to other regions. Those regions that received the most migrants were found to have growing employment levels but not necessarily higher wages.

Differences in the dispersion of the proportion of people moving between US states and between EU regions was also found. In the US, the average share of working age residents moving from another US state was 3.38 per cent in the highest decile of states and 1.08 per cent in the lowest decile, whilst in the EU the respective figures were 2.54 per cent and 0.1 per cent.

For an extended discussion of these trends and comparison with intra-country dispersion, see Andersson et al (2008).³⁴

4.3.3 Labour productivity

As with wage dispersion, another product of free movement of labour should be a fall in labour productivity differentials.

Labour productivity is a measure of efficiency. We define it here as the ratio of Gross Value Added to Hours Worked.

The next figure shows the evolution of EU-aggregate labour productivity.³⁵ Whilst the increase in labour productivity was 13 per cent for the total economy, productivity in the energy and pharmaceutical industries grew 20 per cent and 70 per cent respectively.³⁶

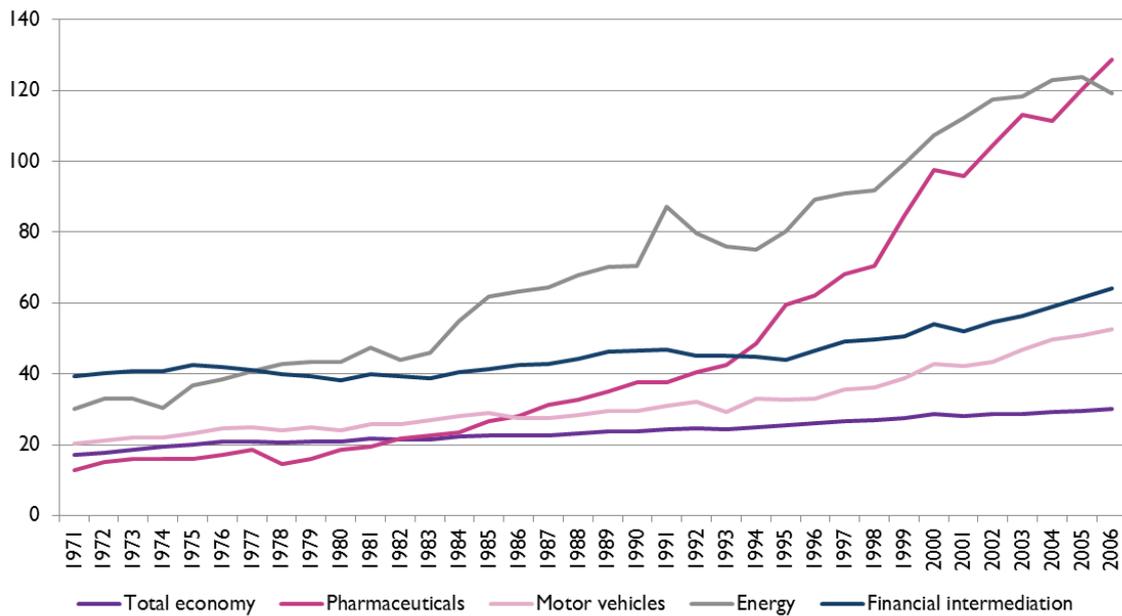
³³ Regional Focus (2008), "Labour mobility between the regions of the EU-27 and a comparison with the USA", European Union Regional policy. http://ec.europa.eu/regional_policy/sources/docgener/focus/2008_02_labour.pdf

³⁴ Andersson et al "Wage Growth Dispersion Across The Euro Area Countries: Some Stylised Facts", ECB 2008 (<http://www.ecb.int/pub/pdf/scpops/ecbocp90.pdf>).

³⁵ Eurostat has no data for the finance industry on hours worked at the EU level.

³⁶ Data for pharmaceuticals go until 2009.

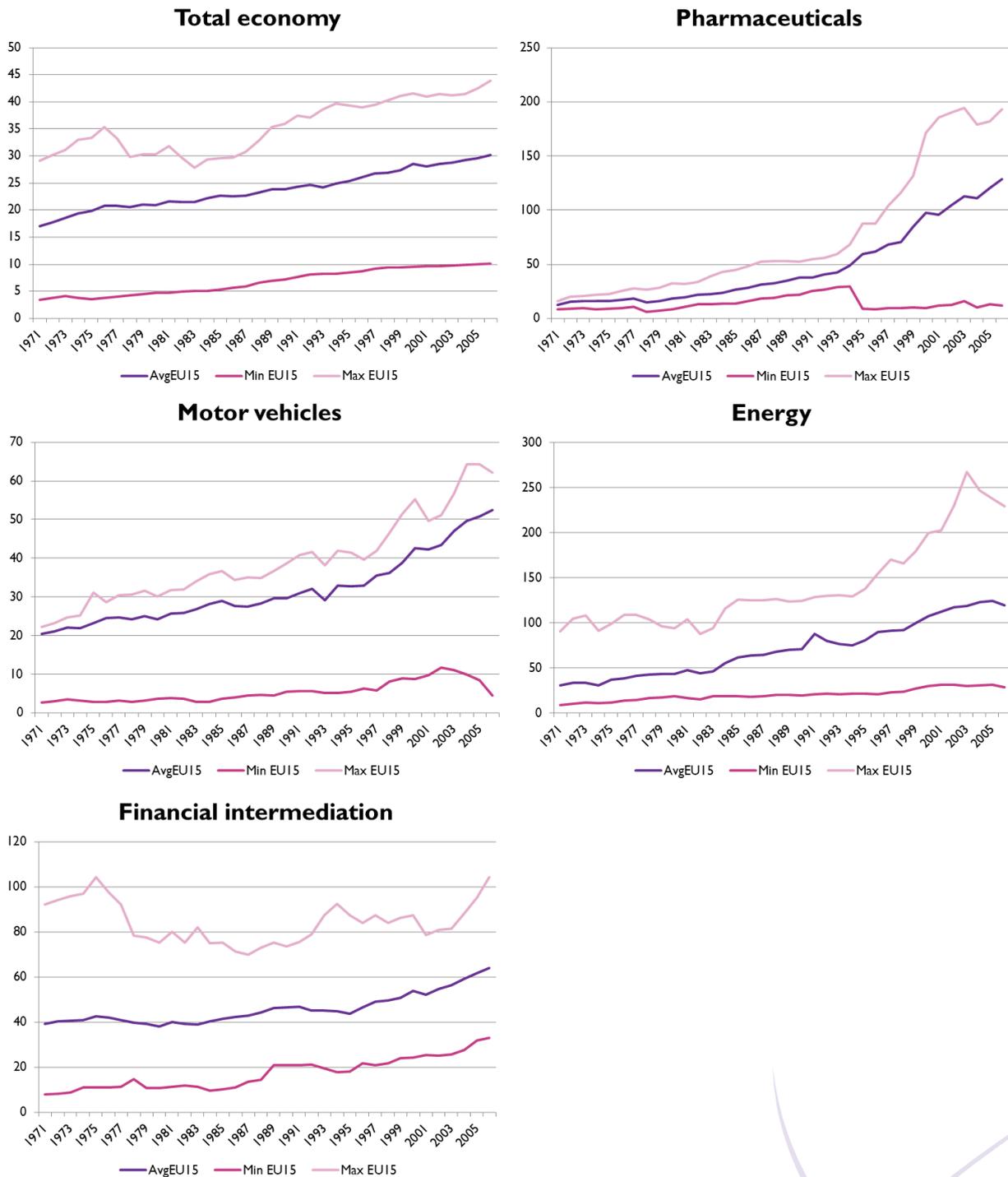
Figure 4.6: Labour Productivity in the EU15.



Source: EU KLEMS and Europe Economics calculations; exchange rates were obtained from the Penn World Table.

The next figure shows the data series for each of the sectors for the EU compared to the maximum and minimum productivity among Member States. Whilst the heterogeneity is large in general, all the industries considered have larger spreads compared to the total economy, with motor vehicles being the closest reflection of the aggregate. This is particularly true for energy.

Figure 4.7: Labour productivity



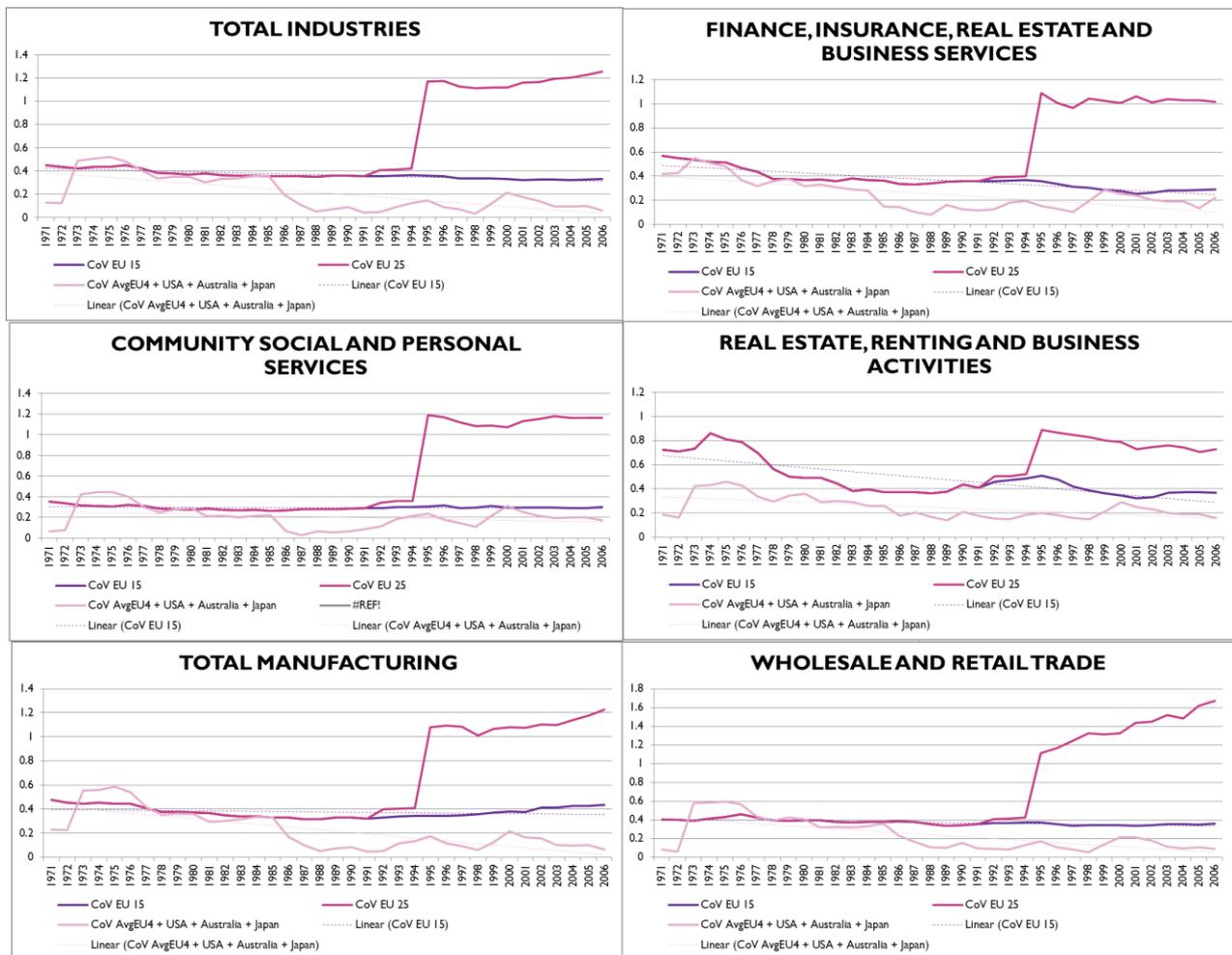
Note: Labour productivity measured by NACE Rev.2 categories
 Source: EU KLEMS and Penn World Table (exchange rates)

Of the next two figures the first includes all countries for which there is a complete series from the 2000-2010 period, whilst the second excludes from the sample all Member States that joined the EU on or after 2004. These figures show the evolution of the coefficient of variation of labour productivity for the twelve

largest sectors of the UK economy, by gross value added. The charts illustrate whether labour productivity in those sectors has converged/diverged since the early 1970s, both in absolute terms and relative to a measure of global convergence – which we calculated by comparing the average labour productivity of the EU’s “big four” – UK, France, Germany, Italy – with that of the US, Japan and Australia (so, a four-“country” comparison). The key salient features are as follows:

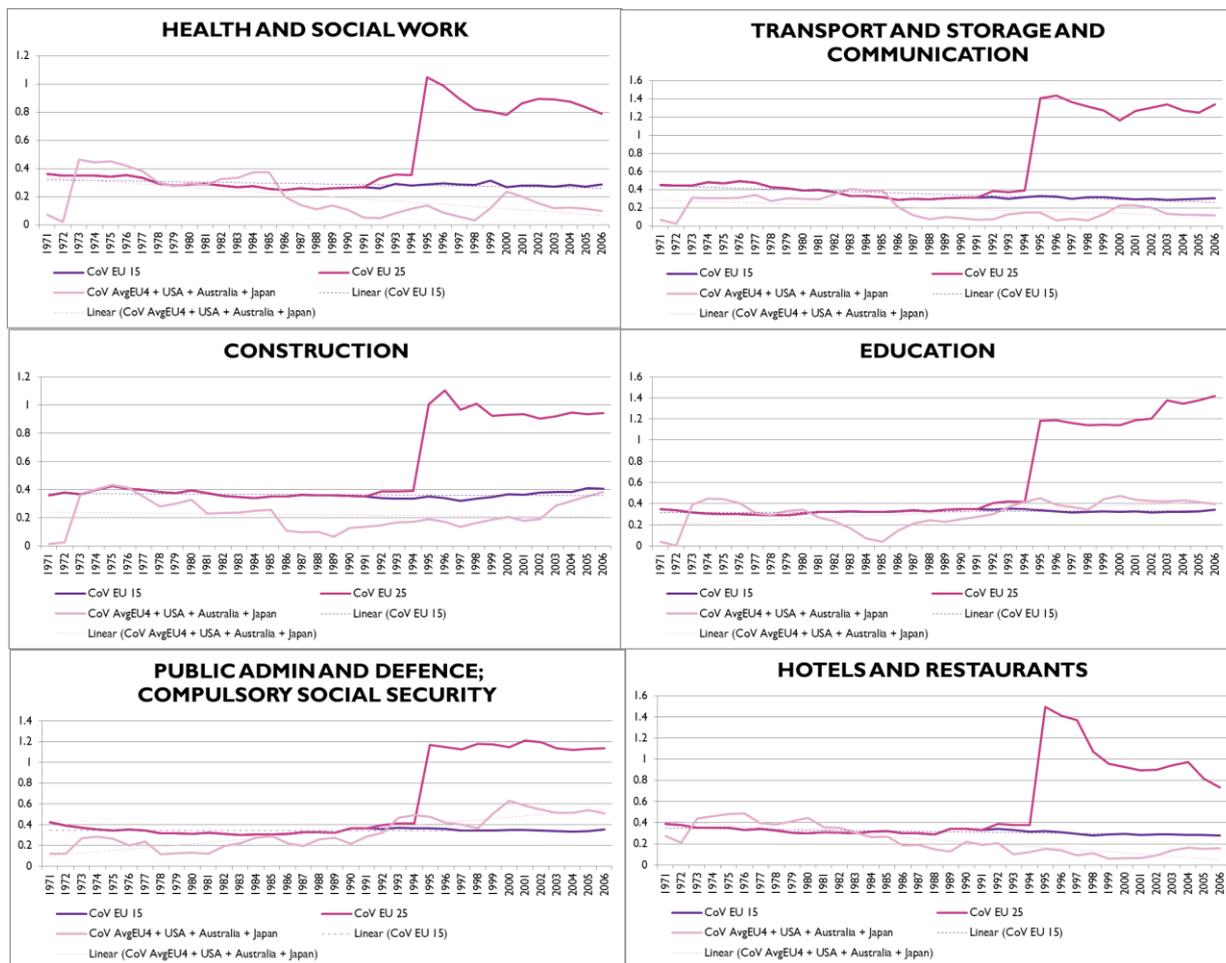
- In the period since the Accessions of the mid-2000s, there has been convergence in labour productivity (increased integration in the Single Market) in most main sectors, with the notable exceptions of manufacturing, wholesale & retail trade and education.
- This convergence has been driven overwhelmingly by convergence between the new Member States and the EU15, rather than amongst EU15 Member States.
- For almost all sectors (excepting public administration (etc) and education – both relatively unaffected by the Single Market), there has either been very little convergence since the early 1980s or what convergence there has been has been less than or entirely explicable in terms of global convergence.
- The worst four performances, in terms of EU15 convergence relative to global convergence, are manufacturing, wholesale/retail trade, construction and transport.

Figure 4.8: Labour productivity, coefficient of variation.



Source: EU KLEMS and Penn World Table.

Figure 4.9: Labour productivity, coefficient of variation (cont.).

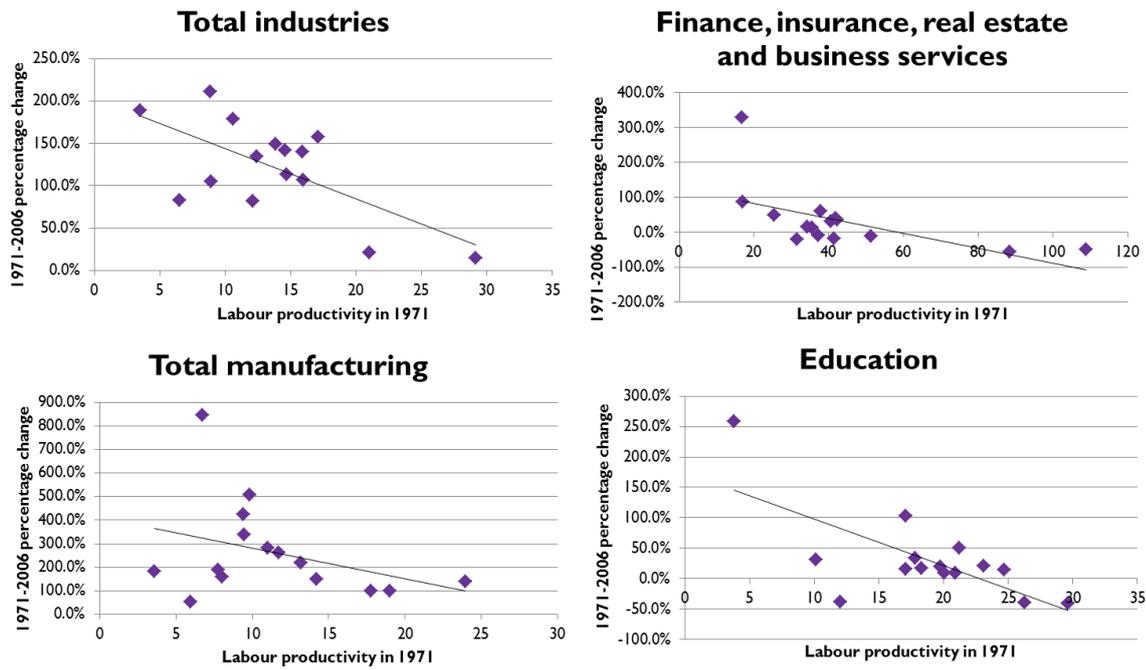


Source: EU KLEMS and Penn World Table

Finally, we are interested in testing the hypothesis of convergence in productivity. The next two figures show scatter plots of the labour productivities at the beginning of the EU KLEMS data series against the percentage change in labour productivity in the period.³⁷ Convergence would imply that the countries with lower initial labour productivity would show larger changes in this variable. The next figure shows the result of this exercise for EU 15 Member States whilst the one after repeats the exercise for EU 25, albeit with a shorter data series. Both figures show strong convergence.

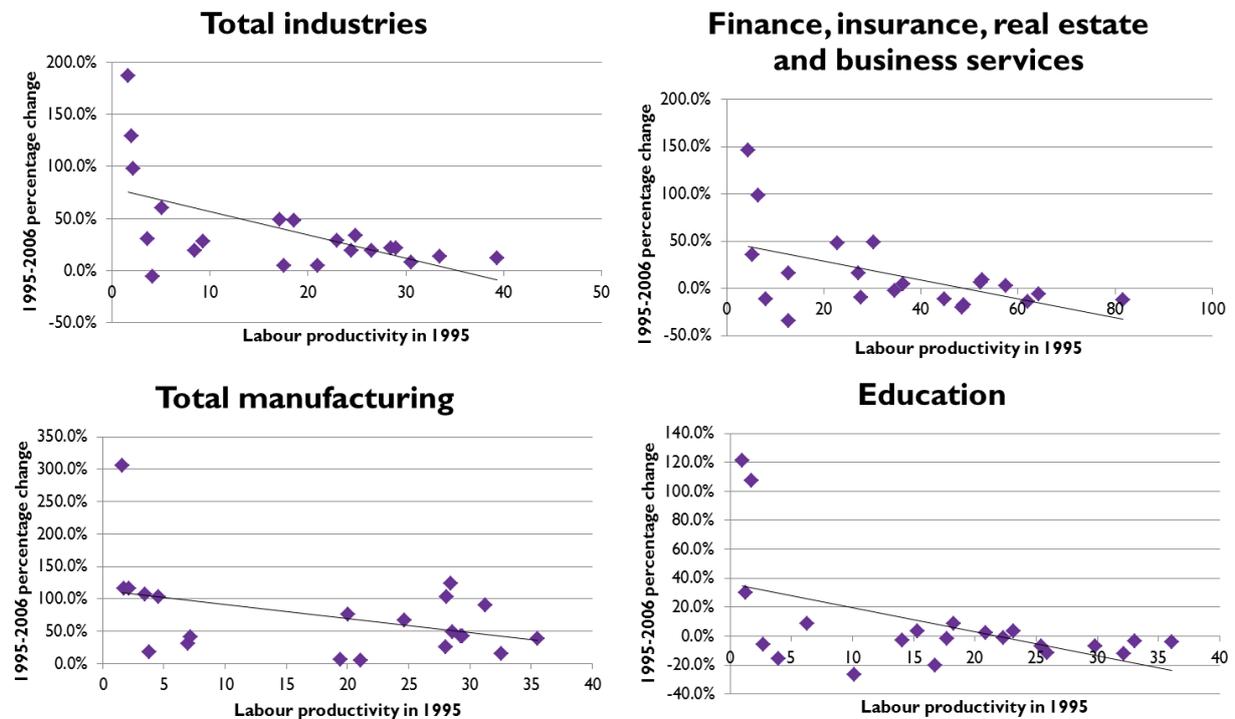
³⁷ The EU KLEMS database covers the period 1971-2006 for EU 15 Member States and 1995-2006 for EU 25 countries.

