

Twenty Years On

The UK and the Future of the Single Market



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Centre for Economic Policy Research (CEPR)

Centre for Economic Policy Research
3rd Floor
77 Bastwick Street
London
EC1V 3PZ
UK

Tel: +44 (0)20 7183 8801
Fax: +44 (0)20 7183 8820
Email: cepr@cepr.org
Web: www.cepr.org

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HM Government

Centre for Economic Policy Research (CEPR)

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About the Contributors

Yvan Decreux is an economist specialised in trade policy analysis. He holds degrees in engineering and economics from École Polytechnique and ENSAE in Paris, as well as a PhD in economics from University Paris 1.

After working for 10 years with CEPII in Paris, including a one-year secondment at the World Bank in Washington, DC in 2007, he joined the ITC in April 2010. He has contributed to the construction of a computable general equilibrium model of the World economy, the Mirage model, with which he simulated a number of trade agreements, bilateral agreements and multilateral negotiations of the Doha Development agenda.

Peter Goodridge is currently studying for a PhD at Imperial College Business School on intangible capital and its contribution to growth. He previously worked at the ONS, specifically in branches responsible for Productivity and the New Economy and has written a number of articles in Economic and Labour Market Review and the ONS Productivity Handbook.

Jonathan Haskel is Professor of Economics at Imperial College Business School. He is also the School Research Director. He has recently completed eight years as a Member of the UK Competition Commission, including serving on the panel investigation into British Airports Authority. His work with Gavin Wallis on UK intangibles and growth is widely cited as the first paper for the UK on this topic.

John Longworth was appointed Director General of the British Chambers of Commerce on 5th September 2011. He originally trained as a scientist, and over the course of his career, he has served as an Executive Main Board Director of Asda Group Ltd and Asda Financial Services Ltd, and held senior director positions at Tesco Stores Ltd and the CWS Ltd.

His public roles have included the Board of a Healthcare Trust and the British Retail Consortium. He was economic spokesman for the Confederation of British Industry, Chairman of its Distributive Trades Panel and Chairman of the Brussels based CIES International Product Standards and Trade Body.

A former Health and Safety Commissioner and Chairman of the HSE Audit Committee, John also sat on the original Deregulation Task Force. He assisted a leading Healthcare Trust to establish a commercial and marketing operation, and currently has a portfolio career as chair and founder of a venture capital-

backed science and professional services business, SVA Ltd; non-executive director at the Co-operative Group Food Ltd; non-executive Director of Nichols plc; and trustee of the social enterprise P3.

Gavin Wallis is an Economic Adviser at HM Treasury, visiting researcher at Imperial, and is currently studying for a PhD in Economics at UCL. He previously worked at the Office for National Statistics (ONS). He has extensive knowledge of productivity issues, having worked on both productivity statistics production at the ONS and on productivity policy at HM Treasury.

Bill Wells is head of the Labour Market Analysis Branch in the Department for Business, Innovation and Skills. He has been in the UK Civil Service for 35 years and during all of that time has concentrated on analysis of national and international labour markets and labour market policies. His international experience includes a period as a National Expert in the labour law department of the European Commission. He was also the UK representative to the Employment, Labour and Social Affairs Division of the OECD and covered both the OECD Jobs Study and the Jobs Study Reassessment. His work with David Grubb of the OECD also formed the basis of what is now the OECD Index of Employment Protection.

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Foreword

The Single Market is now twenty years old; twenty years in which it has become the most economically integrated trading bloc in the world. It has successfully dealt with considerable growing pains to reach this milestone, including expanding to include new Member States with very difficult economic legacies, and ever freer movement of goods, services, labour and capital. This achievement has allowed UK and European companies to make far better use of the resources on our doorsteps, and consumers to enjoy a huge variety of choice. For these reasons alone the Single Market has represented a powerful boost to freedom of choice.

But there is still a long way to go. The full economic potential that the Single European Market has to offer is nowhere near delivered.

Following the recent financial crises, completing the Single Market is one of the single most valuable steps that can help Europe recover. Moreover as global markets become ever more integrated and competitive, the answer is not further fragmentation at the European level.

There are a number of areas where we believe further action would be fruitful.

The importance of further progress on opening up services markets is underlined by the scale of services sectors across all European economies. The Services Directive extended the Single Market to services but only to a limited degree, so there is further that we can go.

Progress on the Digital Single Market agenda could rapidly reduce barriers on cross-border online trading and inject the level of trust needed for both customers and companies to operate increasingly in the digital space. There are also benefits from establishing common approaches to aspects to such as intellectual property for digital content and data protection and privacy.

A third area is the liberalisation of key infrastructure networks. The UK has led the way in this area and will continue to push for the opening up of networks across Member States, on the basis that the resulting increased competition should help European businesses compete more effectively on global markets.

For any market to operate effectively, clear and consistent rules and regulations are required. The pursuit of a 'better' regulatory environment should be an overarching goal. Regulations should be effective and efficient tools for providing consistency and certainty for companies looking to trade across

borders and provide customers with clear rights irrespective of where they chose to enter the market-place.