Figure 4.10 Convergence of Labour Productivity across EU 15 Member States, 1971-2006



Source: EU KLEMS and Penn World Table

Figure 4.11 Convergence of Labour Productivity across EU 27 Member States, 1995-2006



Source: EU KLEMS and Penn World Table

4.3.4 Interest rates

As free movement of goods and services should reduce price differentials, and free movement of labour reduce wage differentials, free movement of capital should reduce differentials in the cost of capital. One form of capital is debt, and one measure of the cost of debt is interest rates charged. Hence a measure of integration within the Single Market is the dispersion in interest rates.

Interest rates might differ between consumers and firms. In our analysis we have considered three measures: the rate for housing loans, the rate for enterprises for loans up to one year and the rate for enterprises over one year. We examine the CoV of these three rates.

The next chart compares the evolution of the CoV for all three borrowing interest rates for EU countries. The chart can be divided in four periods. During the first period, 1990-1994, dispersion not only did not decrease, but it increased during 1992-1994 — perhaps partly attributable to the ERM crisis and the subsequent increase in exchange rate movement differentials between Member States³⁸ and (both in the period of the crisis³⁹ and subsequently) between policy rates. The second period, 1995-2000, saw a sharp decrease in the dispersion in all three rates, once the ERM stabilised and the euro was introduced, alongside the early measures of the Financial Services Action Plan were introduced (from 1998 on). In the third, 2001-2008, dispersion stabilized at a low level, with a range between .074 and .185. The fourth and last period is the one that followed the financial crisis of 2008, where price dispersion increased, in particular for housing and enterprises under a year.

Figure 4.12: Coefficient of Variation for borrowing interest rates in EU 15 countries



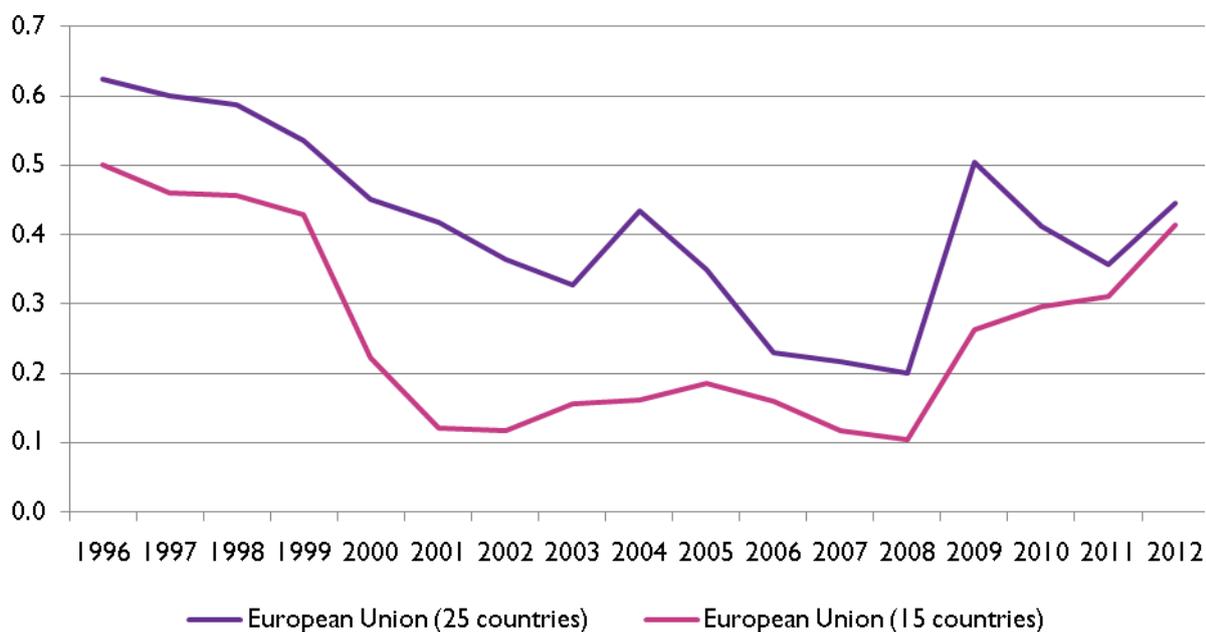
Source: Eurostat

³⁸ For example, Italy and the UK left the ERM in late 1992, whilst the tolerance band was extended for surviving ERM members from 2.25 per cent to 15 per cent in August.

³⁹ As a particularly extreme example, although not itself an ERM member, at the peak of the ERM crisis the Swedish Riksbank offered a 500 per cent interest rate in an attempt to sustain its own exchange rate peg against the Deutschemark — see http://www.princeton.edu/~ies/IES_Studies/S84.pdf (p24).

Figure 4.13 compares the CoV for the borrowing rates for enterprises over one year between EU 27 and EU 15 countries. Under an integrated Single Market for capital, we would expect the EU27 dispersion to be considerably higher until 2004, when most of the new countries joined the EU. Starting from 2004, we would expect the EU 27 dispersion to decrease and to converge to that for EU15 countries. Figure 4.13 shows a broadly similar pattern to that for the EU up to 2011. Since 2011, however, the dispersion levels have been very similar, albeit being at a significantly higher level as in previous years. A natural interpretation is that the divergence from 2008-2010 for both EU15 and EU27 was at least partly the product of the international financial crisis, whilst divergence post-2010 within the EU15 is largely the product of the Eurozone crisis.

Figure 4.13: Coefficient of Variation for borrowing interest rates for enterprises over one year in EU15 and EU25



Source: Eurostat

4.3.5 Trade

When a Single Market or Customs Union agreement is formed, it is expected that trade between members will increase whilst trade between members and non-members will decrease. We examine whether this is true for the UK. In particular, given that data is available only since the mid-1990s, we look at changes in the trade pattern between the UK and the countries that became members of the EU in or after 2004. Additionally, we will compare these trade patterns with those for trade with non-EU members.

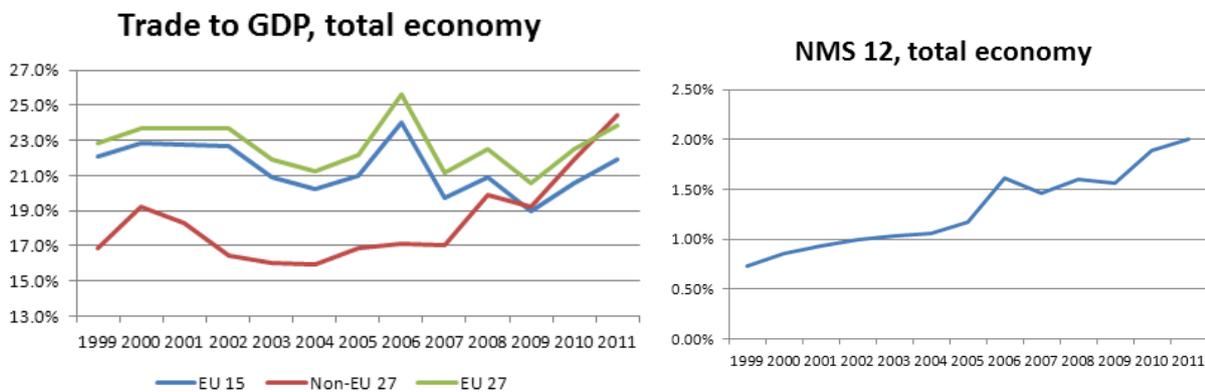
We define trade as the sum of imports and exports. We are concerned with two measures:

- the amount of trade with the 12 New Member States joining after 2004 (the NMS12) as a proportion of UK GDP; and
- the proportion of total UK trade done with EU27 vs non-EU27 countries.

The next two figures show these differences for total trade and for packaged pharmaceuticals, respectively. In both Figures it can be seen that trade with countries that acceded the EU on or after 2004 has increased.⁴⁰

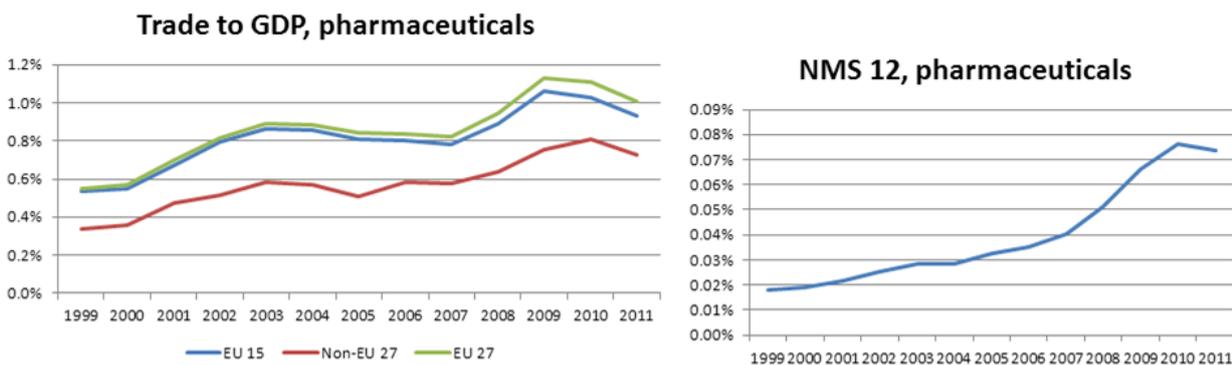
The difference in trade with the UK between the EU27 and non-EU countries illustrates the relative importance of trade with the EU with the total international trade of the UK. The first figure shows that the UK trades more packaged pharmaceuticals with EU Member States than with other countries. This measure has shown some volatility, but the trend indicates that trade with the EU has become relatively more important in recent years. In contrast, for trade as a whole it can be seen in the second figure that the relative importance of non-EU trading partners has increased significantly since 2006 and that non-EU trade now exceeds EU trade (a trend expected to continue in the next few years with continued expansion especially in China).

Figure 4.14: Differences in Trade Patterns for the Total UK Economy



Note: Y axis is % of UK GDP
Source: Eurostat

Figure 4.15 : Differences in Trade Patterns for Packaged Pharmaceuticals



Note: HS code 3004; Y axis is % of UK GDP
Source: Eurostat

⁴⁰ Of course, one cannot conclude simply from the existence of such an increase that EU Accession was the cause — for example, increased trade could be the result of a significant increase in GDP unrelated to EU membership. However, in later sections we shall analyse the impacts of customs union and single market membership more formally.

4.4 Effects of Policy Inputs on Output Measures of Integration

One question of interest is how effective different sorts of policies intended to promote integration have been in delivering integration in the “output” sense. Or to put matters differently, what proportion of achieved “output” integration can be attributed to different policy inputs?

To investigate this question we have performed a number of indicative econometric analyses. Within the scope of this project we have not been able to gather all the data one might use to investigate this question in detail in a specific sector. The essential approach here could be pursued in a more detailed sectoral study.

Our first step is to disaggregate the “Single Market Programme” into the key components set out in Section 4.2.1 above. For each of these we have identified a key date. A more detailed sectoral study might identify more specific dates than those we have used here, but for our purpose the key dates were as follows:

- Competition policy: Creation of DG COMP, 1990
- State Aid: “Enabling Regulation” Council Regulation (EC) No 994/98 of 7 May 1998
- Environmental policy: Emissions Trading System (ETS), created in 2002
- Employment policy: European Parliament and Council Directive 2004/38/EC of 29 April 2004 is about the right of citizens of the Union and their family members to move and reside freely within the territory of the EU and EEA member states.
- Trade policy: Generalised Scheme of Preferences (GSP) 1971 and reformed on 2012
- Procurement policy: EU directive 2004/18 - procurement - contracts for public works, public supply and public service, EU directive 2004/17 – procurement in the water, energy, transport and postal services sectors
- Sector-specific regulatory frameworks (perhaps taking two or three sectors as examples)
- Residual: creation of Single Market, 1993

It should be observed that the key dates for Employment and Procurement coincide, so there is just one combined date used for these in the statistical analysis below since we cannot disentangle their effects.

4.4.1 Econometric specifications

The general form is linear, with an intercept⁴¹ and a time trend variable, with key dates as dummy variables, in a panel study.

Table : Sources and dates of variables.

Variable	Source	Dates available
Wage dispersion	EU KLEMS	1970-2007
EU-wide and market-specific events	Europe Economics	-
Trade between UK and selected partners	Eurostat	1988-2011
Exchange rates	Penn World Table	1950-2010

⁴¹ The intercept is not reported in the tables below

Variable	Source	Dates available
Pharmaceuticals price dispersion	Department of Health	1992-2010
Motor vehicles price dispersion	European Commission Car Price Report	1998-2010
GDP	Eurostat	1971-2012

4.4.2 Effect of policy on integration

The following table considers the impact of our “events” upon wage dispersion.

Table 4.1: Estimated impact of Single Market policy events on wage dispersion⁴²

	Pharmaceuticals	Energy	Financial Services	Motor vehicles
Single Market	0.025524***	0.025579***	0.013668***	0.0265***
Competition	0.120638***	0.055519***	0.048089***	0.11114***
State Aid	0.116111***	0.067492***	0.034959***	0.098686***
Environment	0.071898***	0.039894***	0.015573***	0.06909***
Employment Procurement /	0.073396***	0.052656***	-0.03785***	0.054513***
Trade	-0.2689***	(omitted)	(omitted)	-0.12848***
Sector-specific regulation	0.159932***	0.053963***	0.323507***	(omitted)
Time	-0.03092***	-0.02061***	-0.01106***	-0.0213481***

Note: *** = statistically significant at 99% confidence; ** = 95%; * = 90%. “(omitted)” indicates the variable is dropped to avoid multicollinearity

The table should be read as follows. All policy measures have a statistically significant impact on wage dispersion at the 99 per cent confidence level, relative to a declining secular trend in wage dispersion (as can be seen from the negative coefficients for all sectors for the “Time” variable). Trade policy is correlated with reduced dispersion in the Pharmaceuticals and Motor vehicles sectors (omitted in other sectors). Employment / procurement policies are correlated with a reduction in financial services wage dispersion.

All other variables are associated with a rise in wage dispersion. One possible way to interpret this would be that events that tend to increase wage dispersion trigger a policy response to counter it — a version of the “if not forwards then backwards” aspects of the EU discussed in Section 2.4 in respect of non-tariff barriers (e.g. in that case absent the action to promote the Single Market, non-tariff barriers were rising and would have risen further).

An alternative (or perhaps complementary) explanation would be that the convergence in wages seen in early decades had exhausted its potential, and as the tendency to naturally integrate more started to falter, policy-makers responded by introducing Single Market measures, which then are statistically associated

⁴² We note that whilst the explanatory variables are correlated, we do not consider multicollinearity a problem since coefficients are significant. Multicollinearity might make estimates less reliable since it increases their standard deviation, but it is a well-known result in econometrics that they do not introduce bias.

with a rise in wage dispersion relative to what the model (wrongly) treats as a continuing declining wage dispersion trend.

A third possibility is that something about these measures has tended to slow convergence — that measures intended to promote integration have had precisely the opposite effect. For example, perhaps a more harmonised labour market might imply wages that were less flexible.

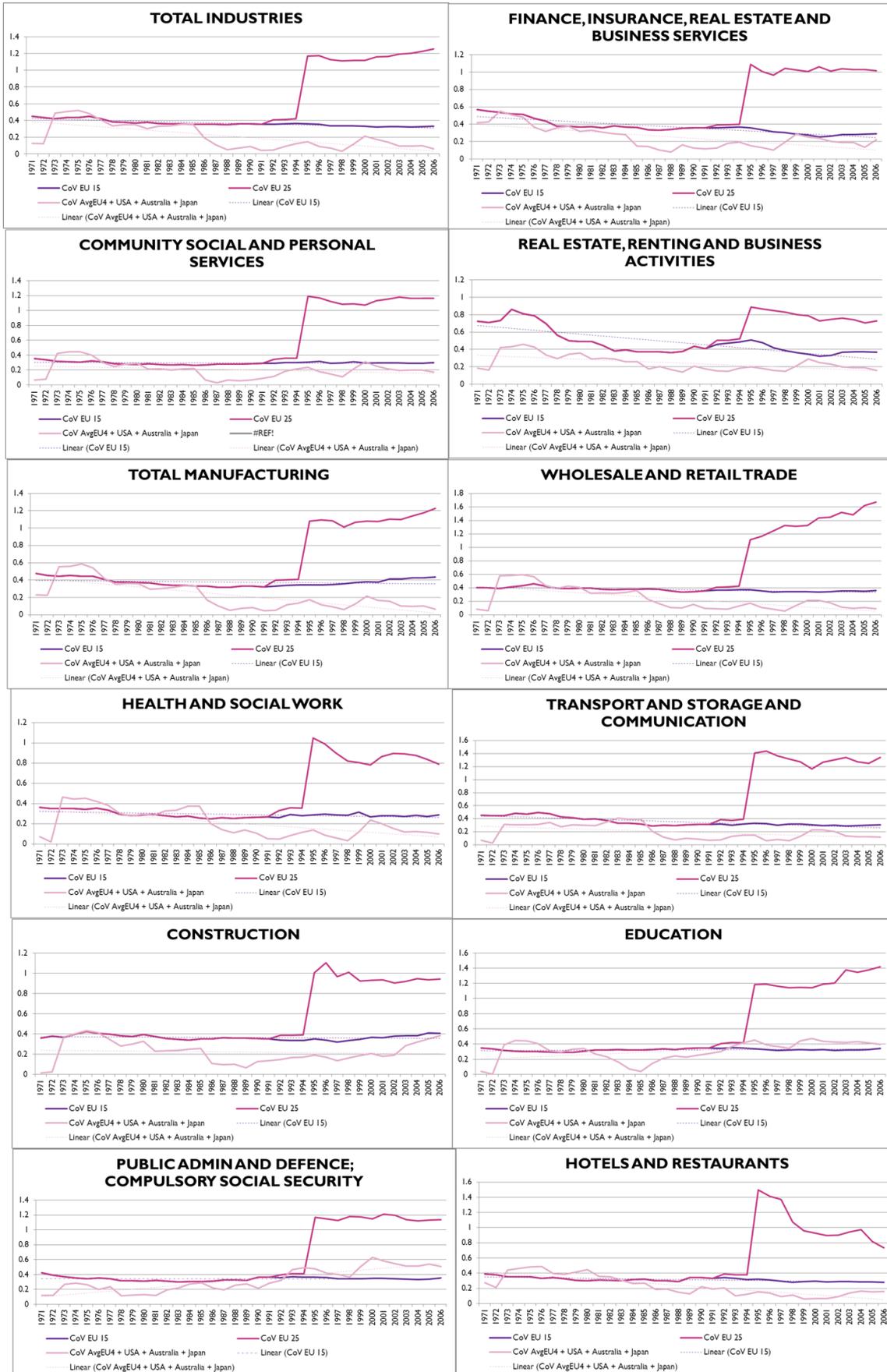
These results would be perhaps most naturally compatible with cost curves (according to our taxonomy of Section 3) of type C or perhaps even A — that is to say, the costs of achieving additional integration veer sharply upwards from at least the Single Market phase onwards on this measure.

4.5 So in which Sectors has Integration been Proceeding most?

Above we have proposed the use of “output” measures of convergence in prices, wages, productivity and so on. Next, we use this method to provide some insight into sectors where integration has made progress in recent years and similarly of sectors where progress on integration had stagnated or even reversed.

We focus upon the twelve largest sectors of the UK economy, by gross value added, and the labour productivity measure. We have calculated how labour productivity in those sectors has converged/diverged since the early 1970s, both in absolute terms and relative to a measure of global convergence – which we calculated by comparing the average labour productivity of the EU’s “big four” — UK, France, Germany, Italy — with that of the US, Japan and Australia (so, a four-“country” comparison). The results appear in the graphs below:

Figure 4.16: Labour productivity trends across sectors



The key salient features are as follows:

- As noted for the other narrower sectors considered above, in the period since the Accessions of the mid-2000s, there has been convergence in labour productivity (increased integration in the Single Market) in most main sectors, with the notable exceptions of manufacturing, wholesale & retail trade and education.
- This convergence has been driven overwhelmingly by convergence between the new Member States and the EU15, rather than amongst EU15 Member States.⁴³
- For almost all sectors (excepting public administration (etc) and education – both relatively unaffected by the Single Market), there has either been very little convergence since the early 1980s or what convergence there has been has been less than or entirely explicable in terms of global convergence.
- The four sectors in which EU15 convergence relative to global convergence is least positive / most negative are: manufacturing, wholesale/retail trade, construction and transport.⁴⁴

4.6 Summary

In this section we have considered how the degree of integration within the Single Market, for economies as a whole, for particular sector, and for the Four Freedoms of the Single Market, might be measured. We have considered both “input” indicators, considering the evolution over time of regulation intended to promote integration; and “output” indicators, measuring the degree of integration in terms of the expected impacts of the Four Freedoms (specifically upon price differentials, wage differentials, interest rate differentials, labour productivity, and trade volumes).

Key lessons from this section are as follows:

- The degree of integration can be measured, especially in respect of “output” measures such as the degree of price and wage dispersion, and output measures are correlated with input measures (though not always in the direction policymakers might have expected).
- There is evidence of increased integration — in particular in the form of wage convergence in the 1970s and 1980s and labour productivity convergence in the 2000s.
- Integration, measured on outputs, is not a one-way process. Integration can reach a plateau (as with wage dispersion from the 1990s onwards) or even, in some cases, be reversed (as with pharmaceuticals price dispersion and interest rate dispersion during the 2000s).

⁴³ One might speculate on a number of reasons for this. For example, it could be that the EU15 had already converged as much as feasible (though our analysis above in respect of narrower sectors suggested that, relative to single countries, there should still be further scope for integration in some dimensions, e.g. wage dispersion). The collapse of the Warsaw Pact and Soviet Union may have meant there was still, even a decade and a half later, as Eastern European countries joined the EU, material scope for further post-transition structural adjustment.

⁴⁴ Again, one might speculate on a number of factors marking out these sectors, such as perhaps their role in globalisation of supply chains.

5 Concrete Benefits from the Single Market

As discussed in Section 3, the benefits each Member State obtains from the Single Market come through a variety of channels, including:

- trade creation;
- more competitive markets;
- gains in efficiency;
- innovation; and
- policy influence and synergies.

The relative importance of each of these benefits can vary depending on the Member State and the stage of the process of integration. In this section we will analyse each of these sources of benefit separately, with the exception of policy influence and synergies (covered in the next section), and attempt to gain further insight on the shape of the benefit curve. In doing so, we will focus on the UK and on specific sectors (such as pharmaceuticals or energy) when appropriate.

5.1 Gains from Trade Creation

The first and most direct benefit from a free trade area, customs union or single market is the free movement of goods and services. Hence we now consider whether UK trade has been increased by its membership to the European Union's Customs Union and Single Market.

We base our analysis on the gravity model of trade that is predominant in the international economics literature.⁴⁵ The gravity model proposes that trade can be explained by measures of 'mass' of the economies (i.e. economic significance, captured by economic activity variables such as GDP) and distance between the trading partners.

We use data obtained from Eurostat for the period 1988-2011 for the amount of trade between the UK and EU and other trade partners as Japan, Turkey and the United States.⁴⁶

Table 5.1 presents our results. The explained variable in the estimation is the natural logarithm of total trade (imports plus exports). The gravity explanatory variables are the natural logarithms of the UK's GDP, the trade partner's GDP and the distance between the two countries, measured by the distance between capital cities. In addition, we added dummy variables that take the value of one if the country has a free trade, customs union or single market agreement with the UK in that year. Our estimation exploits the panel structure of the data using a random-effects approach, that allows for the inclusion of distance as a time-independent explanatory variable.

⁴⁵ The gravity model was originally developed by Tinbergen, Jan (1962), *Shaping the World Economy* (New York: The Twentieth Century Fund). For an overview and discussions from an applied perspective, see World Trade Organization "A Practical Guide To Trade Policy Analysis", 2012.

⁴⁶ See the Harmonized Commodity Description and Coding System (HS).

Table 5.1: Estimation of the effect of free trade agreements on total trade in the UK via a gravity model

Variable	1	2	3
Intercept	11.80952***	21.17065***	21.88721***
UK GDP	0.50075***		
Partner GDP	0.737377***		
Distance	-0.76516***		-0.76516***
Free Trade Agreement	0.155589	0.491578***	0.305289***
Customs Union	0.085629	0.049096	0.02679
Single Market	-0.16945**	0.50758***	0.529891***
Unexplained UK GDP			0.50075***
Unexplained Partner GDP			0.737377***
R ²	0.8936	0.4095	0.8936

Note: Panel estimation method: random effects. ***, ** and * denote that a coefficient is significant with 99%, 95% and 90% confidence, respectively.

The way to interpret these results are as follows. There are three regression models, in the columns labelled “1”, “2” and “3”. Statistically-significant variables are marked with *s, with two stars and higher (i.e. significance at the 95 per cent level or above) being the standard measure of “statistical significance”. In the first regression, we obtain the coefficients for GDP, distance and our indicators for the various stages of progress of the Single Market project. Our estimations show that there is considerable correlation between the GDP and trade agreement dummies. Therefore, the impact of these variables is likely to pick up the effects of one another. In order to confirm our suspicion that their effect on trade is influenced by the correlation with other variables, we perform a second regression, in which we include only these dummies but exclude GDP, and distance. It can be seen in the second column that there is a sign reversal in the coefficient for the agreement dummies when comparing the first two regressions, in the one case (Single Market) where the variable was significant in the first regression. We can infer, therefore, that these agreements have a positive effect on trade, but this effect is not captured in the first estimation due to the “multicollinearity” problem — i.e. to the impact of variables picking up their effects upon each other. In order to address this issue, therefore, we performed auxiliary estimations to determine what portion of GDP variation can be explained by trade agreements.⁴⁷ We subsequently constructed new variables for UK and the partner countries’ GDP from the residuals of these estimations. These new variables are the variation in GDP that cannot be explained by trade agreements. Finally we performed the gravity model estimation using these new variables as ‘mass’, which is reported in the third column — this being our preferred model.⁴⁸

⁴⁷ The auxiliary regressions have the UK and Partner’s GDP as explained variable and the trade agreement and events in the pharmaceuticals market dummies as regressors. Whilst our approach with the auxiliary regression might appear ad-hoc to some readers, it is analogous to a standard methods for the de-seasonalisation of time series. Alternatively, it would be possible to conduct a difference-in-difference regression to account for this effect.

⁴⁸ We observe that, by identity, the coefficients on the “Unexplained UK GDP” and “Unexplained Partner GDP” variables in the third model will be the same as for “UK GDP” and “Partner GDP” in the first, as will the R² for the two models. The model includes a constant (Intercept), so all that the coefficient on GDP is measuring is changes associated with changes. But the adjusted GDP variables (“Unexplained” UK and partner GDP) have precisely the same changes as the unadjusted variables in every period except for at the time of introduction of the dummies for the trade variables — these simply induce just a downward translation of the unadjusted variable, taken downwards in the trade dummy introduction period — but the difference in that period is fully absorbed by the model as impacts of the trade dummy coefficients. So the coefficients for GDP must be identical to adjusted GDP, but then there is an impact on the constant.

From our preferred model, in column 3, we can see that there is an underlying level of trade (the Intercept), trade increases with the (adjusted) GDP of the UK and partners, trade decreases with “Distance” (as expected in a gravity model), and trade increases with the introduction of a free trade area and the Single Market, but is unaffected by the customs union (the coefficient on “Customs Union” is not statistically significant). Overall, the model is statistically very powerful at explaining trade, as indicated by the “R²” variable (which can range from 0 to 1, and in this context might be viewed as indicating reasonable explanatory power even at around the 0.5 mark) being close to 0.9.

The broad method can be applied to specific sectors, also, and indeed in specific sectors more concrete impacts may be identifiable. We present below gravity estimations for trade in pharmaceuticals packaged in doses, again using data obtained from Eurostat for the period 1988-2011 for the amount of trade between the UK and EU and other trade partners as Japan, Turkey and the United States.⁴⁹ We believe that this approach could be applied in other sectors, also, where data is available.

In Table 5.2 we present the results of our pharmaceuticals trade model. Note that in addition to the GDP and trade policy dummies that appear in the all-trade regression above, for the pharmaceuticals sector we also include a dummy variable that takes a value of one starting on 1996. This variable captures the year in which, according to our judgement, there were relevant events that relate to the trade of pharmaceuticals in the EU, namely, the court rulings regarding parallel trade (Merck v Primecrown) and trademarks/repackaging (Bristol-Myers Squibb v Paranova).

Table 5.2: Estimation of the effect of free trade agreements on total pharmaceutical trade in the UK via a gravity model

Variable	1	2	3
Intercept	-0.9096606	16.88167***	21.88721***
UK GDP	0.8094253***		
Partner GDP	1.068762***		
Distance	-0.6975915***		-0.6975915***
Free Trade Agreement	-0.4015218***	0.1667964	0.1914056
Customs Union	0.2102044	0.0907828	-0.0117946
Single Market	-0.237119	1.081346***	0.6161392***
Court rulings	0.4608576***		0.4608576***
Unexplained UK GDP			0.8094253***
Unexplained Partner GDP			1.068762***
R ²	0.7978	0.1288	0.7978

Note: Panel estimation method: random effects. ***, ** and * denote that a coefficient is significant with 99%, 95% and 90% confidence, respectively.

We conclude from our estimations in the third column that trade in pharmaceuticals in the UK is positively affected by the UK’s GDP, the partner country’s GDP, the existence of the Single Market and the court rulings of 1996, whilst it is negatively affected by geographical distance. All these effects are statistically significant at extremely high confidence levels and the total explanatory power of the estimation, measured by the R-squared is at virtually 80 per cent.

As an alternative to the free trade agreement dummies approach (an inputs-based measure of integration) used in the regressions reported above, it is possible to include price dispersion as a measure of integration. It is expected that trade would increase with integration, which in turn leads to a lower price

⁴⁹ Harmonized Commodity Description and Coding System (HS), category 3004.

dispersion. The table below estimates the gravity model using price dispersion as a measure of integration.⁵⁰

Table 5.3: Gravity model estimation of total pharmaceutical trade in the UK with price dispersion measures

Variable	4	5
Intercept	5.779373**	-9.264746***
UK GDP	0.250034	1.579613***
Partner GDP	1.022431***	1.030546***
Distance	-0.5699014 ***	-1.006658***
EU Price Dispersion	-0.3215071**	
Bilateral Price Dispersion		0.005832***
Court rulings	0.3614859**	0.1445625
R ²	0.8112	0.7807

Note: Panel estimation method: random effects. ***, ** and * denote that a coefficient is significant with 99%, 95% and 90% confidence, respectively

We have two different price dispersion measures. The first one considers the dispersion at the EU level through the natural logarithm of the coefficient of variation of the prices reported by the Department of Health. The second one is conducted bilaterally, measuring the price differential between the trade partner and the UK as a percentage of the UK price index of pharmaceuticals.

Based on these results, we conclude the following:

- The gravity model assumption is validated with the ‘masses’, measured by domestic and foreign GDP, increasing the predicted amount of trade and the distance decreasing it. In our pharmaceuticals estimation models an increase of 1 per cent in foreign GDP translates into an increase of trade of between 1.02 per cent and 1.07 per cent. The elasticity of trade with respect to domestic GDP ranges between 0.81 per cent and 1.58 per cent.⁵¹ An increase in the distance between the UK and its trading partner of 1 per cent is associated with a decrease in trade of between 0.56 per cent and 1.03 per cent.
- Pharmaceuticals price dispersion measured at the EU level is negatively correlated with trade, whilst there a positive but small correlation between trade and bilateral price dispersion. The elasticity of trade with respect to EU price dispersion is -0.32.
- The benefits from pharmaceuticals trade continue to increase after the introduction of Single Market phase, which would provide evidence against panel (c)-type scenarios for benefits in respect of trade, according to the taxonomy we introduced in Section 3.
- The presence of the Single Market in pharmaceuticals and the court rulings intended to enhance its functioning are statistically associated with increases in trade of 62 per cent and 46 per cent, respectively.
- We do not find the coefficients for the EU Customs Union significant. However, given the dates of our sample, we attribute this fact to insufficient data.⁵² On the other hand, we cannot exclude this as indicative of how important the removal of non-tariff barriers is relative to tariffs (as per panel (d)-type scenarios for benefits, according to the taxonomy we introduced in Section 3).

⁵⁰ With this analysis, we evaluate the adequacy of price dispersions as measures of integration. A formal analysis of the two-way causality between trade and price dispersion would require a careful selection of instrumental variables. Such analysis falls beyond the scope of the present report.

⁵¹ Including only the coefficients of specifications where UK GDP was significant.

⁵² The data available from Eurostat covers the 1988-2011 period. However, the EU Single Market was put in place in 1993. Therefore, there is only data for the Customs Union era for the years 1988-1992.

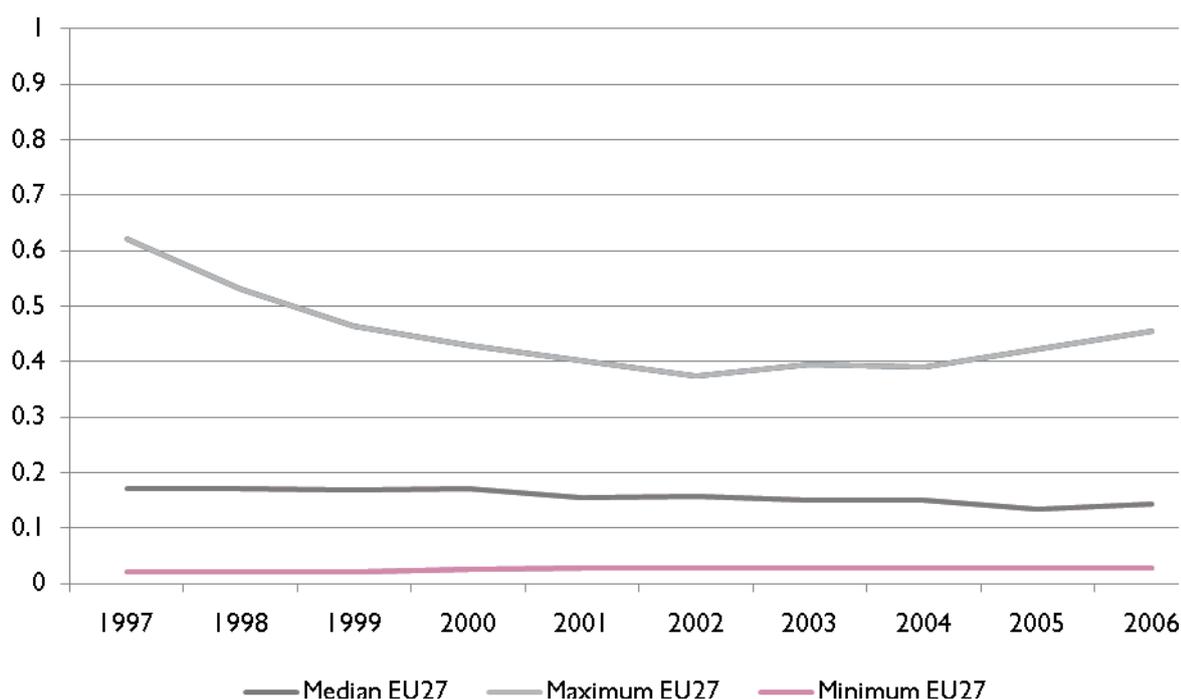
5.2 Competition

One of the expected benefits of the Single Market is an increase in the competitive pressure in domestic markets reducing prices for consumers and increasing technical and allocative efficiency within and between firms and industries.

We measure the degree in competitiveness in domestic markets through the standard Hirschman-Herfindahl index (HHI).⁵³ For HHI definition purposes we use the geographical area of the market as the Member State itself.⁵⁴ We focus on two different sectors: pharmaceuticals and motor vehicles. The former is one of our main case studies, whilst we expect the latter to serve as benchmark of successful integration across the EU.

Figure 5.1 shows the median, maximum and minimum HHI across 10 EU countries for the period 1997-2006.⁵⁵ The median and minimum values are relatively stable over time, with a small decrease in the median from .17 to .14 (a 16.6 per cent decrease). However, the maximum value exhibits considerable variation over time. The countries with the largest HHIs are Austria, Denmark and Finland, whilst the lowest were France, Italy and Spain. For Austria and Finland HHIs decreased from .55 and .62, respectively, in 1997 to .28 in 2006. It is interesting to note the resemblance between the maximum HHI and the price dispersion of pharmaceuticals in the EU from the figure below.

Figure 5.1: Hirschman-Herfindahl index for Pharmaceuticals, 1997-2006



Source: EU KLEMS, based on the Amadeus database, defined according to NACE Rev.1.1, code 244.

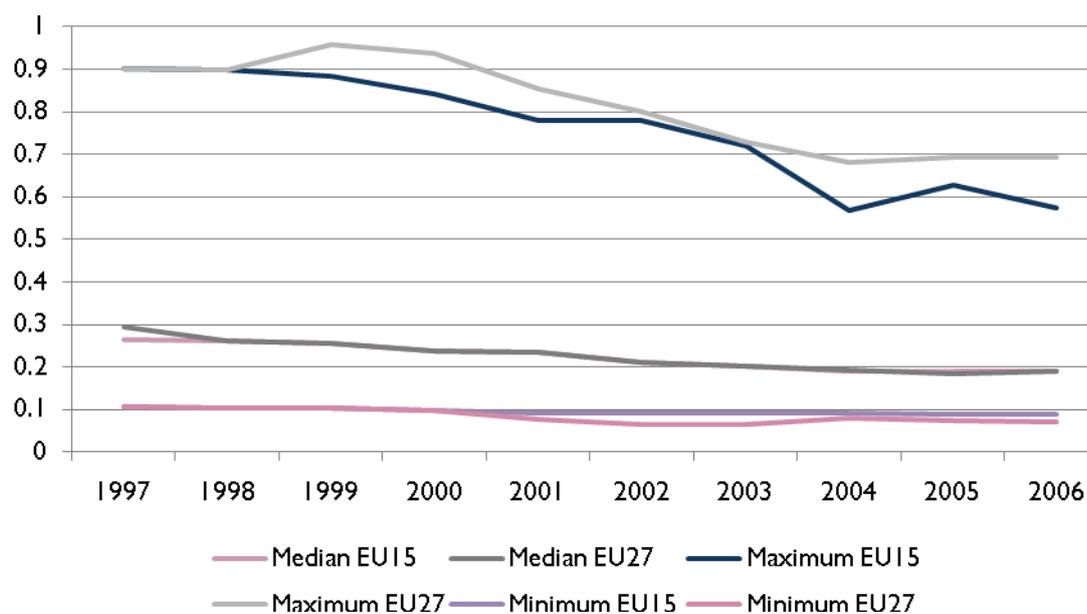
⁵³ The HHI is defined as the sum of the squares of the market shares of all the firms that participate in the market. A higher value of this index indicates a less competitive industry. An index below 0.15 is generally interpreted as competitive by different competition authorities.

⁵⁴ This does not imply we are assuming that the relevant economic market is only the Member State — quite the reverse, for we are seeking to assess how competition within states might be promoted by the extension of the relevant economic market from the Member State to the EU as a whole.

⁵⁵ Data is available for the following countries: Austria, Belgium, Denmark, Spain, Finland, France, Germany, Italy, Netherlands and the United Kingdom

Figure 5.2 shows an analogous analysis for the motor vehicles sector. In this chart, given the larger amount of data available, we include results for EU15 and EU27 Member States. In this case, we observe that all measures (namely, median, maximum and minimum values) decrease over time for both groups of countries. See Table 5.4 for the corresponding nine-year percentage changes. As it is shown there, the increase in competitive pressure applies to both EU15 and EU27 groups. Interestingly, for the EU27 group the proportionate increase in the median HHI is greater than in the maximum HHI, suggesting that the increase in competitive pressures is not simply a matter of competition increasing in those new Member States that are least competitive to begin with.

Figure 5.2: Hirschman-Herfindahl index for Motor vehicles, trailers and semi-trailers, 1997-2006



Note: Uses code 34

Source: EU KLEMS, based on the Amadeus database, defined according to NACE Rev.1.1

Table 5.4: Hirschman-Herfindahl index for Motor vehicles, trailers and semi-trailers, 1997-2006

	1997	2006	Percentage change
Median			
EU15	0.26	0.19	-28.2%
EU27	0.29	0.19	-35.3%
Maximum			
EU15	0.90	0.57	-36.2%
EU27	0.90	0.69	-22.9%
Minimum			
EU15	0.11	0.09	-15.4%
EU27	0.11	0.07	-32.5%

Note: Uses code 34

Source: EU KLEMS, based on the Amadeus database, defined according to NACE Rev.1.1

Note that the greatest increase in competition / reduction in concentration has been achieved in those countries with the least competition initially.

Our findings are consistent with the hypothesis that competition increases with further integration. In sectors when integration has been more successful, as with motor vehicles, improvements in the HHI can be seen across the board. In sectors in which there is only partial integration, such as pharmaceuticals, the benefits from the Single Market might become tangible only in some markets, such as those with, initially, the lowest levels of competitive pressure.

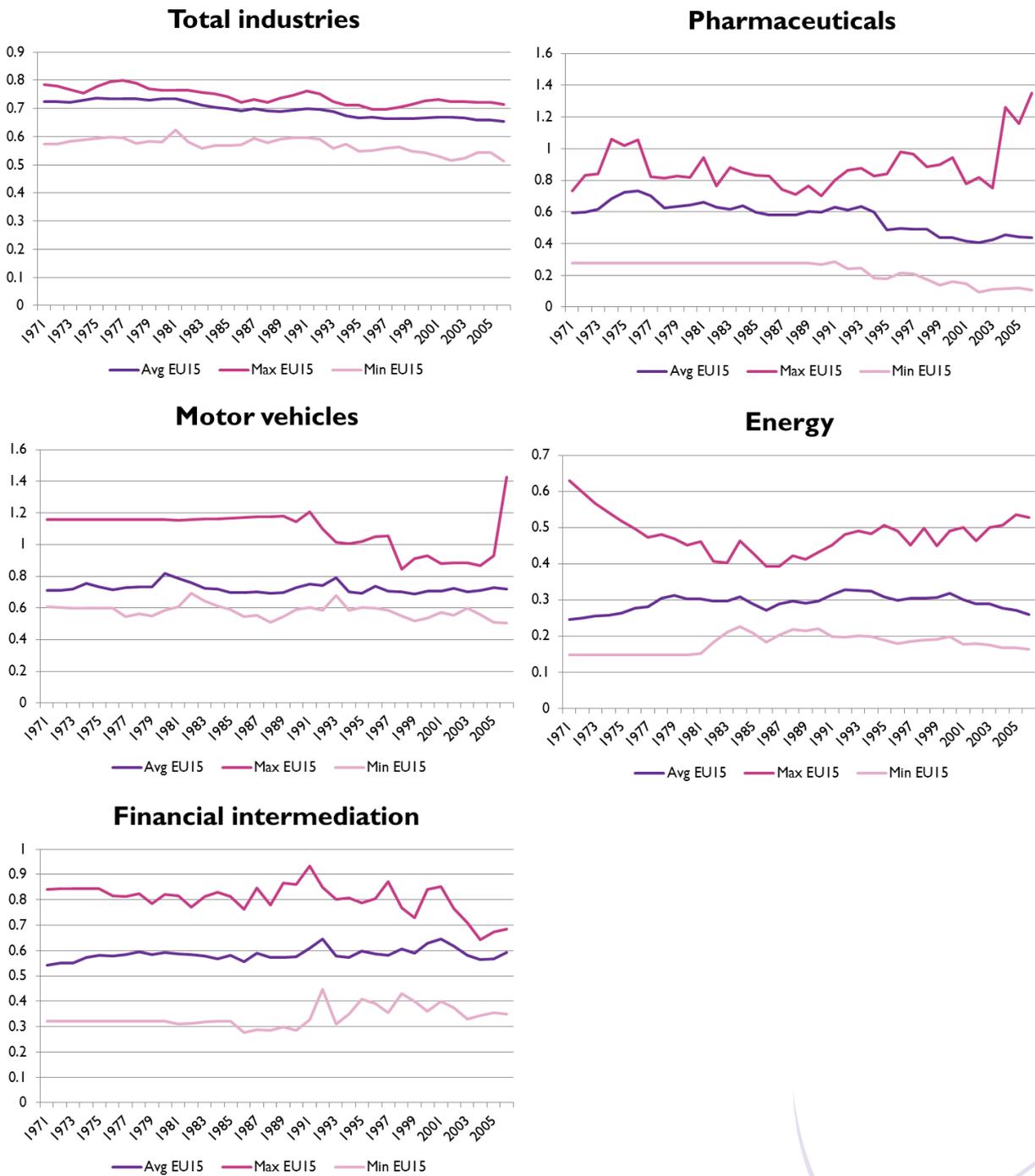
5.3 Efficiency gains

Potential benefits of the Single Market include gains in efficiency from sources such as economies of scale and scope. We measure these efficiency gains using unit labour costs — defined as the ratio of total labour costs (total hours worked multiplied by the hourly wage) to Gross Value Added, deflated by the Gross Value Added price index. Data is available from EU KLEMS from 1970 for EU 25 Member States.