We must prioritise the actions that have the greatest potential to deliver growth, including delivering on commitments that have already been agreed. A strategy of liberalisation, harmonisation and mutual recognition to remove or reduce remaining barriers will make it easier for companies to work effectively across borders. The recently published Single Market Act II shows the European Commission's commitment to these aims.

This useful set of papers seeks to draw together evidence about the impact that the Single Market has had to date and establish where the priorities should be going forward.



The Rt. Hon. Dr Vince Cable MP
Secretary of State for Business, Innovation, and Skills

1 Summary of conclusions

The European Union Single Market – what has been achieved in 20 years?

HM Government

Conclusions

- The European Union is now the most integrated region in the world, boasting the highest levels of liberalisation among sovereign states of any region. The Single Market has gradually developed from its formal inception at the start of 1993 and is still advancing. It currently comprises around 500 million people and approximately £11 trillion in GDP in 2011
- Between 1992 and 2006, the Single Market is estimated to have raised EU GDP by 2.2% in (or €518 per person) and created 2.75 million additional jobs across Europe. However, while progress has been made across all four freedoms, there are clearly still barriers that prevent the full potential benefits of the Single Market from being realised.
- Increased competitive pressure in the EU for goods has been reflected by greater instability in market leadership, market entry on national markets, and changes in the pricing strategies of firms. However, there are still persistent barriers in product market regulation, insufficient business dynamism and price rigidities.
- Services account for over 70% of EU GDP and over 95% of new jobs created, although these activities only account for around 23% and 22% of the EU's internal exports and imports respectively. While progress has been made (for example the 2007 Services Directive), services sectors still face, on average, higher obstacles to cross-border trade than goods.
- Although considerable progress has been made in enabling the freer flow of capital across member state, financial integration has progressed unevenly across different activities and market sectors. Cross-border financial activity has fallen sharply since the onset of the current economic crisis, and further integration will be highly dependent on the shape of future regulatory frameworks across all Member States (both within the Eurozone and out of it).
- European markets account for just under half of total UK exports of goods and services. The 2004 and 2007 enlargements of the EU have had a positive effect on the UK's trade with the new Member States – doubling exports to the EU12 since 2004. In addition, the UK has

recorded a trade surplus in services since 2004, growing strongly to record a net surplus of £15.9 billion in 2011. The UK also benefits from being part of a larger trading bloc in trading negotiations with third parties.

- Other EU Member States are both the main source of and the main destination for foreign direct investment (FDI) in and from the UK. EU27 countries were responsible for 49% of the total inward flow of FDI in 2008, and received 44% of the total outward flow in FDI from the UK.

Looking forward – what more is there to achieve through strengthening the Single Market?

HM Government

Conclusions

- Economic integration in the EU has been achieved gradually, with initial focus on targeting more easily defined barriers to cross-border trade. As a result, what remains are the potentially more sensitive and complicated barriers to cross-border trade, namely non-tariff measures (NTMs).
- Recent focus has tended to be on particular sets of regulations or sectors, such as network industries and the market services sector. However, the Single Market Act (2011) and its successor, Single Market Act II (2012) mark a return to a more cross-cutting approach to achieving a Single European Market. Effort should focus on barriers that are expected to yield the greatest potential benefit (net of cost of implementation) and, in the context of the objectives of the Europe 2020 strategy, those that are most likely to contribute to setting the EU as a whole and individual Member States on a long-term, sustainable growth path.
- Barriers can also persist through difficulties and/or delays in the transposition and delivery of agreed European directives and regulations. Obstacles are caused by information gaps (where individuals do not have sufficient information about their rights) and by implementation or application gaps (where national rules may not be in line with EU law or are incorrectly applied).
- Estimates of the potential future gain from implementation of the Single Market vary. The Commission (2007) estimated that the benefit could be as much as a further 2.2% GDP and 2.75 million jobs. More recent analysis has suggested that full liberalisation could deliver very strong positive benefits for all Member States and that, after a ten-year implementation period, the EU's national income could be 14% higher than under a baseline scenario of no change.
- With respect to services, there could be significant gains from:

- deeper and more consistent implementation of the Services Directive, including improvements to governance and enforcement; and
- further liberalisation of services through new secondary legislation to enable further integration to take place, for example, through greater use of mutual recognition, and removal of specific regulatory barriers such as the reduction of reserved activities.
- Completion of the DSM is considered fundamental to the future growth and prosperity of the EU. Further action should be taken to:
 - improve the integration of the European telecoms market (through greater harmonisation of regulatory regimes);
 - create a clear and consistent legal and regulatory framework for the DSM (through harmonisation or mutual recognition in legislation); and
 - remove technical barriers, particular in cross-border delivery and payments.
- On achieving a single market for energy, the focus should continue to be on the implementation throughout the EU of the Third Energy Package, including effective unbundling of production and supply from transmission. In addition, further integration may be helped by EU action to facilitate investment in cross-border energy interconnectors, for example, by streamlining consenting procedures, through the Connecting Europe Facility and innovative financing of projects, where the benefits accrue to the EU as a whole but the costs cannot be easily allocated between specific member states. Finally, agreement on cross-border technical rules and cooperation by NRAs in ACER should help national regulatory regimes become more consistent over time.
- Further progress in developing the Single European Transport Area should focus on delivering a Fourth Rail Package that further liberalises European passenger rail markets and more consistent implementation of legislation across the rail freight sector.