The following charts present our results. Unlike the case with labour productivity in the previous chapter, there seems to be no clear trend in the unit labour costs for the total economy, energy and financial services sectors.

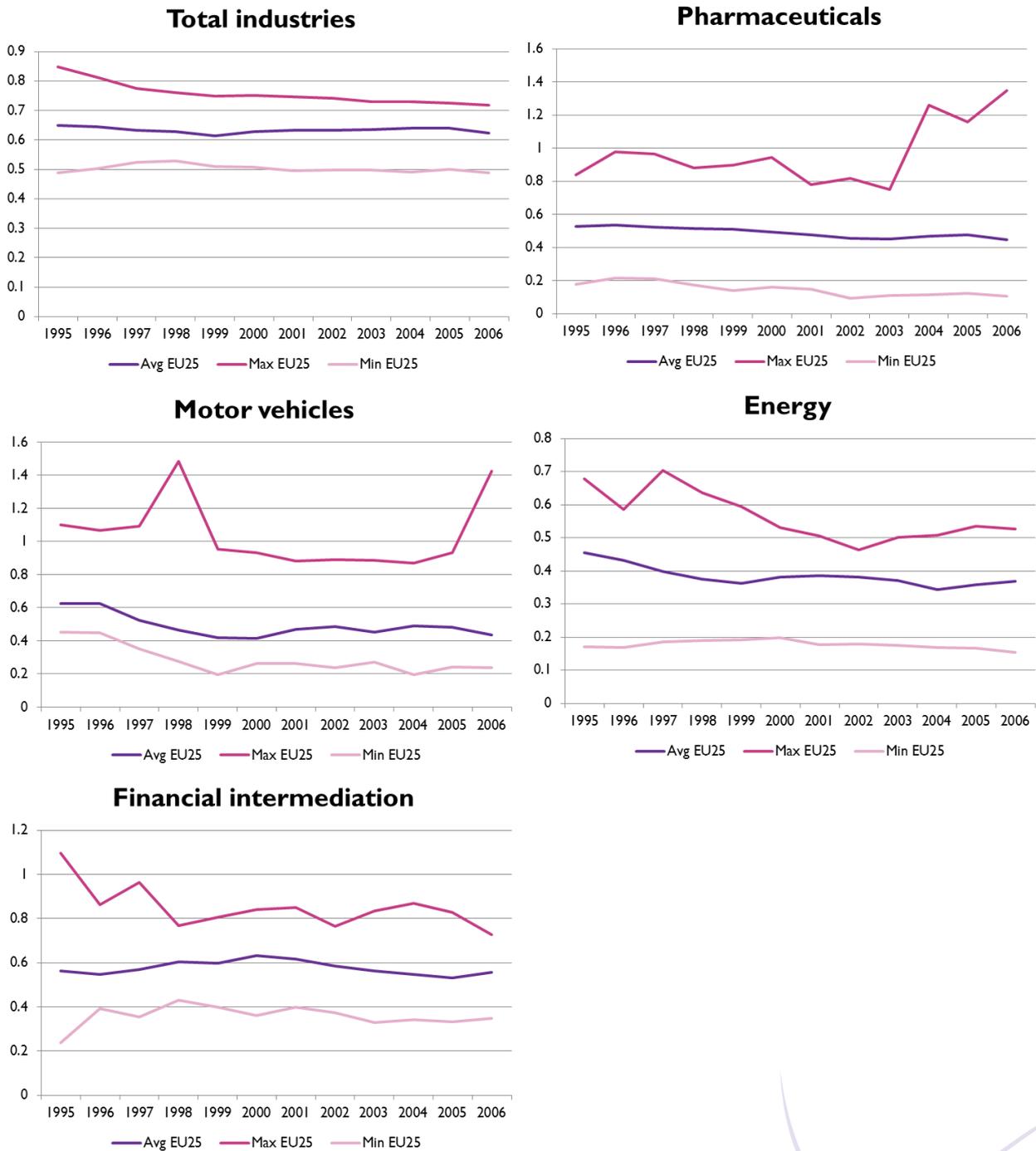
In the period 1996-2007, the EU median labour cost increased 7.7 per cent for the total economy, but decreased by 10.2 per cent and 6.9 per cent for the energy and financial services sectors, respectively. As we saw above, the pharmaceutical sector had the largest gains in efficiency in recent years, when measured by labour productivity. It can be seen that this sector is exceptional in that the unit labour costs have decreased.

Figure 5.3: Unit Labour Costs for Member States of the EU15, 1971-2006



Note: Defined by NACE Rev. 2 sectors
 Source: EU KLEMS

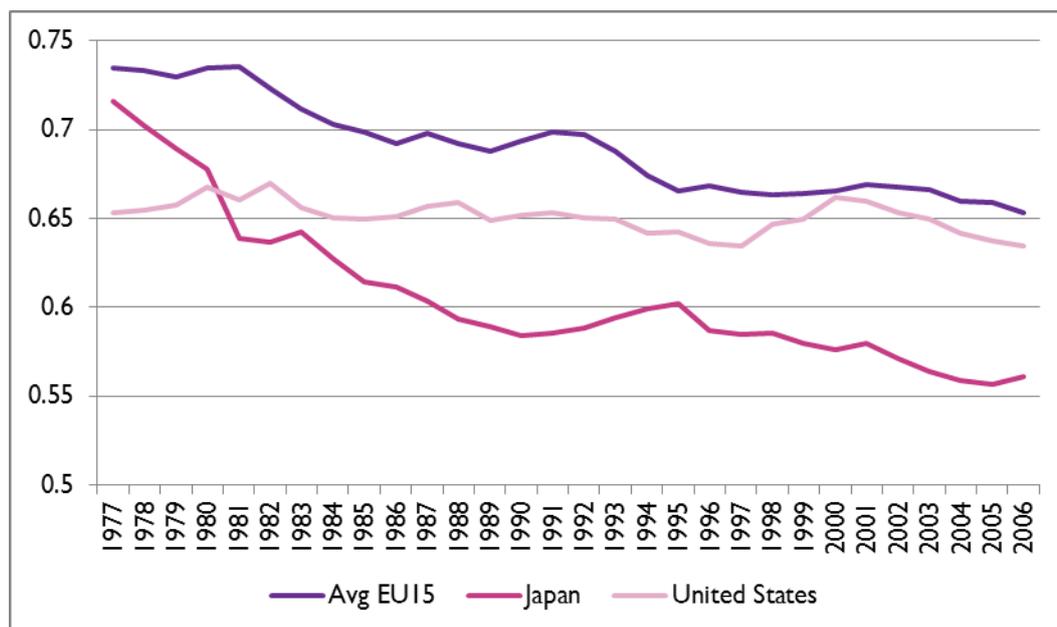
Figure 5.4: Unit Labour Costs for Member States of the EU25, 1995-2006



Note: Defined by NACE Rev. 2 sectors
 Source: EU KLEMS

Thus, unit labour costs appear to be fairly invariant to the development of the Single Market. So, despite labour productivity rising, there is relatively little cost efficiency increase overall. This implies that, at least after 1996, cost efficiency benefits are flat — perhaps indicating a pattern most like that in benefits panel (c) (i.e. there being relatively little cost efficiency gain associated with the Single Market itself).

A lack of increased cost efficiency has implications for the EU’s global competitiveness (see below). However, the rise in labour productivity indicates that there is *some* efficiency gain — it is simply that that efficiency gain is (to a material extent) captured by labour, rather than translating into lower unit costs.

Figure 5.5: Unit Labour Costs for total industries in the EU15, Japan and the United States, 1977-2006

Note: Defined by NACE Rev. 2 sectors

Source: EU KLEMS

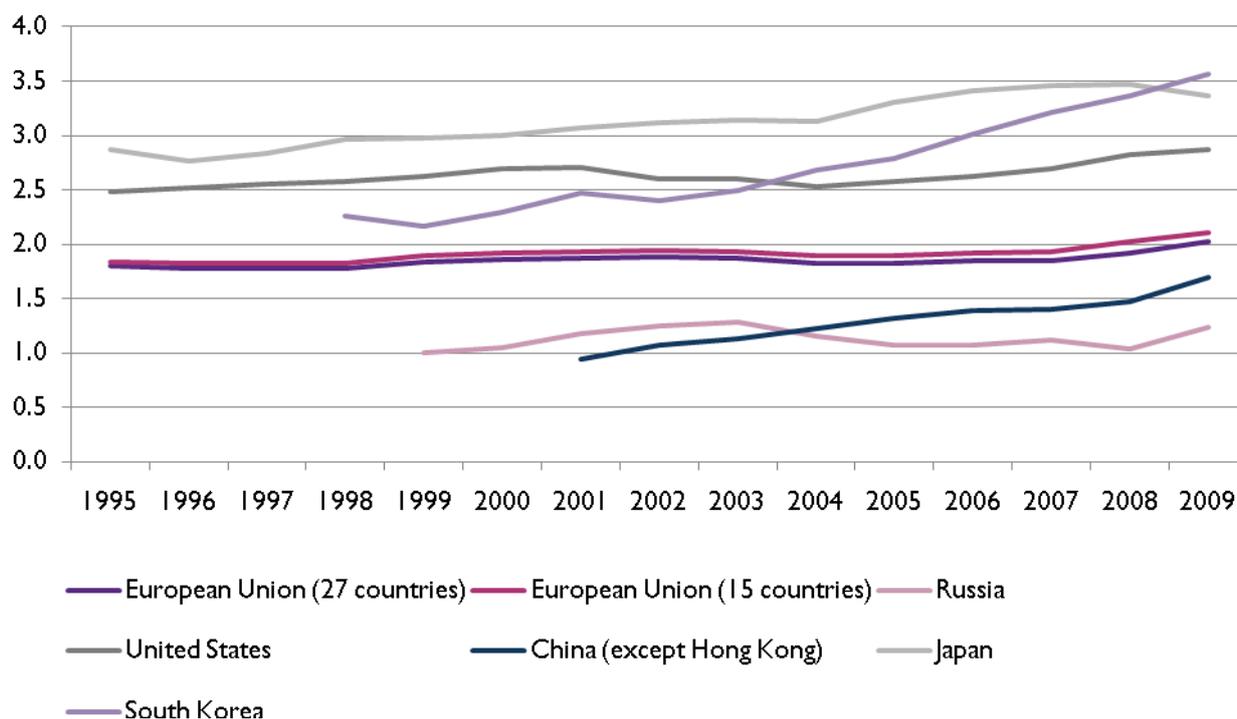
5.4 Innovation

Higher levels of innovation are among the expected benefits of European integration. We measure innovation through expenditure in Research and Development (R&D). We observe immediately that there are some weaknesses in such an approach, in particular

- Because expenditure is an input, not an output — by our approach here, if less is spent on innovation but is spent much more efficiently such that more innovating occurs, we shall mistakenly infer that innovation has risen. Implicitly, we are assuming that the amount of innovation produced increases with the amount spent on innovation, and that the productivity of innovation expenditure is invariant.
- Because innovation covers a much broader spectrum of activities than even simply the output of R&D, including process innovation, new product ideas, and new service concepts that might arise from new start-up firms or from on-the-job insights as well as from targeted research by existing players.

Other measures of innovation could include the number of personnel employed in R&D activities, number of patents and innovative activity (according to the biannual Community Innovation Survey). These caveats notwithstanding, due to data availability and the need to make international comparisons, we focus on expenditure on R&D.

The figure below shows the evolution of R&D expenditure for the total economy as a percentage of GDP. On first inspection, the expenditure in EU 27 and EU15 countries follow similar patterns, which show a very gradual increase over time, from 1.8-1.84 per cent of GDP in 1995 to 2.02-2.11 per cent in 2009 (a 12.2-14.7 per cent increase in the period). Figure 5.6 also shows that Japan, South Korea and the United States have had consistently higher levels of R&D expenditure relative to GDP, whilst China and Russia exhibit lower levels. In addition, the time evolution of R&D expenditure has seen rapid increase in China and South Korea, whilst this process has been slower in Japan and the United States.

Figure 5.6: Total R&D Expenditure (GERD) as a percentage of GDP, 1995-2009

Source: Eurostat.

Table 5.5 shows that the apparent uniformity and stability of innovation in the EU does not hold when comparing individual Member States. The second column shows the level of R&D expenditure in 2011. The European average is approximately 2 per cent of GDP. The countries that significantly outperform this figure are (in order) Finland, Sweden, Iceland, Denmark, Switzerland, Germany, Austria, Slovenia and Estonia.

The third column in

Table 5.5 shows that average percentage change of the R&D expenditure to GDP ratio in the period from 1995 to 2011. Whilst the European average is .75 per cent, this measure shows a large degree of dispersion across Member States. The countries that show an average at least four times as large as the European are (in order) Malta, Estonia, Portugal, Cyprus, Iceland, Lithuania, Czech Republic, Austria, Switzerland, Denmark, Spain, Hungary, Finland and Slovenia.

There are two main conclusions that can be drawn from

Table 5.5. First, a significant part of the Member States that joined the EU on or after 2004 have seen a very substantial increase in their R&D expenditure. This fact is consistent with the benefits of the Single Market in terms of innovation. Second, a number of established economies in the EU have either low levels or low growth in their R&D spending. These Member States include France, the Netherlands and the UK. This fact, however, might not necessarily indicate that those countries do not reap the benefits from innovation in the Single Market for two reasons. First, integration might lead to specialisation and those Member States might not have their comparative advantage in sectors that are R&D intensive. Second, innovation in sectors such as financial services, which represent a significant part of the economies of some Member States as the UK, might not be best captured through R&D expenditure. Therefore, their innovation activities might be underrepresented in the measures used in this section.

Table 5.5: Total R&D Expenditure (GERD) as a percentage of GDP, 1995-2011

Country	2011 level	Average annual percentage change
European Union (27 countries)	2.03%	0.75%
European Union (15 countries)	2.12%	0.89%
Malta	0.73%	12.15%
Estonia	2.38%	11.62%
Portugal	1.50%	6.85%
Cyprus	0.48%	6.18%
Lithuania	0.92%	4.87%
Czech Republic	1.84%	4.50%
Austria	2.75%	3.65%
Denmark	3.09%	3.36%
Spain	1.33%	3.31%
Hungary	1.21%	3.30%
Finland	3.78%	3.27%
Slovenia	2.47%	3.08%
Greece	0.60%*	2.82%
Latvia	0.70%	2.52%
Ireland	1.72%	2.01%
Germany	2.84%	1.64%
Italy	1.25%	1.60%
Belgium	2.04%	1.26%
Poland	0.77%	1.26%
Sweden	3.37%	0.28%
Netherlands	2.04%	0.22%
France	2.25%	-0.08%
United Kingdom	1.77%	-0.41%
Bulgaria	0.57%	-0.52%
Luxembourg	1.43%	-1.58%
Slovakia	0.68%	-1.87%
Romania	0.48%	-2.75%
Non-EU		
Iceland	3.11%***	5.61%
Norway	1.70%	0.05%
Switzerland	2.87%**	3.48%
Croatia	0.75%	-2.71%

Note: Due to data availability, *, ** and *** denote the levels in the years 2007, 2008 and 2009, respectively
Source: Eurostat

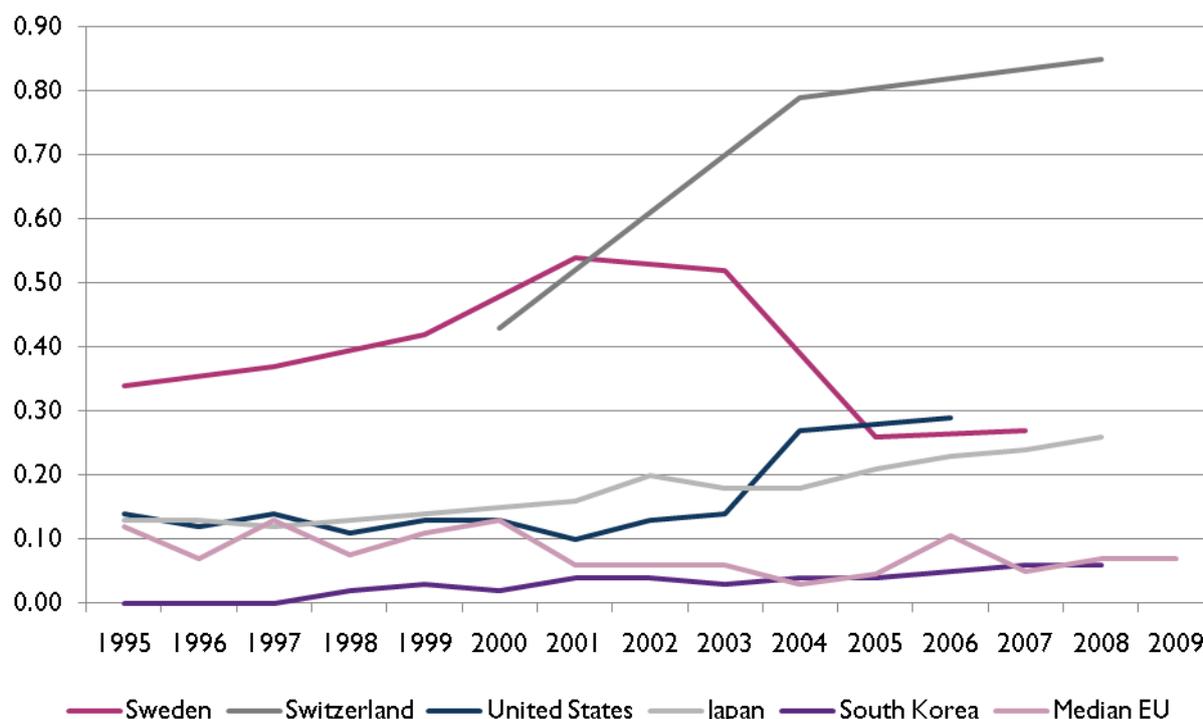
As it has been done throughout our analysis, more detailed conclusions can sometimes be obtained for specific sectors. We conduct a similar analysis for the pharmaceutical sector.

Figure 5.7 shows expenditure on R&D in the pharmaceuticals sector. The median and maximum expenditure in European countries is compared to other developed countries.⁵⁶ From this Figure we make the following two observations. First, it can be seen that the median EU R&D expenditure in

⁵⁶ The maximum R&D expenditure in pharmaceuticals in the Europe for the period covered in our sample took place initially in Sweden and later in Switzerland. The median expenditure in the EU considers all the current Member States for which data is available. We note that the results of the BERD survey are not available for some NACE categories for the following EU countries in the period covered: Denmark, Finland, Lithuania, Luxembourg and the UK.

pharmaceuticals was comparable to the ones in Japan and the United States until 2000. The median EU expenditure decreased after that date whilst the ones for Japan and the United States increased consistently. Second, the European countries that have the highest expenditures in R&D for pharmaceuticals clearly outperform other developed countries in both their levels and their growth rates.

Figure 5.7: Business Enterprise R&D Expenditure (BERD) in pharmaceuticals as a percentage of GDP, 1995-2009



Note: Pharmaceuticals are defined by the category Manufacture of pharmaceuticals, medicinal chemicals and botanical products (DG244) of NACE Rev. I.1.

Source: Eurostat

Table 5.6 shows, analogously to

Table 5.5, the wide dispersion in R&D expenditure for pharmaceuticals across Europe.

Table 5.6: Business enterprise R&D Expenditure (BERD) for pharmaceuticals as a percentage of GDP, 1998-2009

Country	2009 level	Average annual percentage change
Belgium	0.33%	4.7%
Bulgaria	0.01%	-14.5%
Czech Republic	0.03%	10.5%
Germany	0.14%**	3.5%
Ireland	0.14%	4.5%
Spain	0.06%	2.3%
Italy	0.03%*	-4.0%
Cyprus	0.01%	0.0%
Hungary	0.21%	6.1%
Netherlands	0.08%*	-1.3%
Austria	0.07%	1.4%
Poland	0.01%**	0.0%
Slovenia	0.38%	7.6%

Country	2009 level	Average annual percentage change
Slovakia	0.01%*	-38.9%
Sweden	0.27%*	-5.4%
Iceland	0.15%	10.0%
Norway	0.02%**	-5.6%
Switzerland	0.85%**	8.9%
Croatia	0.05%	25.8%
Median	0.07%	2.3%
Maximum	0.85%	25.8%
Minimum	0.01%	-38.9%

Note: Due to data availability, * and ** denote the levels in the years 2007 and 2008, respectively. UK figures appear only for some NACE categories, not including pharmaceuticals and for some (such as financial services and motor vehicles) only since 2007
Source: Eurostat.

A conclusion that can be obtained from this section is that the benefits from the Single Market in terms of innovation may not apply uniformly to all Member States, but to those that specialise in sectors intensive in R&D, such as pharmaceuticals.

Thus, in conclusion, the effects of the EU in terms of promoting innovation may be concentrated in certain Member States (of which the UK might be an example if innovation were measured properly in the dimensions in which the UK specialises, though the UK does badly in terms of the data available) — and the gains of such innovation may accrue to consumers and firms across the EU. We are unable to draw any clear conclusion regarding the likely shape of benefits.

5.5 Indicative Quantitative Results

The following table summarizes the quantitative results from this section. As throughout this report, we note that the purpose of exhibiting these results is not to offer commentary on the specific sectors studied, but to illustrate the synoptic method of analysis.

Table 5.7: Estimated effect of price dispersion

	Pharmaceuticals	Motor vehicles
Trade	-3.09***	-6.41***
Unit Labour Cost		2.42
Competition (HHI)	.409***	1.3**
Innovation (R&D)	-.382	.170

Note: *** = statistically significant at 99% confidence; ** = 95%; * = 90%.

One of our measures of the degree of integration is the (reduction in) the degree of price dispersion. This first table tells us that we had data sufficient to estimate impacts of changes in price dispersion in the pharmaceuticals sector on trade, competition and innovation and in the motor vehicles sector for all four efficiency areas, and found there to be statistically significant correlation with Trade and Competition but not unit labour costs or innovation (** or * indicates statistical significance, which * is only marginal significance). For each percentage point reduction in price dispersion (measured by the CoV), there is increase in trade of 3.09 per cent for pharmaceuticals and 6.41 per cent for motor vehicles, and a reduction

in the index of competition (HHI) (i.e. an increase in competition) of 0.409 per cent for pharmaceuticals and 1.3 per cent for motor vehicles.⁵⁷

Table 5.8: Estimated effect of wage dispersion

	Pharmaceuticals	Energy	Financial Services	Motor vehicles
Trade	3.03**			-3.44**
Unit Labour Cost		-.117	-.726	.632
Competition (HHI)	.218			-2.04*
Innovation (R&D)	.397		-.173	-.227

Note: *** = statistically significant at 99% confidence; ** = 95%; * = 90%.

Another measure of integration is wage dispersion. We found that falling wage dispersion is correlated with increased trade in the motor vehicles sector — a 3.44 per cent rise in motor vehicles trade for each 1 per cent reduction in wage dispersion. The pharmaceuticals sector exhibits a perverse impact of reduced wage dispersion — falling wage dispersion is associated with reduced trade. There was no other clearly statistically significant correlation (the * on competition HHI for motor vehicles is only marginally significant and the coefficient is perverse — i.e. competition falls as wage dispersion falls; we therefore believe this should be discounted.). There were no statistically significant impacts for Energy or Financial Services.

Our final regression of this section focuses up “input” measures, breaking down the Single Market programme into the components set out in Section 4.4.

Table 5.9: Impact of Single Market programme on Motor vehicles

	Trade	Unit Labour Cost	HHI	Innovation
Single Market	0.462068***	1.786881	0.00000	0.024961***
Competition	-0.19934	(omitted)	(omitted)	(omitted)
State Aid	-0.25334*	-0.13779	0.003163***	0.031253***
Environment	-0.02338	-2.74343*	-0.01957***	-0.01332
Employment / Procurement	-0.18205*	0.940149	0.001114	-0.01555
Trade	(omitted)	(omitted)	(omitted)	(omitted)
Sector-specific	(omitted)	(omitted)	(omitted)	(omitted)
Time	-0.04961***	1.634626***	-0.00729***	0.00096

Note: *** = statistically significant at 99% confidence; ** = 95%; * = 90%. “(omitted)” indicates the variable is dropped to avoid multicollinearity

For non-omitted variables, the statistically significant impacts (those with significance of 95 per cent or 99 per cent — *** or ** in the table above) are:

- The Single Market in general (over and above the specific policy areas identified) is associated with increased trade and innovation in the motor vehicles sector.
- Amongst (or additional to) Single Market impacts, State aid is relatively unsuccessful — it has no statistically significant impact on trade or unit labour costs, and is associated with a tiny increase in concentration.⁵⁸ It is, however, correlated with increased expenditure on innovation. (One

⁵⁷ We note that there is a potential technical issue of endogeneity here, which would require detailed data to resolve and which it is not proportionate for us to address fully within this synoptic review, but which should be addressed were a detailed study to be made of these sectors.

⁵⁸ If the impact were larger, it might be tempting to speculate that the removal of state aid knocks out inefficient “national champions” leaving room for larger more efficient cross-border players. But although statistically significant, the impact is very small, making interpretation problematic.

potential interpretation is that, forbidden from subsidising firms in other ways, governments respond by funding or otherwise promoting increased research.)

- Environment policy is not correlated with statistically significant impacts on trade, unit labour costs or innovation, but is correlated with reduced concentration.⁵⁹
- Employment/procurement policies are not statistically significantly correlated with any impacts.
- Trade and sector-specific regulation cannot be disentangled statistically from other effects by our model and thus are omitted.

⁵⁹ Environmental regulation, including specific national standards, was a well-known significant form of non-tariff barrier prior to the Single Market programme. It might therefore be expected that the pan-Europe coordination of policy, associated with significantly reducing non-tariff barriers of this form, should ease barriers to entry and increase competition.

6 Concrete Costs of the Single Market

In this chapter we will explore the costs incurred by Member States by participating in the European Single Market. We have identified the following sources of these costs, which are:

- trade diversion;
- sovereignty/democracy costs;
- subsidiarity costs;
- process costs EU Budget: Administration;
- costs of regulation.

In this section we shall focus upon trade diversion risks, process costs and the costs of regulation, whilst mentioning subsidiarity costs. More general sovereignty costs are considered in the next section.

6.1 Trade diversion

In a customs union, the degree of trade diversion increases as the volume of trade that would occur with the rest of the world, but for the external tariff of the customs union, increases. That in turn depends on the quality of product produced outside the customs union, the cost thereof, and the volume available.

If the pre-tariff price of non-customs union products falls further below the customs union price and production capacity outside the customs union rises, the proportion of international trade accounted for will rise. Hence two indicators of an increasing risk of trade diversion are:

- An increasing proportion of international GDP and trade accounted for by countries outside the customs union (other things being equal⁶⁰);⁶¹
- A fall in international tariffs imposed by countries outside the customs union.

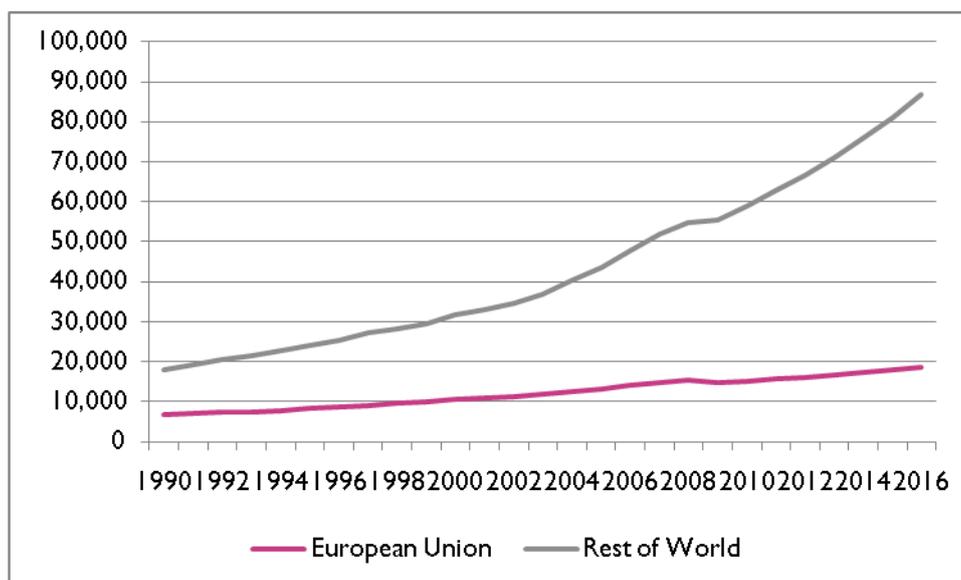
There is also a dynamic aspect, especially in a Single Market in which not only products (goods and services) are relevant but also the factors of production — with the implication that relative investment expectations (relative, that is, between EU and non-EU sources) are a key potential source of benefits or costs.

6.1.1 The proportion of world GDP accounted for by the EU is falling

Opportunities outside the EU may be growing more rapidly than was the case in previous decades. Though Britain and Europe may grow only slow through the next few years, the world as a whole has been growing much more healthily — setting aside the global contraction of 2009.

⁶⁰ In particular, for invariant non-tariff barriers, which is clearly not the case for the EU.

⁶¹ To develop the intuition for why this is so, consider the following thought experiment. Imagine first that the customs union encompassed the entire world — in that case there would no trade diversion at all. Next imagine that the boundary of the customs union were contracted so that it covered fewer and fewer trading countries and hence a smaller and smaller proportion of the world with which one would otherwise trade — as more and more of international trade were conducted outside the customs union, the amount of trade diverted would, other things being equal, increase.

Figure 6.1: GDP at PPP, 1990-2016 (\$)

Source: IMF World Economic Outlook

In 1990, the European Union was 27 per cent of world output (in US dollars, at purchasing power parity). By 2002 the EU was still 25 per cent of world output — only a small drop. But by 2016 the EU is forecast to be just 18 per cent of world output — a dramatic and rapid relative fall.⁶²

The balance of advantage, over the next decade, could quite plausibly have shifted dramatically. Whilst EU Member States offer stagnant (or even in some sectors such as financial services, shrinking) opportunities for UK firms, opportunities explode elsewhere. This would be likely to imply increasing trade diversion risk.

6.1.2 International tariffs are much lower than in past decades

The following table illustrates the ways that international trade agreements have led to a reduction in international tariffs amongst countries outside the EU and with the EU.

Table 6.1: GATTs reductions in tariffs

Global liberalization	Description
1950: Individual External Tariffs (%)	Reduction by countries (%): AT(20), BE(9), DE(16), DK(5), ES*(24), FI(13.5), FR(19), GR*(24), IE*(17), IT(24), NL(9), PT*(24), SE(6), UK(17)
1964-1967: Kennedy-Round	Average agreed (relative) tariff reductions: 47%
1973-1979: Tokyo-	Average agreed (relative) tariff reductions: 30%

⁶² We observe that since some of this impact arises from especially strong growth in the emerging markets of Brazil, Russia, China and India, the relative share of other developed economies falls also — though EU growth is projected to be slower than growth in the US, Australia, and a number of other developed economies, so the overall impact is reduced. But even if the share of other developed countries fell even faster than that of the EU, that would not affect the central point being made, which is that as the share of EU trade in global trade falls, the trade diversion associated with the EU's customs union will tend to rise, regardless of whether that is trade with developed or emerging markets.

Global liberalization Round	Description
1986-1993: Uruguay-Round	Average agreed (relative) tariff reductions: 40%

Source: Badinger (2001), "Growth effects of Economic integration – the case of the EU Member States (1950 – 2000), IEF working paper Nr. 40

We see that a series of GATTs negotiations have led to very significant falls in tariffs. It has even been argued that the fall in international tariffs has been significant enough that it, alone, could account for the considerable majority of the trade-enhancements more normally attributed to the elimination of tariffs within the EU's customs union.⁶³

As international tariffs fall, the tariff-based benefits of being inside the EU's tariff-free customs union area fall. On the other hand, the lower the external tariffs imposed by the EU, because of these international agreements, the lower the trade diversion risk (since the difference between the pre-tariff price and the post-tariff price falls).

One should also be cautious, however, in being too definitive on this point. In particular, a key element of the EU is that it serves as a device for the joint negotiation of international trade accords with non-EU partners. It might therefore be a mistake to assume that, absent combining into the EU as joint negotiator, European Member States would have secured as large reductions in international tariffs as have been secured via the EU.

6.1.3 Case study: Global opportunities versus EU opportunities in Financial Services

We can explore further the ways a changed balance of opportunities within versus outside the EU has evolved through time by considering the concrete case of the financial services sector. As the Single Market developed and expanded, and as financial development advanced in many EU Member States, especially under the influence of EU-level regulation, the 1990s and 2000s saw opportunities for UK businesses within the EU, including in particular UK financial sector businesses, both because financial services sectors developed within the EU as economies developed and under the influence of liberalising regulation, and also because the development of the financial services sector in turn promoted more rapid economic growth.

However, although for nearly two decades financial development within the EU created attractive opportunities for British financial services sector exporters, this is much less clearly likely to be the case over the next decade. In a number of Member States (e.g. Ireland, Spain), an important factor in enhanced financial development appears to have been over-indebtedness and over-expansion in banking sectors. The correction of this problem is likely to be associated with reductions in the volume and value of financial sector business. Even simply the process of deleveraging — reducing indebtedness relative to the size of the economy — is likely to have the consequence of a fall in financial sector activity, as lower debt levels means less demand for the debt to be put to work adding value, and hence passing through financial intermediaries. But beyond that there may be considerable austerity at national level, reduced function of banking sectors, reduced appetite for experimenting with new financial sector firms or new innovations — in short, these are unlikely to be as attractive growth opportunities for British financial sector firms as was the case in the past.

The financial crisis of recent years is unprecedented in the post-World War II era. It is an established empirical observation that major financial crises are followed by periods of deleveraging. The more substantial the financial crisis, other things being equal, the more substantial the deleveraging that follows.

⁶³ e.g. see Badinger (2001), "Growth effects of Economic integration – the case of the EU Member States (1950 – 2000), IEF working paper Nr.40 <http://epub.wu.ac.at/170/1/document.pdf>

Given the scale of the recent (and in some senses on-going) financial crisis, we would anticipate a significant phase of deleveraging. The McKinsey Global Institute analysed 45 historic episodes of deleveraging, finding that they on average last six to seven years and reduce the ratio of debt to GDP by 25 per cent.⁶⁴ This empirical finding suggests that households, businesses and governments will continue to deleverage for a number of years.

In some Member States, the key form of deleveraging will be direct reductions in household indebtedness. For example, a European Parliament study in 2010 identified Cyprus, Denmark, Ireland, Portugal, Spain and the United Kingdom as “high household indebtedness” Member States, averaging 85 per cent household debt to GDP in December 2009.⁶⁵ That compared with average household indebtedness of just 56 per cent for Belgium, Germany, Luxembourg, Austria, Finland, France, Malta, Netherland and Sweden. A reduction of 25 per cent in household debt to GDP for the high indebtedness countries (in line with McKinsey’s historical analysis) would take them to 60 per cent — close to the average for the lower-indebtedness group.

In other Member States (and to some extent even in the high household indebtedness states), a key mechanism of deleveraging will be government austerity programmes. That will deleverage both by reducing government debt and by increasing household tax commitments and reducing benefits, thereby making households less attractive to lenders, reducing their creditworthiness and so reducing the amounts they borrow.

In other cases, deleveraging may take the more brutal form of default. That could be true over the next decade at household, corporate, and even sovereign level.

Just as periods of increasing leverage are both effect and cause of growth in financial services, periods of deleveraging will tend to be associated with and encourage contraction in financial services. Thus, this protracted period of deleveraging will tend to reduce financial services activity. This follows both from a reduction in credit extended by financial services firms and a consequent reduction in economic activity and growth, further restricting demand for and provision of financial services.

The Eurozone, in aggregate, is not as heavily indebted as the UK or the US, and of course there are EU Member States outside the euro, such as the Czech Republic, which offer their own unique growth opportunities. And we emphasize that the point being made here is not that there remains no scope for an expansion in financial services within the EU, or that financial services sectors had become “just too large”.⁶⁶ The central point is merely that there is clearly a case to be made that, in this next-decade phase of deleveraging, relative to the recent past, opportunities for rapid growth in financial services within the EU are likely to be more limited.

6.2 Process costs

The functioning of the Single Market requires dedicated administrative bodies together with utilisation of a significant part of the EU government. The associated considerable processing cost must be funded by Member States. The following graph presents the UK contributions to the administrative expenditure component of each EU Budget period⁶⁷, in gross and net terms, relative to UK GDP.

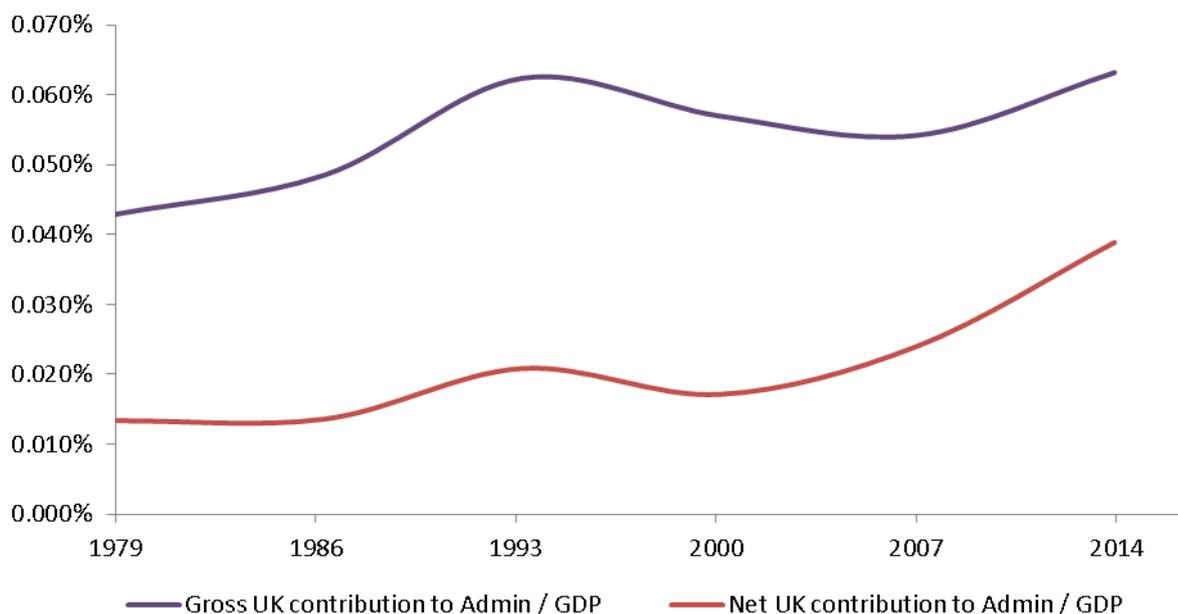
⁶⁴

http://www.mckinsey.com/Insights/MGI/Research/Financial_Markets/Debt_and_deleveraging_The_global_credit_bubble_Update

⁶⁵ *Household indebtedness in the EU*, Europe Economics on behalf of the CRIS Committee of the European Parliament, 2010.

⁶⁶ For example, Europe Economics’ analysis for TheCityUK has suggested that, in all Member States except Ireland and the United Kingdom, the financial services sector is clearly below even fairly minimal notions of its efficient size — see paragraphs 2.65ff in http://217.154.230.218/NR/rdonlyres/583EB1BD-3CAE-4EAD-8BEA-41B2CEC1EFD6/0/BC_RS_ValueofEUsFinancialCentres_FullReport.pdf.

⁶⁷ The EU budget is governed by the Multi-Annual Financial Framework (MFF) in which each annual EU budget is based on spending rules which apply across seven-year framework period.

Figure 6.2: UK contribution to EU administrative expenditure

Source: Europe Economic analysis based on data collected from Eurostat, Official Journals of the European Communities and financial reports of the European Commission

We see that there is a rising trend in gross UK contribution to administrative expenditure, even relative to GDP. In general, the gross UK contribution would adjust according to the goals of the EU and fluctuate between 0.04 and 0.07 per cent to GDP level. After the introduction of Single Market in 1993, there was a gradual fall in gross UK contribution until the financial crisis in 2007. Specific budget has recently been assigned to improving the institutional infrastructure of the EU as a single economy, for instance, €40 billion was assigned to the creation of the Connecting Europe Facility in the 2014 – 2020 budget.^{68,69}

6.3 Costs of Regulation

6.3.1 Sources of cost of EU legislation

Besides the annual contribution each Member States make, another major component of the cost of EU membership is the cost of complying with EU regulations. Regulatory costs to businesses could include:

- Administrative costs — i.e. those incurred from providing information to government authorities or complying with administrative tasks such as record-keeping;
- Policy costs — i.e. those incurred in meeting the aims of the regulations, e.g. installing new computer software to facilitate information sharing;
- Financial costs — i.e. costs arising from a direct transfer of money to the government and regulatory agencies, such as authorisation fee, a tax or levy; and
- Wider costs on the economy created by regulatory distortions.

⁶⁸ http://europa.eu/legislation_summaries/budget/bu0001_en.htm

⁶⁹ The analysis here considers EU institutional estimates. Details of the UK Treasury view of UK contributions and public sector receipts for the years 2009-10 to 2011-12 can be found in Table 3C, page 17, of European Union Finances 2012 (Cm 8405) — see http://www.hm-treasury.gov.uk/int_eu_statefraud.htm. The Office for Budget Responsibility's latest forecast of UK contributions to the EU Budget over the period 2012-13 to 2017-18 was published in December 2012 and can be found in Table 2.19 of Economic and fiscal outlook supplementary fiscal tables at: <http://budgetresponsibility.independent.gov.uk/economic-and-fiscal-outlook-december-2012/>

We have seen in Section 4.4.2 that the costs of achieving additional integration appear to be rising as more integration is achieved (i.e. the cost curves take a form like curves C or A of Section 3). Between 1998 and 2007, there were a total of 9,415 EU laws/rules, at an average of 942 new laws introduced each year.⁷⁰ In implementing the requirements of these EU laws/rules, there were over 23,000 new regulations brought into force in the UK between 1997 and 2003.

Various studies commissioned by governments and political organisations have attempted to measure the costs of EU regulations to the UK economy but no strong consensus has yet been reached. The House of Commons Library claims that 9.1 per cent of UK laws stem from the EU, but some groups claim much less (e.g. the British Chambers of Commerce reported a much lower percentage of 0.1 per cent for the period in 2007–2008⁷¹) whilst others claim much more. As an example of the latter, a report by Open Europe estimated that the cost of UK regulations was approximately £176 billion between 1998 and 2009. While some of the cost could solely attributed to the UK domestic regulations in the absence of the EU legislations, the average proportion of the cost stemmed from EU legislation is argued to be 72 per cent per annum, though the share of the total cost has tended to fall in recent years.⁷² The 72 per cent attribution figure is broadly in line with other “Eurosceptic” analysis, which typically suggests a range of 50 to 84 per cent of national laws come from the EU.⁷³

The cost of EU legislation tends to be focused in specific policy areas. For example, it is estimated that EU employment laws alone account for 22 per cent of the total costs of regulation imposed on the UK in 1998 – 2009.⁷⁴ (We observe in passing that the value of regulation is not only to be understood in terms of how low its costs are — a regulation of high benefit might justify higher costs than a regulation of low benefit.)

Much analysis of the cost of EU regulation, however, includes the implicit assumptions (a) that equivalent regulation would not be imposed by the UK authorities acting alone, absent the EU; and (b) that the cost of regulation is to be treated in terms of (estimates of) the impact on existing firms, despite the focus and intent of much EU regulation being to liberalise markets and strip away barriers to entry by new players in markets, in particular firms from other EU Member States, thereby reducing their costs.⁷⁵ On the other hand, domestic regulation could be more cost effective than EU legislation, for the subsidiarity reasons explored in Section 3.

6.3.2 Case study: The Financial Services Action Plan (FSAP)

The Financial Services Action Plan (FSAP) is a key part of the EU’s attempt to create a single market for financial services. It was created in 1999 and contained 42 articles relating to the harmonisation of financial services markets within the EU.

A Europe Economics 2009 report⁷⁶ looked at compliance costs and focused on six Derivatives, five of which were important parts of the FSAP. The report looked at four sectors of the financial services

⁷⁰ The Taxpayers’ alliance, “Brussels of Whitehall: locating the source of the UK’s regulatory burden”, http://tpa.typepad.com/home/files/UK_and_EU_Regulatory_Burden_Embargoed_Monday_27_October.pdf

⁷¹ British Chambers of Commerce (2009), “Worlds apart: the EU and British Regulatory systems”

⁷² S.Gaskell and M.Persson (2010), “Still out of control? – measuring eleven years of EU regulation”, Open Europe report

⁷³ Europhobia, <http://www.jcm.org.uk/blog/2009/06/what-percentage-of-laws-come-from-the-eu/>

⁷⁴ S.Gaskell and M.Persson (2010), “Still out of control? – measuring eleven years of EU regulation”, Open Europe report <http://www.openeurope.org.uk/Content/documents/Pdfs/stilloutofcontrol.pdf>

⁷⁵ This is a variant of the classic and well-known policy analysis error of focusing upon the visible firms affected by a measure and failing to consider the effect upon firms that do not yet exist

⁷⁶ Europe Economics report commissioned by the DG Internal Market (2009), “Study on the cost of compliance with selected FSAP measures”

industry: banks & financial conglomerates, asset managers, investment banks and financial markets and assess the cost of compliance and its impact of business across the sectors.

Mean one-off costs of complying with the six selected derivatives as a percentage of 2007 operating expenses were found to vary across sectors with the lowest percentage of 1.43 per cent in asset managers and the highest percentage of 2.41 per cent in banks & financial conglomerates. On the other hand, the mean on-going costs of complying with the six selected derivatives as a percentage of 2007 operating expenses were estimated to be between 0.32 per cent and 1.41 per cent. Despite the associated compliance costs, the benefits of the extensive regulations were considered to outweigh the costs mainly because of the potential for significant market failure in an unregulated financial market.

Another study on the cost of compliance on FSAP was carried out by Open Europe.⁷⁷ That report estimated that the FSAP would involve total costs of £14 – £23.5billion to the UK economy by 2010, based on a summation across the government's own Regulatory Impact Assessments (RIAs).

6.3.3 Case study –environment regulations in the United Kingdom before and within the EU

The following table presents environmental regulations introduced in the UK before and during the period of the EU.

Table 6.2 Number of environmental regulations between 1933 and 2011

	Number of environmental regulations introduced
2003 - 2011	197
1993 - 2002	51
1983 - 1992	31
1973 - 1982	14
1963 - 1972	17
1953 - 1962	4
1943 - 1952	1
1933 - 1942	2
Total	317
Total (pre 1973)	25
Total (post 1973)	292

Source: Europe Economic analysis based on information collected from The National Archives

We can see that the number of laws has increased significantly since the UK joined the European Economic Community in the 1973 and especially significantly since the establishment of the European Commission's

⁷⁷ K.Boyfield (2006), "Selling the city short? – A review of the EU's financial services action plan", Open Europe

Directorate General for the Environment in 1981.⁷⁸ It is therefore natural to suppose that the presence of the EU has been a considerable factor in increasing the volume of environmental regulation.

In considering the implications of this, it is important to recognise that the EU has long had an aspiration to have amongst the most comprehensive environment policy frameworks in the world, with ambitious targets on sustainable development. The growth of environmental regulation is therefore no accidental accretion, but deliberate policy. However, a number of more recent regulations involve modifying UK regulations to comply with EU frameworks and standards, rather than *extending* UK regulation per se.

We note that we argued above that achieving policy synergies in an area such as environmental regulation would mean that membership of the EU should therefore, *as a benefit*, entail an increase in the volume of environmental regulation.

6.4 Conclusion

Of the concrete costs, although the rising trend in process costs within the EU should not be ignored and there does appear to be an accelerating trend in the volume of regulation associated with the EU (although deeper counterfactual analysis would be required before concluding that this acceleration would not be fully duplicated by the UK alone), we consider the most significant dynamic aspect of recent and forthcoming years has been the shifts in trade diversion. Though the removal of non-tariff barriers should allow the EU, in principle, to achieve deeper cost reduction than is feasible under customs union or free trade agreements, in practice the EU has not kept pace with international competitiveness trends — not necessarily through any failings of its own but perhaps simply because of successes elsewhere. The proportion of world economic activity accounted for by the EU is set to contract dramatically over the next decade or so, and given that the EU has not managed to keep up with past international trends in unit labour costs for decades, it seems unlikely that there will be any large turnaround in that trend soon.

Since trade diversion costs should (other things being equal) be expected to increase as the EU's share of global trade falls, the implication is that trade diversion is a rapidly increasing cost of EU membership and could eventually become a threat to its economic efficacy, and thus that the focus upon EU competitiveness amongst EU-level policymakers is a concern well founded.

⁷⁸ The significant increase in the number of regulations in the period 2003 – 2011 can be partially explained by the fact that, over the period, various new complex and holistic framework legislations were introduced, such as the Ambient Air Quality Directive and the Water Framework Directive which would lay a path of extensive environment policy development in the coming ten years.⁷⁸ See C.Hey, “EU Environmental Policies: A short history of the policy strategies”, Chapter 3 of the Environment policy Handbook

7 Policy Costs and Benefits

In previous sections we have considered the concrete costs and benefits of developing integration within the Single Market. In the current section we turn our attention to the “policy costs and benefits” — including the ways the Single Market allows British ideas to influence and improve policy-setting elsewhere, but also the risk over Britain being over-ruled by others. A key question in this section will be the dynamic one: is there a genuine risk that although policy benefits have outweighed costs in the past, policy costs might outweigh benefits in the future?

7.1 How can one Measure Sovereignty Costs and Benefits?

In Section 3 we argued that one of the benefits of membership of the Single Market was the UK’s ability to influence the policies of other Member States, whilst one of the costs was that other Member States might collectively set UK policy in ways the UK itself might not choose. Since Britain is traditionally a pro-trade country, the impact of its influence will tend to be to increase opportunities for trade, to the benefit of British firms and British consumers.

On the other hand, there are also potential drawbacks to the EU-level setting of regulation:

- Regulation might not be set in Britain’s national interest. As discussed above, a simple case might be where Britain is outvoted on some regulation, and the result is that regulation is imposed upon Britain that is conceptually inferior to British-set regulation.
- Regulation set at EU level might be technically inferior to British-set regulation. For example, designing regulations that are applicable across all Member States might result in messy compromises on certain technical points, creating anomalies and loopholes.
- The loss of regulatory competition might undermine both the long-term quality of regulation (because of the loss of processes of learning from the mistakes and successes of others) and remove the pressure, from the threat of regulatory arbitrage, to keep regulation at a low level — which offsets natural bureaucratic and democratic tendencies to over-regulate. Furthermore, Britain could be a beneficiary from regulatory arbitrage if all other relevant countries had a natural tendency to over-regulate — i.e. ideal regulation could be the attractive regulatory minimum.

The balance of such sovereignty costs and benefits can be extremely challenging to quantify or even pin down to specific instances. Because they are so difficult to quantify, many studies make no attempt at quantification of any sort or even attempt to pin down whether sovereignty costs are falling or rising over time, let alone whether the rate at which costs fall or rise is accelerating or decelerating.

Given that the costs of pooling sovereignty or the benefits thereof are argued by many commentators to be much the largest costs/benefits of EU membership, setting them aside entirely has the drawback of making it impossible to form a reasoned judgement as to the costs and benefits of EU membership, either overall or in a particular sector.

Nonetheless, although we shall sketch a method for forming a view as to the dynamic of the costs and benefits of pooling sovereignty, it is imperative to recognise from the start that any such assessment will, of its very nature, involve an ineliminable element of judgement.

We shall consider two ways on might inform a judgement as to the evolution of the policy costs and benefits of pooling sovereignty — noting that for the purposes of this section the only costs and benefits relevant are the policy costs (in particular, the risk of over-rule but also other sovereignty costs) and benefits (in particular, the opportunity to influence policy-making in other countries) rather than the broader costs and benefits of pooling sovereignty in the EU that we explore in other sectors.

One approach considers the number of areas to which sovereignty pooling applies — which for our purposes we treat as the policy areas falling under qualified majority voting — and the frequency with

which the UK is over-ruled (i.e. dissents from a legislative act). The second approach considers in detail how key EU directives and regulation in a specific sector compare to pre-existing UK regulation, relative to pre-existing regulation in other Member States, as a measure of the UK's influence over policy in that sector.

Agreeing to pool sovereignty is an ongoing commitment. The costs and benefits of a decision to pool sovereignty in, say, 1973 or 1992 are unlikely to have their key effects in 1973 or 1992. It is plausible (perhaps likely) that sovereignty costs and benefits go through phases. For example, there may be a phase in which UK thinking in a specific policy area is especially influential, such that the benefits of influencing others appear to outweigh the costs of potentially being over-ruled — when no-one wants to over-rule you, the fact that they could do so may seem a small cost. The costs may only come later, in a period where the UK's influence is less.

We shall explore below how one might reason through to a judgement on this dynamic point in a specific sector: Financial Services. The Financial Services sector is highly important in any economy, the free movement of capital is one of the four freedoms of the Single Market, the Financial Services Action Plan was arguably the single most important regulatory programme of the EU from 1998 to 2006, and the Financial Services industry is a very significant industry to the UK in particular. These factors all serve to make the Financial Services sector a very relevant case study. However, as always our goal in what follows is to explore a method, which could in principle be applied to other sectors, rather than to draw a final conclusion in respect of the specific sector explored. We do not claim that our findings for the Financial Services sector (even in the provisional form they take here) can be generalised across the Single Market as a whole. What we do claim is that the method of reasoning could be a helpful way to work towards a judgement as to the policy costs and benefits of pooling sovereignty.

7.2 Sovereignty costs dimension 1: Over-rule and dissent

As noted, sovereignty costs are particularly challenging to measure. However it is natural to assume that if EU processes entailed measures being imposed upon countries, those countries might vote against them — either at the Council of Ministers or via a majority of a country's representatives at the European Parliament. If ministers agree to a measure passing and the majority of a country's European Parliamentarians votes in favour, it is unclear on what basis one could claim that that country had been over-ruled. Hence one possible way to assess the sovereignty cost is to determine in how many decisions that pertain the Single Market a Member State votes with the minority.

“Qualified Majority Voting” (QMV) is the name given to the (dominant) decision-making procedure within the EU whereby measures are not passed simply by a majority of states voting in favour, nor even by a weighted majority of states voting in favour (with the weights attached to different member states set by the Treaty) but rather, that for a measure to pass it must have a weighted “super-majority” — so a sufficient “blocking minority” can prevent passage of a measure.⁷⁹

Amongst Eurosceptic groups, a common metric to use for sovereignty costs are the numbers of “lost vetoes” i.e. areas to which QMV is applied, as can be seen in the following table:

⁷⁹ e.g. Blocking minority percentages were: 35.3 per cent until 1973; 31 per cent from 1973-80; 30.2 per cent from 1981-5; 30.3 per cent from 1986-94; and 29.9 per cent from 1995-2004. See <http://www.parliament.uk/documents/commons/lib/research/rp2004/rp04-054.pdf> footnote 1 p7. The fall in required blocking minorities could be seen as a “negative sovereignty cost” to be offset against the loss of an increased number of “vetoes” (i.e. an extension of the use of QMV) discussed below.

Table 7.1: "Lost vetoes" associated with various EU Treaties

European Treaty	Number of articles introduced on moved to QMV
Treaty of Rome (plus extensions)	38
Single European Act	12
Maastricht (Treaty on European Union)	30
Treaty of Amsterdam	24
Treaty of Nice	46
Lisbon Treaty	63

Source: <http://www.brugesgroup.com/mediacentre/comment.live?article=4056>

An arguably more fine-grained measure of sovereignty costs can be obtained by considering how often QMV procedures result in the UK being over-ruled. In 1988, 14 per cent of the 320 legislative acts passed through the Council of Ministers were subject to dissent by some country (i.e. minorities did not achieve a blocking minority and measures were passed despite votes against); in 2008 the equivalent figure was 15 per cent of 200 legislative acts. Breaking down the actual votes by sector we have the following:

Table 7.2: Negative votes and abstentions by sector in 1988 and 2008

	1988	2008
Agriculture	10	7
Fisheries	12	2
Single Market and industrial policy	6	7
Environment	1	2
Total number of acts in the above sectors	29	18
Total number of votes	34	30

Source: http://www.eng.notre-europe.eu/media/Etud88_EN-QualifiedMajority-Voting-Novak.pdf

We thus see a change in the balance of negative votes over time — whereas in 1988 dissent is heavily concentrated in Agriculture and Fisheries matters (Fisheries dissent was particularly driven by Spain), by 2008 Single Market and Industrial Policy issues are just as important as Agriculture and Fisheries dissent has become much less.

The next table considers the distribution of dissent amongst countries:

Table 7.3: Distribution by member states (in % of legislative acts dissented from)

	1988	2008
Spain	3.75	1
Denmark	3.1	2
Greece	2.5	1.5
Ireland	1.9	1.5
UK	1.9	3.5
Italy	1.6	1
France	1.25	0.5

	1988	2008
Portugal	0.9	1
Germany	0.9	2
Netherlands	0.6	1
Belgium	0	2
Luxembourg	0	1.5

Source: http://www.eng.notre-europe.eu/media/Etud88_EN-QualifiedMajority-Voting-Novak.pdf

We see that whereas in 1988 the UK was fairly close to the median in terms of dissent, by 2008 the UK was much the most common dissenter — being over-ruled in QMV more than twice as often as any other Member State.

Noting the perils of drawing too firm a conclusion from a comparison between just two years⁸⁰, as it stands these numbers suggest that not only do brute sovereignty costs rise as harmonisation measures are extended (as is, in a sense, inevitable) but that over time the costs to the UK have increased faster than those for other Member States.

We observe that it might be tempting to believe that the legitimacy of analysis above is threatened by a changed context — e.g. that there have been several Treaties since 1988 or that some newer members tended to dissent more early. But such a response misses the point that may be precisely the evolution of the context and/or the tendency for states to conform to majority opinion over time that generates the sovereignty costs here. What we are attempting to identify here is what costs there are, not why they were regarded as appropriate to bear — the “why” should be dealt with in the analysis of benefits.

Box 6: Gold-plating of EU legislation

“Gold-plating” is the name commonly given to the practice of exceeding the requirements of EU legislation when implementing directives into national laws. It could include:

- The imposition (or retention) of additional requirements to those set out in a Directive by means of the implementing legislative measure in a Member State.
- A increase in scope, relative to the requirements of the directive — e.g. the application of the measures incorporated into the Directive to a larger universe of firms.
- Where the Directive offers discretion to national regulatory authorities or implementing legislature to impose greater or lesser degrees of regulatory burden upon firms, choice of the former is sometimes regarded as gold-plating.

In the case of financial regulation, a study conducted by Europe Economics on the cost of compliance with selected FSAP measures identified that some selected directives were indeed subject to gold-plating.⁸¹ The study participants provided several examples:

- The Markets in Financial Instruments Directive: it was suggested that the Danish and Italian competent authorities extended the trading transparency obligations of MiFID to include bonds.
- Third Anti-Money Laundering Directive: It was cited that the local interpretation of this Directive was more stringent than required in the Czech Republic and United Kingdom.

⁸⁰ The two years quoted are simply those for which we had data available from the study quoted. A fuller exercise might perhaps focus upon results in a specific sector of interest and gather voting outcomes for that sector for a number of years. As always throughout this report, we quote these results to illustrate a method and the sorts of analysis one might produce within that method, rather than with a view to drawing final conclusions.

⁸¹ Europe Economics report for DG internal Market, “Study on the Cost of Compliance with Selected FSAP Measures”, 2009

Capital Requirements Directives: the UK implementation of the CRDs was found to have made the requirements rather more complex than the language used in the Directive.

Most of those highlighting examples of gold-plating consider it to be a source of cost (or at least missed opportunity). However, gold-plating is not always seen as intrinsically a mistake — for example the original form of a measure may be ineffective or imply lower level of enforcement or robustness of implementation than is the regulatory norm for some countries (e.g. the UK) — but there is a concern that it could result in an “unlevel playing field”. Pressure to achieve a level playing field by skimping on implementation or enforcement could undermine regulatory and legislative traditions and culture, and thereby generate a sovereignty cost.

The UK Department for Business Innovation & Skills has noted the UK government’s aim to reduce gold-plating of European Regulations to reduce competitive disadvantages of EU law on UK businesses as compared to their European competitors.⁸² In 2013, a Gold-Plating review conducted by BIS showed that Government has been successful in minimising the gold-plating of EU legislation and little evidence has been found on the additional burdens of the gold-plating on UK businesses between 2011 and 2012.⁸³

7.3 Sovereignty costs dimension 2: Changing balance of your influence over others versus their influence over you — Case study: The financial services sector

To unpack what “influence” might mean and how one might use evidence to draw a reasoned judgement on how much influence the UK has over EU policy-making and how that has changed over time (and may change in the future) we shall focus on the financial services sector, and in particular on the UK’s influence over EU financial services regulation and the risk of over-rule on some fundamental issue of difference.

7.3.1 Influence in Financial Services Regulation

We shall now explore the senses in which, up to this point, there is a case to be made that EU-level setting of financial services regulation has been beneficial to the UK. As stated, we shall focus upon the ways in which EU financial services regulation has been liberalising in certain Member States in ways that mimicked UK regulatory practice.

7.3.1.1 *The Benefits of Influence*

As discussed in previous sections, the stated ambition of EU directives and regulation and judgements of EU competition authorities and the European Court of Justice (hereafter frequently referred to as “EU-level decisions”) has been, in general, “liberalisation” across most industries. More specifically, it has been to strip away government subsidies, government-created monopoly power, and legal impediments to trade and competition (both explicit and implicit).

It is, of course, strongly disputed how ideal or complete EU-level decisions are in delivering upon these stated objectives. However, as a sweeping generalisation, one might observe that it is not uncommon for EU directives and regulations, seen as increasing the level of regulation in the UK, to be regarded as reducing it in many other Member States. This reflects the fact that for many Member States, participation in the Single Market programme is a mechanism for delivering liberalisation that would not be chosen by

⁸² <https://www.gov.uk/government/news/government-ends-goldplating-of-european-regulations>

⁸³ BIS, “Gold-Plating Review”, March 2013, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/137696/bis-13-683-gold-plating-review-the-operation-of-the-transposition-principles-in-the-governments-guiding-principles-for-eu-legislation.pdf

purely domestic political processes. But for the UK, there was a much longer-standing tradition of liberalisation or a liberalised market environment, that was domestically-driven. So, Britain would very often choose, for itself, at least as liberalised rules as those delivered at EU level. This is particularly true in the Financial Services sector (as we shall see in more detail below).

The key gain for Britain, then, has never been conceived as that the EU would deliver liberalisation within Britain that Britain could not deliver for itself. Rather, it has been that

- by being involved, Britain would influence policy positively, so that it delivered more and better liberalisation than would be delivered absent British ideas;
- where the final result distinguished between the treatment of different parties (e.g. between firms within and outside the EU), by being involved in the decision, Britain would be more likely to be on the more advantageous side of the line (e.g. by not being subject to tariff or non-tariff barriers).

It can be argued that the ways in which, influenced significantly by British ideas, EU-level decisions are liberalising for other countries has, in recent years (specifically, taking EU membership and the Single Market Programme to 1992 as given), been much the most significant benefit to the UK of EU-level decision-making. This is particularly evident in the financial services sector in respect of the Financial Services Action Plan (FSAP) of 1998-2006, which sought to create / deepen the Single Market in Financial Services.

7.3.1.2 The Financial Services Action Plan

The potentials benefits of creating/completing a Single Market in Financial Services were explored by the Lamfalussy group of “Wise Men”, who identified in particular the following⁸⁴:

- Improved allocation of capital — through more efficient, deeper and broader security markets enabling savings to flow more efficiently to investment; lower transaction costs and improved market liquidity; more diversified and innovative financial systems; and more opportunities to pool risk.
- More efficient intermediation between savers and investors — through Intensified competition among financial intermediaries across Europe, leading to fewer inefficiencies; giving users greater freedom of choice; and the opportunity to reap economies of scale and scope across a larger market.
- Hence, a stronger faster-growing European economy.

The European Parliament’s ex-post evaluation of the FSAP⁸⁵ identifies the following as the most material FSAP measures:

- For the Banking sector:
 - Directives relating to money laundering⁸⁶;
 - The Capital Requirements Directive⁸⁷;
- For the Insurance sector:
 - The Insurance Mediation Directive⁸⁸;
 - The Solvency I framework⁸⁹;

⁸⁴ See *Creating a Single European Market for Financial Services - a discussion paper* — City of London

⁸⁵ *The Impact of the New Financial Services Framework* — IP/A/ECON/ST/2005-86, report prepared by Europe Economics for the European Parliament, http://www.pedz.uni-mannheim.de/daten/edz-ma/ep/07/pe385.623_part_I-en.pdf

⁸⁶ ...particularly 2001/97, the “second money laundering directive”

⁸⁷ 2006/48/EC and 2006/49/EC

⁸⁸ 2002/92

⁸⁹ ...particularly 2002/13 and 2002/83. The report also identifies the Solvency II framework, but this is part of the FSWP, not the FSAP.

- For the Securities sector:
 - The Markets in Financial Instruments Directive⁹⁰;
 - The UCITS directives⁹¹;
 - The Prospectus Directive⁹²;
- For Financial Conglomerates:
 - The Financial Conglomerates Directive⁹³.

A number of these directives were significantly influenced by British thinking — indeed, in many key respects they sought to conform the regulation in other Member States to pre-existing British regulations — and significantly liberalising for many Member States.

7.3.1.3 British influence: the example of MiFID

A clear illustration of British influence upon directives in the Financial Services Action Plan can be seen in arguably the single most important component of the FSAP: the Markets in Financial Instruments Directive (MiFID). MiFID is a directive that sets out how Member States must regulate “investment services”. By “investment services” we mean activities such as trading shares or bonds or commodity derivatives on behalf of other people, or running a stock exchange where other people trade, or virtually any other investment service apart from a small number of foreign exchange activities. The firms affected included⁹⁴:

- investment banks;
- portfolio managers;
- stockbrokers and broker dealers;
- corporate finance firms;
- many futures and options firms; and
- some commodities firms.

MiFID aimed to:

- Increase harmonisation, in particular in order to limit the ability of Member States to set regulation above the EU standard (under the directive that MiFID replaced — the Investment Services Directive — states had been entitled to gold plate the EU regulations, and many did in ways that the EU authorities regarded as protectionist);
- Increase the ease (and reduce the cost) of trading across borders within the EU;
- Increase competition;
- Protect investors;
- Increase efficiency;
- Increase transparency.

For our purposes here we do not need to analyze all of the voluminous detail of MiFID. Neither do we need to come to a conclusion about how successful it was in its aims, or to adjudicate upon the fierce debate there has been about how costly it has been to comply with. But what is of interest is to see (a) how its form was heavily influenced by pre-MiFID UK regulation; and (b) that it was materially liberalising for a number of other Member States.⁹⁵

Two illustrations of the influence of UK thinking are the ways MiFID requires firms to categorise their clients; and some of the forms of trading MiFID says must be permitted.

⁹⁰ 2004/39

⁹¹ 2001/107 and 2001/108

⁹² 2003/71

⁹³ 2002/87

⁹⁴ See <http://www.fsa.gov.uk/pages/About/What/International/mifid/background/index.shtml>

⁹⁵ Such a structural comparison of key regulatory measures is potentially relevant when considering the relative influence of the UK and other Member States' thinking in other sectors, also.

7.3.1.4 *Categorisation*

MiFID requires firms to categorise clients into three groups:

- “eligible counterparties”
- “professional clients”
- “retail clients”

As one might expect, the level of consumer protection in the regulation increases as one goes down this list — i.e. is greater for professional clients than eligible counterparties, and greater still for retail clients.

Before MiFID, UK regulation, set by the Financial Services Authority (FSA), had required firms to categorise clients into three very similar groups:

- “Market counterparties”
- “Intermediate customers”
- “Private customers”

The MiFID groups were not *precisely* the same as the pre-existing FSA categories (e.g. certain FSA “market counterparties” counted as MiFID “professional clients”). But the choice of categories in the MiFID was consciously made so as to closely reflect the pre-existing UK regulations, and to learn from them.

7.3.1.5 *Permitted forms of trading*

Prior to MiFID, a number of countries (e.g. France, Italy, and Spain) had what were called “concentration rules”. Concentration rules stated that if an ordinary investor ordered an investment firm to buy or sell shares on her behalf, that order could only be “executed” (i.e. carried out) on a “regulated market” — which in practice meant the main exchange. Put less technically, that meant that if you asked an investment bank to buy shares for you, that bank was only permitted to buy them at the stock exchange.

Britain, by contrast, had for some time permitted certain firms to act as “systematic internalisers” (some readers may be familiar with the concept of a “market maker”, which has some overlap with that of a systematic internaliser). To make things concrete and simple, let us think of a systematic internaliser in some shares. A systematic internaliser will have some clients that want to sell and other clients that want to buy the same shares. Instead of executing the buy orders on the main stock exchange, and then the sell orders on that same stock exchange, a systematic internaliser can simply match up those seeking to buy with those seeking to sell. (So, instead of going “externally” — to the stock exchange — it “internally” matches up between its own orders.)

MiFID required all countries to be like Britain, in permitting systematic internalising. This was a large change — a significant liberalisation introduced by EU regulation — as, prior to MiFID, even in Member States where systematic internalising was not specifically forbidden, it was effectively so by the complex interplay of other regulations. And even in some Member States where there was some systematic internalising (e.g. Germany), it was much less widespread than in the UK.⁹⁶

MiFID was an extensive and complex piece of regulation, affecting many areas of investment business. The above two areas are simply examples of the widespread ways in which MiFID was heavily influenced by, and conceived itself as learning from, pre-existing British financial regulation.

7.3.1.6 *Other ways in which the FSAP was liberalising for other Member States*

One of the key goals of the FSAP was increased liberalisation and competition. Where the FSAP has enhanced competition, the single most important mechanism is that the FSAP increased openness to foreign firms, which can lead to enhanced competition directly through an increase in the number of firms in the market or via the threat of entry.

The main European Parliament evaluation of FSAP found that its impact on Italy was particularly significant, leading to enhanced competition in banking, insurance, securities services and in relation to financial conglomerates.

⁹⁶ In Germany, internalisation was allowed, but investment firms were required to obtain explicit permission for every order before internalising trades.

The FSAP was also found to have resulted in increased competitiveness in the banking sectors of Italy, Poland and Spain.⁹⁷ Italy also increased its competitiveness in insurance, securities services and in relation to financial conglomerates.

FSAP (and Financial Services White Paper) directives and regulation, when implemented in full, were predicted to lead to a significant lowering in the cost of equity capital for Italy.⁹⁸ The key drivers of this were seen as being reductions in transaction costs and reductions in servicing costs as liquidity increases. Transaction costs in Italy were relatively high and liquidity low, compared, for example, with the UK. A fall in the cost of equity was also expected to lead to an increase in the use of equity.

However, the largest impact of the FSAP was seen in New Member States, though it is difficult to disentangle the impact of the FSAP from other impacts, including the Member States' Accession to the European Union.

Table 7.4: Illustrative Impacts of FSAP on Italy, Poland and Spain

	Italy	Poland	Spain
Key liberalising effects	<ul style="list-style-type: none"> • Increase in competition in banking, insurance, securities services and financial conglomerates. • Increase in competitiveness in banking, insurance, securities services and financial conglomerates • Increase in consumer protection in banking and insurance • Large fall in the cost of equity capital 	<ul style="list-style-type: none"> • Increase in competition in banking, insurance and securities services • Increase in competitiveness in banking • Increase in consumer protection in banking and securities services 	<ul style="list-style-type: none"> • Increase in competition in banking • Increase in competitiveness in banking

Source: European Parliament, *The Impact of the New Financial Services Framework — IP/A/ECON/ST/2005-86*

Indeed, perhaps partly reflecting UK influence via its influence upon EU institutions and thence down into action in other Member States, the common caricature that the UK is materially more liberal than other EU Member States is something of a UK myth. Considering the World Bank's Ease of Doing Business survey or WEF's Global Competitiveness Report the UK comes across as actually rather run-of-the-mill in its overall approach (i.e. not limited to just financial services): more liberal than a France (or Greece or Italy), less so than Ireland, Netherlands and Finland. Germany, for example, is much more liberal in action than is often thought.

7.3.2 Limited Risk of Over-Rule

As detailed above, one of the potential draw-backs of EU-level setting of regulation is the risk that Britain is over-ruled in some fundamental aspect of financial services regulation with regards to which its concept of the regulation differs from that of other EU Member States.

Through most of the period of Britain's membership of the European Union and its forerunners, this risk has been relatively limited. There have been three key classes of reason why:

⁹⁷ The term "competitiveness" is used here in relation to the relative efficiency and attractiveness of the output of domestic firms compared with foreign firms.

⁹⁸ Europe Economics (2007), "The Impact of the New Financial Services Framework. A Report by Europe Economics for the Internal Policies Directorate of the European Parliament".

- The thrust of EU regulation has been liberalising, pro-trade, and pro-competition. This has meant that, although Britain might have preferred the details of certain regulations to be different, some compromise provided the opportunity, overall and the considerable majority of the time, to extend British concepts at the EU level.
- EU policymakers at, in particular, the European Commission have been highly influenced by British thinking and often (arguably typically) regarded British financial regulation as definitive of international best practice and the British experience as a key source of evidence when formulating policy.
- It has long been understood that financial services, particularly at the wholesale level, were an industry in which Britain had a particular specialism and was much the leading player in the EU, and there was a general reluctance at EU level to over-rule a country that was especially dominant in the industry concerned.

This last point, regarding the reluctance to over-rule, is worth dwelling upon, because it will be important in our discussion later. Shortly after qualified majority voting (QMV i.e. the process of over-ruling national vetoes by a weighted vote of all Member States) was introduced, President de Gaulle came to power in France. He regarded qualified majority voting as an impingement upon the sovereignty of France, and there was an extended “empty chair” crisis in 1965, when France refused to participate in European Council proceedings. This led to the Luxembourg Compromise of 1966. According to the Luxembourg Compromise:

"Where, in the case of decisions which may be taken by majority vote on a proposal of the Commission, very important interests of one or more partners are at stake, the Members of the Council will endeavour, within a reasonable time, to reach solutions which can be adopted by all the Members of the Council while respecting their mutual interests and those of the Community".

The Luxembourg Compromise was never formally accepted by the European Commission or the European Court of Justice, and was widely regarded as becoming largely obsolete with the Stuttgart Declaration of 1983, in which the French accepted the principle of widespread curtailing of national vetoes. However, the French have occasionally subsequently invoked the Luxembourg Compromise to prevent themselves being over-ruled in agriculture⁹⁹, and the Compromise was in place for so long that it became part of the culture, still informally curtailing or at least influencing the conduct of QMV. As the Member State with much the largest presence in wholesale financial services, and very large involvement in other financial services activities as well, the cultural echo of the Luxembourg Compromise has been a significant protection for the UK up to this point.

We shall see in the next section that this has now changed. The implications for the efficacy of EU-level setting of financial services regulations are potentially profound.

7.3.2.1 London as an Asset for the EU

Another traditionally important reason why British financial regulation concepts were influential and there was limited risk of Britain being over-ruled in anything fundamental with respect to financial sector regulation was the understanding that the City of London, as a global player in the financial services sector, was an asset to the European Union.

Before the financial crisis, in the mid-2000s, it was estimated that London provided 41 per cent of all City-type financial services activity in the European Union, and had a dominant international market share in six of eight major international financial product areas. If London's financial cluster did not exist, advocates for the City claimed that the cost of financial services in the EU would rise sixteen per cent and EU GDP

⁹⁹ Indeed, the British government position is that the Compromise is still in place, and the possibility of the UK's applying the Luxembourg Compromise to financial services regulation was floated by Mark Hoban at the Treasury Select Committee on 8 November 2011 (see <http://uk.reuters.com/article/2011/11/08/uk-britain-financial-hoban-idUKTRE7A74WO20111108>).

would be €33bn lower in the short term, €23bn lower over the medium term, with the loss of 100,000 jobs.¹⁰⁰

Of course, the benefits of the financial sector to the broader EU go far beyond the simple generation of jobs and activity in the City.¹⁰¹ The financial services sector has a much broader contribution — to how business investment is funded, including small local businesses; how pensions are paid for; how companies manage to buffer themselves against bad times, to hedge against risks, and insure against disaster; how broader access to financial services enables households to smooth consumption during periods of unemployment or unexpected drops in income (e.g. short-hours working) or family surprises (illness, divorce, babies) and hence to deliver greater overall macroeconomic stability (contrary to much recent discussion); how interventions in distressed businesses can preserve value and restore long-term jobs; how governments use international financial centres to borrow to service public spending in periods when tax takes are temporarily depressed.

Such contributions are not simply within one Member State. Some Europeans gain returns on their investments in the UK; others travel to the UK to work in the City. And the benefits of the business activities carried out in the City are not accrued only by the UK. The activities of London's financial centre benefit car companies in Sweden, pharmaceuticals manufacturers in France, clothes manufacturers in Italy, agribusinesses in Poland, and so on.

7.3.3 Remembering the Goal of this Discussion

The analysis above would not be sufficient, alone, to establish, that all EU-level financial regulation has been to the UK's benefit, or even that EU-level setting of financial regulation has, overall, been to the benefit of the UK — to establish that we would need to consider the costs of complying with regulation, the trade created, competition promoted, etc. so as to form an overall judgement. Our discussion here has focused solely upon the policy influence question — the most one could conclude from our discussion, if it seemed persuasive, would be that Britain had, in recent decades in respect of financial services regulation, gained more from its policy influence on other countries than it had lost from risking being over-ruled and from any losses of sovereignty.

An analysis of precisely *why* Britain was particularly influential in financial services regulation in this period falls outside our scope here, but could be important in understanding the policy dynamic to be expected in other sectors. For example, does the example of Financial Services suggest that the UK should expect to be better at influencing in areas where we have a genuine national interest or comparative advantage relative to other Member States, with the result that our regulation tends to be more up-to-the-minute in responding to technological and business trends, and more detailed/based on more evidence (because of the greater materiality to us of the issue)?

Though, as ever, our main goal is to explore a method rather than draw concrete final sectoral conclusions, for our purposes here we shall regard our discussion as implying that the UK is likely to have gained more than it lost, during the 1990s and 2000s, through the EU-level setting of Financial Services regulation. However, that case rests on the specific key planks we have identified. We shall now float the thought that these key planks have now reversed — that is to say, the key factors that would, up to now, be offered by someone contending that EU-level setting of financial regulation has indeed been to the UK's benefit can be argued to be factors that, over the next decade, would suggest that, in terms of policy costs and benefits (always remembering that in this section we are setting aside trade creation effects, the cost of compliance, etc.) EU-level setting of financial regulation will not be to the benefit of the UK.

¹⁰⁰ *The City's Importance to the EU Economy 2005*, City of London & CEBR, February 2005. It falls outside our scope here either to dispute or validate the figures in this report. We merely quote them for context.

¹⁰¹ See, for instance, *The Value of Europe's International Financial Centres to the EU Economy*, Report prepared for the City of London Corporation and TheCityUK by Europe Economics, July 2011, http://217.154.230.218/NR/rdonlyres/583EB1BD-3CAE-4EAD-8BEA-41B2CEC1EFD6/0/BC_RS_ValueofEUsFinancialCentres_FullReport.pdf

7.3.4 The Future Outlook for EU-Level Financial Services Regulation

In the previous section, we identified the key planks upon which rested an argument that EU-level setting of financial regulation has, over the past couple of decades, been to the UK's benefit (i.e. the policy influence gains have outweighed other policy costs). In this section, we shall explore the risk that these very same factors that, in the past, might have supported the case for the UK's so benefitting, might over the next decade suggest that the UK would not (in policy influence cost-benefit terms) benefit from EU-level setting of financial regulation.

More specifically, we shall now argue that it is likely that in the future the case from what we argued above were the two dominant potentially beneficial factors seems, as matters stand, likely to reverse, along with a reversal in respect of the third effect. That is to say, in the future

- it, at present, seems more likely that the EU will be a de-liberalising force in the financial services sector, that British influence will be negligible in preventing this, and that, if anything, European thinking will be more likely to influence the British debate in a de-liberalising direction; and
- the consequence of EU-level setting of regulation (which, because EU, may be more de-liberalising than might be sustainable in the presence of regulatory arbitrage and regulatory competition), seems likely to be slower growth (or greater contraction) in EU member states than would otherwise be the case; and
- absent EU-level setting of regulation, Britain would be more likely to be a beneficiary of regulatory arbitrage than a loser, as business would be more likely to be attracted to Britain as regulation introduced elsewhere was regarded by some firms and investors as inappropriate and/or excessive.

7.3.5 Change in Spirit and Thrust of Regulation

The Financial Crisis of 2007 onwards, and in particular the collapses in the banking sector of late 2008 and early 2009 led to a sea-change in attitudes to financial sector regulation across Europe and the United States. This has partly been reflected in certain specific regulatory changes in the banking sector — changes already announced and a number of changes yet to come. But more fundamentally it has driven a significant change in the thrust of financial services regulation at EU level. Whereas we have argued in previous sections that during the 1990s and 2000s the key thrust of EU-level regulation, on average across the EU (if not always in the specific case of the UK), has been liberalisation and the encouragement / facilitation of cross-border trade within the EU, the key driving force now has become the extension of the net of regulation, increasing restriction on financial services regulation, limiting the activities of financial sector firms, and empowering greater national control over the activities of the financial sector.

There are, of course, very good reasons for this change in motive force. We do not need, for our purposes here, to rule either in favour of or against all the specific measures currently being enacted or planned at EU level. But we do offer the following points for debate:

- The balance of EU regulatory plans has shifted from liberalising and promoting cross-border trade to extending the scope, depth, and national bite of regulation.
- Whereas in the 1990s and 2000s, EU-level policymakers were eager to learn from and emulate British financial regulators and regulation, Britain has become much less unambiguously influential upon the shape, objectives and detail of EU-level financial regulation.
- Whereas in the 1990s and 2000s, EU politicians would have felt constrained, by the culture and norms created by the Luxembourg Compromise, from imposing financial regulation upon the UK that the UK strongly resisted, that has now ceased to be the case. A recent example of this was the EU bonus cap, from which the UK dissented.
- A number of initiatives in EU-level financial sector regulation are directed at and relevant to specific issues of the Eurozone, rather than the EU as a whole.

- EU-level financial regulation impinges upon and in some cases appears may impede some of the British new regulatory initiatives in response to the financial crisis (in other words, even where Britain is *increasing* its financial sector regulation, it is not always able to do so in its chosen way).¹⁰²
- The scale of financial sector trade within the EU is likely to decrease or grow much more slowly than non-EU financial sector trade over the next decade.

7.3.6 EU-Level Regulation as a Check / Balance upon Regulatory Over-Reaction to the Financial Crisis

Under the pressure of the financial crisis, particularly in late 2008 and early 2009, many widespread principles of regulation were overthrown. Procedures for mergers were set aside in the urgency of events (e.g. in the case of Lloyds TSB and HBOS). Rules limiting state support to particular companies (regarded as anti-competitive and protectionist) were set aside.

At the national level, such principles were simply blown away by events. But in many of these areas the ultimate authority lay with European Union institutions. It is not as widely appreciated as perhaps it deserves to be that the European Union rules were left much more intact than were national frameworks. This partly reflects the fact that the EU rules were embedded in Treaties, and so not straightforward to sweep away in one heated and hasty Parliamentary vote. Partly it reflects their international nature. And partly it reflects the fact that the European Union Single Market rules are intrinsically insulated from the day-to-day pressures of public opinion — they exist precisely to deliver liberalisation, competition, and the removal of barriers to trade between countries that either would not, for most Member States of the EU, be passed by Member State democratic institutions if left to themselves, and to resist the erection of barriers to trade and competition, and state aids, that might naturally arise as politicians respond to day-to-day demands that “something must be done” and then, once in place, are only slowly removed (if at all).

The European institutions, therefore, to some extent ensconced in their ivory tower and deliberately insulated from day-to-day political pressures, could not and did not abandon the principles laid out in the EU Treaties. By and large they did not seek to obstruct the neglect of merger procedures or the institution of anti-competitive state aids. Instead, they issued memoranda of forbearance, and entered into agreements with Member States about the timescales over which state aids would be unwound and more competition would once again be introduced. One example of this that has emerged during the writing of this report was the requirement for the British government to divest itself of much of Northern Rock by 2013. Other examples include the divestments required by EU competition authorities of RBS and Lloyds.

Thus, although we are about to argue that EU-level regulation will, over the next few years, be a source of de-liberalisation and reduced trade in the financial sector, this should be understood as a delicate judgement. The underlying deep structure of the Single Market is still present in the Treaties and in the institutional set-up, and this deep structure has been a pro-competitive pro-liberalising force in respect of the UK as well as elsewhere — that is to say, it has forced the UK to be more liberal and pro-competition, in certain respects, than the UK might have found it easy to choose to be for itself. It is thus not enough (and would not be enough in other sectors than financial services, either), to conclude that the EU is de-liberalising, to show that EU-level policy-setting will imply the introduction of de-liberalising regulation. One would also have to show that the de-liberalising regulation introduced would be more de-liberalising than the regulatory changes the UK would be likely to choose for itself, and that this more-than-offsets the liberalising character of the Treaty-embedded principles that have forced, and will probably continue to force, the UK government to be more liberal, more competitive, and more pro-trade, in certain respects, than it might find easy to choose for itself.

¹⁰² It is important to recognise, as we shall set out in more detail below, that some of these EU-level changes are globally-driven. It is, of course, a matter of potential dispute to what extent the UK would accept globally-driven changes *tout court*, were it not for their being introduced at EU level.

7.3.7 Extension to the Scope and Depth of Regulation

The financial sector is currently experiencing an unprecedented wave of new regulation, and regulatory and tax changes. These include:

- (a) Measures that had only recently been implemented prior to the crisis, and had probably not yet been fully absorbed into behaviour, prices, demand or market structure, are already being revised in light of these events. These include the Capital Requirements Directives (implementing Basel II and now Basel III) and the Markets in Financial Instruments Directive.
- (b) Measures that had been planned before the crisis but scheduled for introduction shortly afterwards. These include the Solvency II Directive and the Clearing and Settlement framework.
- (c) Measures introduced at least partly in response to the banking crisis which affect the broader financial sector rather than the banks themselves. This includes in particular the Alternative Investment Fund Managers Directive, the proposed Financial Transactions Tax, and the EU bonus cap.
- (d) Measures introduced, proposed or debated in response to the crisis affecting mainly the banking sector. These include measures requiring or effecting:
 - new arrangements for cross-border supervision and crisis management
 - changes to capital and liquidity requirements even under existing regulatory structures and new measures such as changes to trading book capital requirements
 - new special administration regimes or other resolution mechanisms
 - new mechanisms for the treatment of bondholders in the event of administration (e.g. “bailins” — debt-equity swaps)
 - the restriction or separation of activities (e.g. as per the retail / investment banking separation / ringfencing discussed by the Vickers Commission, with proposals now to consider such separation at EU level, also)
 - restrictions on remuneration or dividend policy
 - caps on size, connectedness, concentration or complexity
 - accounting changes
 - taxes or stability fees
 - macroprudential oversight
- (e) Measures introduced at Member State level, in response to particular crisis, such as restrictions on the short selling of bank equities or on sovereign credit default swaps.

The central issue for our discussion here is not whether any or all of these measures are justified and appropriate regulatory improvements. It is that they are clearly not liberalising deregulatory trade- and competition-promoting measures. Their central goal is to restrict and control the activities of the financial sector.

It is also the case that a significant tendency has arisen for different Member States to enact their own new measures of financial regulation. Obvious examples of this are the various country-specific bans on the short selling of banking stocks or various trades in sovereign CDS. There have also been country-specific moves in areas such as the treatment of banking sector bonds (e.g. Denmark has taken a different approach on this question from, say, Belgium, which has in turn treated such bonds differently from Ireland).

Furthermore, the crisis has inspired the creation of a number of new EU institutions, such as ESMA, EBA and EIOPA. We note that the UK has objected to the granting to ESMA of broad-based powers (proposed

on credit rating agencies, defining appropriate technical standards on equity and non-equity trading, and on product bans).¹⁰³

Without, at this stage, committing either way on the efficacy of these measures¹⁰⁴, we aim to highlight that — in deep contrast to the general liberalising thrust of financial services regulation in the 1990s and 2000s — the thrust of financial services sector regulation at present is quite the reverse. And this is, at the time of writing, expected to remain the case for much of the next decade.

It is, however, worth observing that at least some important components of this rise in regulation originate from global institutions, rather than the EU. Examples include

- the revisions to the capital requirements directives (which reflect — though amplify upon — the Basel III global rules);
- revisions to MiFID (which have been heavily influenced by G20 initiatives in derivatives trading and transaction reporting).

7.3.8 Reduced Future Influence of the UK

In previous sections we have emphasized how influential United Kingdom regulatory models were upon EU-level financial services regulation in the 1990s and 2000s. There has now been a significant change in this area. There are three key aspects to this:

- Partly this reflects a reaction to the financial crisis, and its widespread characterisation (perhaps arguably caricature?) on the Continent as having been the consequence of an “Anglo-saxon” light touch, low supervision deregulatory approach to the financial services sector.
- Partly it is a consequence of a change in the balance of initiative in European Union institutional policy-setting, with the European Parliament gaining codecision-making powers.
- Partly, this reflects the fact that certain forms of financial regulatory change have been developed in response to Eurozone-specific issues, to which British concerns are regarded as peripheral at best.

7.3.8.1 *Changed spirit of regulation*

Of course, UK regulation has also, to some extent, shifted away from the “light-touch” aspiration.¹⁰⁵ There is a wider re-evaluation of the approach to regulation within the UK. However, it is by no means clear that the new paradigm emerging within the UK matches that emerging at EU level.

Within the UK, two of the key foci concern the nature of supervision (and its institutional expression) and the structure of firms. An illustration of the supervision point is the switch away from FSA prudential supervisory powers to prudential regulation becoming a Bank of England competence. This is neither, per se, a matter of increased nor of resistance to increasing regulation. The Bank of England has argued, indeed, that supervisory relationship is likely to make it more feasible to enforce regulatory change than would be more detailed regulation¹⁰⁶:

¹⁰³ However, it should also be observed that, as at the time of writing, it remains uncertain what direction ESMA, etc will take. It is not impossible that in due course these may be as keen to learn from UK ways as the European Commission was before.

¹⁰⁴ It could, for example, be argued that it would be wrong-headed to argue that the previous “light touch” UK approach to regulation was ideal, and that the UK had a bias to under-regulating financial services, especially on the wholesale side. Some commentators have even argued that the financial services sector is intrinsically likely to be successful in “regulatory capture” of individual countries in which the sector is located. Perhaps it could even be argued that EU institutions might be less susceptible of such regulatory capture, and so intrinsically better-placed to regulate for all?

¹⁰⁵ Whether it was ever truly light-touch in practice is a disputed point, which it falls outside the scope of this study to assess.

¹⁰⁶ See, for example, Mervyn King’s evidence to the Parliamentary Joint Committee on the Draft Financial Services Bilol, 3 November 2011:

I give two examples of where we think it will be important for regulators to exercise judgment and why we need to make a break from the style of regulation we have seen in the past. One is that I would like [Bank of England supervisors] to be able to say to a bank—this is a hypothetical example but is clearly relevant to what happened before the crisis—“Your

This is not merely a changed style of supervision. It is a changed concept of regulation. But at EU level, though the possibility of the ECB taking some supervisory responsibility for banks has been floated, there is nothing on the table remotely of the nature of the change that is taking place in the UK.

Another central element of UK regulatory change has been proposals for changing the structure of the industry. The most visible example of this has been the Vickers commission consideration of splitting or subsidiarising retail from investment banking activities. As matters stand, it appears that, far from EU-level regulation following British regulation in this area, it might even be a blockage to certain of the Vickers proposals (in particular, the giving of bite to the ringfencing proposals by associating them with differences in capital requirements).¹⁰⁷

The approach at EU level and in many other Member States has reflected the concept that there was in the past, simply too much freedom, perhaps even laxness with respect to the activities of financial sector firms. Whereas in the UK the concept has been to try to re-empower market forces (through changes in structure) and re-empower supervisors (through relational supervisory oversight, rather than rules-based regulation), at EU level much of the concept has been fairly straightforwardly to write more rules. This is not altogether true — we have mentioned above the continuation of EU competition, state aid and merger rules, and it is also worth noting that the Vickers proposals in areas such as making bank debt “bail-in-able” (i.e. empowering banking administrators to convert bank debt into equity) were first proposed by the European Commission. But it does not, overall, mis-characterise the new spirit of EU regulation to say that it is consciously and explicitly more sceptical of markets and actively seeks to curtail their activities.

Now we are clearly in a time of flux, and the possibility cannot yet altogether be ruled out that in due course EU and UK concepts in financial regulation might converge. But at present the UK’s thought leadership in this area is much less clear than was the case in the past.

leverage has gone up from 20 to one to 40 to one in the past four or five years. You have not broken any rules. Nevertheless, this is a highly risky set of activities to undertake, and we want you to reduce your leverage.” The only way that regulation can have an effect is if the regulators have the freedom to impose their judgment and not base it purely on a myriad of detailed rules.

Another example would be to say to a bank, “The structure of your bank is so complex and opaque, with so many offshore and onshore legal entities, that we don’t understand the risks you are taking. We are not entirely confident that you do either, but certainly outside investments cannot assess it. We think that degree of opacity is inconsistent with a sensible and stable contribution to financial stability.” These institutions are operating not only for themselves; they are big enough to affect the economy of the whole country. Therefore, the regulator has to be free to make a judgment about that degree of opacity, even though nothing is done that could be said to violate a specific detailed rule. That degree of judgment is vital.

<http://www.parliament.uk/documents/joint-committees/Draft-Financial-Services-Bill/Ucjcdfsb031111ev11.pdf>

¹⁰⁷ During his evidence to the Parliamentary Joint Committee on the Draft Financial Services Bill, Mervyn King discussed this point with David Mowat MP:

Q769 David Mowat: My final question is about the Capital Requirements Directive and the way we co-ordinate with Europe on that. At one time it looked as though it might make it difficult for us to impose higher capital requirements on our institutions than the Europeans would find acceptable.

Sir Mervyn King: It is still a problem. The Commission’s current proposals still want to impose maximum harmonisation. I am completely baffled as to why they want to do it. I can think of no logical or economic reason why you would want to have maximum harmonisation, other than a theology of convergence for the sake of it. But the whole spirit of the agreement under Basel I, II and III was to have a level playing field in terms of common minimum requirements. No one could conceive of any reason why you would object to a country wanting to impose higher requirements, for example to protect their taxpayers. At the European Systemic Risk Board the vast majority of the people round the table were equally baffled as to why there was a case for maximum harmonisation, and I believe that an increasing number of governments in Europe will come to the same view. This is a problem.

The Commission takes the view that some of the things we want to achieve by implementation of the proposals of the Vickers Commission, or macro-prudential regulation through the Financial Policy Committee of the Bank, could be done through what is known as pillar 2 of the capital requirement. Again, that seems rather bizarre to us, because it is clear from the legal basis of pillar 2 that this is for individual institutions, but clearly that is not macro-prudential. Macro-prudential is something that applies to all banks, and that is naturally pillar 1. I cannot see any reason why anyone should object to a country using pillar 1 to have higher capital requirements. I absolutely agree there need to be common minimum capital requirements, and it is good that Europe is now taking this through the European Parliament to get European legislation. We are ahead of other countries in this respect, but I am completely baffled as to why they see any need or reason for having maximum harmonisation.

7.3.8.2 *Changed institutional balance*

Another, non-trivial development has been a change in the relative powers of institutions within EU-level decision-making. Traditionally, the European Commission was especially sympathetic to UK thinking across a range of economic policy areas, but especially in the financial services sector, whilst the European Parliament was much less sympathetic to UK orthodoxy.

In recent years, and especially with the Treaty of Nice, the power of the European Parliament has been enhanced. One example is the development of the “codecision procedure” whereby the European Parliament now has equal power with the Council, in its ability to amend and reject legislation.¹⁰⁸ Another is that, under provisions of the Treaty of Maastricht enhanced by the Lisbon Treaty, the European Parliament now has a right of legislative initiative that allows it to ask the Commission to submit a proposal.¹⁰⁹

This enhanced role for the European Parliament has increased its influence over what legislation comes forward, also. An example is the Alternative Investment Fund Managers Directive (the AIFM Directive). This was a measure that the European Parliament repeatedly urged should be investigated from the mid-2000s onwards (with the European Commission repeatedly refusing), but was only finally introduced in 2009, partly as a reflection of the financial crisis but also, and crucially, as a reflection of the increased institutional role of the Parliament.

7.3.8.3 *Increased relevance of needs of Eurozone*

Some financial sector measures recently introduced or considered have reflected particular issues in the Eurozone. Two examples of this are restrictions on trading in sovereign CDS and proposals for a Financial Transactions Tax. Neither of these was a measure likely to be proposed within the UK. Each reflected particular issues in the Eurozone — in the case of sovereign CDS issues relating to concerns about whether assessments of sovereign creditworthiness reflected genuine analysis or were merely the result of manipulative speculation; in the case of the Financial Transactions Tax reflecting the need to obtain a revenue stream to fund future increased fiscal transfers within the Eurozone.

If Eurozone members seek to introduce regulation of particular relevance to the Eurozone, such measures are unlikely to be significantly influenced by British ideas.

The needs of the Eurozone are becoming increasingly significant within the needs of the EU as a whole. The euro began in 1999 with eleven of the 15 Members of the EU; by 2004 12 of the 25 Members of the EU were members of the Eurozone. At present there are 17 members of the Eurozone out of 27 EU members with a further 8 EU members committed to joining the euro in due course. Thus whereas in the late 1990s and early 2000s (whilst the Financial Services Action Plan, upon which the UK was so influential, was being enacted) the Eurozone consisted of only a minority of those states that were EU members or about to become so, the Eurozone now comprises the vast majority of the EU and is scheduled to comprise almost all members of the EU, and the distinction between the “needs of the Eurozone” and the “needs of the EU” is much less clear.

Given the stated intention of the EU to form itself into an “EU Federation”¹¹⁰, along with various other measures to deepen fiscal and political union between Eurozone members in response to the Eurozone sovereign debt crisis, it seems plausible that the central goals of the Eurozone may become relatively more weighted towards the promoting and securing of political integration, and less towards the promotion of trade, over the next decade. This means both that within the EU the Eurozone will carry a very high voting weight, and that the objectives of Eurozone members (being increasingly political, rather than trade-oriented, relative to the UK) may become increasingly ill-aligned with UK policy goals.¹¹¹

¹⁰⁸ Previously, a measure proposed by the European Commission and supported unanimously by the Council could not be stopped by the European Parliament.

¹⁰⁹ <http://www.europarl.europa.eu/parliament/expert/staticDisplay.do?id=55&pageRank=13&language=EN>

¹¹⁰ See President of the European Commission José Manuel Barroso’s State of the Union 2012 Address to the Plenary session of the European Parliament/Strasbourg 12 September 2012 — http://europa.eu/rapid/press-release_SPEECH-12-596_en.htm

¹¹¹ We observe that the concern that, outwith the euro, UK policy influence within the EU would decline was one of the main arguments put forward by those advocating UK membership of the euro. The analysis in this subsection can

7.3.9 Will the Key Future Threats of Regulatory Arbitrage come from within the EU, or without?

As discussed above, a key motivation for regulatory harmonisation within the EU is the threat that, absent regulation providing a floor, there would be the risk of regulatory arbitrage between EU members. Perhaps some New Member State — say from Eastern Europe — might tempt business away from, say, London to some other centre within the EU, still able to passport and trade within the EU, but subject to lower regulation.

The relevance of this analysis over the next decade or so could be challenged (✓) and defended (×) on a number of grounds:

- ✓ Is the most important threat to London, coming from regulatory arbitrage, really from other EU Member States? Or, as a global player in financial services, should it be more concerned about international regulatory competition, from jurisdictions such as Hong Kong, Dubai, or Johannesburg?
- × *Of course, this way of framing the question assumes that London's role as a global player can be divorced from its position within the EU. In the past, it could perhaps be contended that London was able to exercise a global role partly on the back of leveraging scale benefits it secures from its EU markets. But even if correct in the past, whether that would remain the case if EU financial services sector declines over the next decade is less clear.*
- ✓ When the EU was a force for liberalisation, the EU itself was a device of international regulatory competition, providing pressure to drive down regulation for the EU as a whole. But if the EU is now (rightly or wrongly) to be driven by an ethos of increased regulation of financial services, does that make London (if subject to such increased EU-level regulation) more vulnerable to international regulatory competition from outside the EU?
- Against this, it could be argued that the EU might, as a large and cohesive international player, be able to export its ideas internationally outside the EU (or even EEA). A new jurisdiction adopting such a common rulebook would open up an additional revenue stream for City-based firms to exploit as they would have ready-made knowhow and scale compared to local firms adjusting to the new situation.

Additionally, it should be observed that international coordination of regulation has downsides as well as upsides. When market participants become dependent upon regulators for assessing the robustness of institutions (once regulatory badging is widespread), then regulatory failure coordinates market failure — the regulator fails for the whole market at once. And if regulation is coordinated internationally, that can mean that market failure is coordinated internationally, also. Was it a coincidence that the peak of international coordination of banking regulation, with the introduction of the Basel II banking rules, coincided with the most internationally-coordinated banking crisis ever? Of course, regulatory badging and international coordination have upsides as well as these drawbacks, but the current environment of great uncertainty regarding the best way to proceed on financial regulation suggests there could be an unusually high value to regulatory competition — to different countries trying their own different paths in this new financial regulation world, learning from the successes or failures of others, and in due course adapting to the new best practice.

7.3.10 Caveats

In this section we have explored the risk that the very same factors that might have meant the UK benefitted from EU-level setting of financial regulation in the past, might, over the next decade, mean that the UK suffers from EU-level setting of such regulation.

be seen as reflecting (perhaps vindicating?) this traditional pro-euro-membership concern regarding the drawbacks of non-membership of the euro. Of course, UK membership of the euro might have had its own alternative drawbacks, but those fall outside our scope here.

It is an inevitable feature of the future-focused nature of our discussion here that we can only identify risks — we cannot come to a robust definitive conclusion about them. It is not impossible that, in fact, a consensus arises quickly as to the best form of the new phase of financial regulation, and that that consensus closely reflects British views. It also cannot be ruled out altogether that the Eurozone resolves its current difficulties fairly smoothly and the focus of EU regulation returns to EU-wide needs rather than those of the Eurozone and of particular Member States within the Eurozone. It also cannot be ruled out altogether that, having resolved these current challenges, the EU moves into a phase of rapid further integration and growth — whilst at the same time opportunities outside the EU turn out to have been exaggerated and risks under-estimated (as has happened often in the past). An element of judgement is inevitably required in interpreting the discussion of risks here.

That notwithstanding, we do not regard our discussion as idle speculation. We have offered reasons to believe that the risks we identify are material, and that although there is of course great uncertainty about the future at the time of writing, the scenarios we paint are sufficiently plausible to carry important weight in policy considerations.

We emphasize again, however, that this report is an input to a synoptic review, rather than a sector study of financial services regulation in particular, and a more detailed study focused upon that sector might, identifying better data and other considerations we have not brought into the analysis here, come to a different conclusion.

Thus, though we stand squarely behind the analysis and conclusions here, our main purpose has been to set out how one might reason through such an issue, the sorts of criteria upon which one might base a conclusion, and to be transparent in drawing our own provisional conclusion in this case. A reader that is convinced by this analysis might perhaps conclude that the net benefits of policy influence, sovereignty costs, etc. takes a shape rather like panel Db in Figure 3.3 — i.e. that in terms of policy influence, sovereignty costs and the like, the phase of total harmonisation in financial services regulation, relative to the Single Market, is liable to entail a significant fall-away in net benefits to the UK, with those benefits perhaps even becoming negative. Other readers are invited to draw their own alternative conclusions.

This case study has focused upon financial services regulation. The method could be applied to other sectors.

8 Conclusions

This report has considered the following questions:

- ***What is the Single Market and what are its goals?***

The Single Market can be regarded as a trading relationship, extending the European customs union to encompass the stripping away of non-tariff barriers and free movement in capital and labour as well as goods and services, and that has been the main basis of our analysis here. However, the promotion of trade is not the only (or even, arguably, the main) goal of the Single Market — from the beginning its architects have openly identified other goals for the project such as the deepening of political and social linkages between the peoples and regions of Europe.

- ***What are the tools by which integration in the Single Market is promoted?***

Key tools include

- the stripping away of internal tariffs and the imposing of a common external tariff
- Treaty commitments by governments to the principles of free movement of goods, services, capital and labour, to the liberalisation of markets, and to common principles of competition and the addressing of externalities
- mutual recognition of the regulatory and other requirements of other Member States
- harmonisation of regulatory and other requirements across the EU
- the spreading of best practice
- common frameworks for economic regulation (e.g. of utilities)

- ***How should we understand the question of whether integration within the Single Market is optimal?***

Membership and development of the Single Market entails a number of trade-offs. Benefits include gains from trade, gains from efficiency from economies of scale and scope, gains to innovation, policy synergies where policies spill over borders, and the opportunity to improve policy-setting in other countries. Losses include trade diversion, sovereignty/democracy costs, subsidiarity costs, and process costs (including the cost of complying with regulation).

- ***How should one measure the degree of integration within Europe?***

We have argued that the “inputs” to integration — policy measures designed to enhance integration — should, if integration is genuinely delivered, produce fruits in the form of “outputs” — convergence in prices and costs and productivity of the factors of production across the EU.

- ***In which sectors has integration proceeded least?***

We found that the worst four sectoral performances, in terms of EU15 convergence relative to global convergence, are manufacturing, wholesale/retail trade, construction and transport.

- ***How can the concrete benefits of integration be measured in particular sectors?***

Using a combination of general reflections upon data, econometrics, and analytical judgement, we have illustrated how one might explore the relationship between integration in the Single Market and trade, competition, efficiency and innovation for the pharmaceuticals, financial services, motor vehicles and energy sectors. In general we believe one should be optimistic regarding the scope for drawing fairly objective quantitative results in respect of these benefits in respect of trade,

competition and efficiency. In respect of innovation, we believe some quantification is worth attempting but the likelihood of producing robust and definitive results is limited.

- ***How can the concrete costs of integration be measured in particular sectors?***

We have explored trade diversion and process costs, including the costs of regulation. Regulatory costs can be measured quite concretely, but there is an inevitable element of judgement involved in determining how much additional regulatory costs the EU creates that would not have been incurred anyway through national regulatory interventions. We also note that the ways regulatory costs are typically analysed in regulatory impact assessments is not precisely suited to our purpose here, in that many EU regulations are intended to be deregulatory or liberalising — the very essence of the stripping away of non-tariff barriers is that doing so should have the net effect of *reducing* regulatory costs, not increasing them. Trade diversion can be measured, just as can trade creation. Rather than repeating the methods explored earlier, our trade diversion analysis approaches the question from a different angle, considering how international trends in competitiveness and in the balance of global versus EU trade mean that the significant rise in non-EU versus EU competitiveness in recent year (and projected for the next decade, also) is a potential and material threat to the efficacy of the Single Market, since it implies a large rise in trade diversion costs. That means the current EU policymaker concern for EU competitiveness is particularly well-founded.

- ***How can policy costs and benefits be assessed according to some objective or transparent standard?***

We consider policy costs and benefits to be potentially as large as or even larger than the concrete costs and benefits of the Single Market, bearing in mind especially the point that the key goals of the Single Market project may be political (and hence directly related to policy influence) as much as trade-oriented. We explore how measures of dissent, such as occasions the UK has been outvoted via QMV, might supplement more widely-used coarser-grained measures of policy costs, such as the number of “lost vetoes”. In respect of particular sectors, we suggest that detailed reflection upon the dynamic of policy-making can reveal the UK’s influence or lack thereof and how this changes through time. We explore the specific case of the Financial Services Sector, showing how the UK’s past influence can be seen through detailed consideration of the structural similarities between key EU and UK financial regulations and the differences between these and previous regulation in other Member States. We also argue that once one understands the factors that drove high UK influence over financial services regulation in the past, it seems likely (in our judgement — others are invited to draw their own conclusions) that the UK’s policy influence, at EU level, in this area has recently declined markedly and should be expected to be weak over the next decade — implying that we are in a phase of relatively high policy costs, especially in terms of the risk of being over-ruled, in respect of that sector.

The key lessons of this analysis are thus methodological and synoptic — establishing an overall framework of analysis for the Single Market and showing how it can be applied in other sectors.