The internet and the Single Market

Peter Goodridge, Jonathan Haskel and Gavin Wallis (Imperial College London)

Conclusions

- The European Commission estimates the single market to have raised EU GDP by 0.15%pa from 1992 to 2006, mostly due to a once and for all benefit from economies of scale from expansion of network industries and competition effects on innovation.

- Estimates of the contribution of investment in computers, in its infancy at the start of the Single Market Programme, SMP, put them at 0.39% pa for the UK and continuing.
- Early estimates of the effect of the internet in the US were a one off effect of 1-2% of GDP.
- Our estimates for the UK suggest a contribution of the internet of 0.26%pa, about 12% of LPG, which applied from 1995-2011, has raised UK GDP by £49bn in 2011 prices, around 3.3% of 2011 UK GDP. Most of this increase comes from the network effects of the internet.
- The internet is symptomatic of the importance of the knowledge economy in the EU. EU legislation should concentrate on facilitating knowledge investment and its dissemination through mechanisms such as IP.

Eight new ways to make the Single Market work

John Longworth (British Chambers of Commerce)

Conclusions

- After 20 years of comparatively free movement of goods, people, capital and, to an extent services, it is fair to say that we are all better off. Trade between EU countries has ballooned and millions of jobs have been created.
- The EU is the world's largest integrated trading bloc and the most popular destination for UK exports, with 88% of BCC members exporting to the EU; and for smaller BCC members, EU markets present the greatest opportunities for export growth.
- But faith in the inexorable goodness of the Single Market is wavering. A sizeable number of BCC members feel that the benefits of the Single Market are outweighed by impact of rules imposed by Brussels, making them less competitive in the global market.
- There are still gaps in the Single Market which is inhibiting growth, such as energy markets, the digital sector and services. Moreover, those Single Market rules that are in place are being flouted whether they are two years old or twenty years old. The principle of mutual recognition is also not implemented as it should be.
- Two years ago the BCC published a series of steps it believed would make the Single Market work more effectively. Two years on, and most of the eight steps have yet to be taken:
 1. *Spread the word* about the opportunities of trading across the EU.

2. *Help business provide services across borders* including fully function Points of Single Contact by 2013 and investigation of ways to deal more quickly with infringements.
 3. *A freeze on laws that cost jobs* where proposals are rejected by the Commission if they cannot prove they do not worsen prospects for growth.
 4. *Create a level playing field for SMEs* including effective implementation, enforcement and redress.
 5. *New rules must be SME-proofed*, including systematic quantification of the impacts of new legislation on SMEs.
 6. *Secure and vary Europe's energy supply* to ensure that business consumers have access to an affordable and secure supply of energy.
 7. *Create a Digital Single Market* to make the most of the opportunities provided through e-commerce and encourage cross-border trade.
 8. *Rebalance the EU budget towards growth*
- Business is key to delivering a Single Market that works and a stronger Single Market will mean fewer barriers to British companies trading in Europe, and better outcomes for UK plc. Failure to act will further delay Europe's return to growth and could affect the UK's participation in the Single Market.

The labour market and the EU Single Market

Bill Wells (Department for Business, Innovation and Skills)

Conclusions

- The free movement of people means that EU citizens can move freely in order to live, work, study or retire in another Member State. However, there are still restrictions in place that prevent the free movement of workers, including transitional arrangements for new Member States.
- The establishment and completion of the EU Single Market adds to the employment opportunities across the EU as a whole, although participation in the labour market is a fundamental part of translating these potential opportunities into real jobs.
- Labour market outcomes are very different across Member States, particularly in the diversity of employment rates and how these have

evolved. Despite progress against some structural indicators, the diversity of outcomes suggests that there is scope for improvement if the efficiency of the labour market in each individual country is to be improved.

- Across the Member States there is a diversity of national labour markets which have developed in line with each of the state's culture and traditions. The diversity of employment outcomes suggests that the reforms should not be one-size-fits-all, but rather consistent with the culture and tradition of the individual country. Both the employment performance of the UK and Germany, for example, has been relatively good given the fall in output, but there are clear differences in key elements of each country's labour market policy.
- A more effective pan-EU labour market infrastructure where, for example, qualifications are recognised and vacancies advertised across the EU will help to translate more of the employment opportunities into jobs for EU citizens.
- A single accessible source of information setting out clearly and simply what an EU citizen needs to do to work legally in another EU country would make it easier to get and take up a job and also reduce the risk of inadvertent illegal working.
- Labour market policy is a key area where subsidiarity is very important and the rules of the single market need to be carefully integrated with the culture and tradition of each country.

Services sector productivity

Peter Goodridge, Jonathan Haskel and Gavin Wallis (Imperial College London)

Conclusions

- The service sector now constitutes the majority of the UK and EU economy. This chapter examines the implications of this for the Single Market and EU productivity.
- The EU-US productivity gap is much commented upon, but rather than being caused by the size of the EU service sector, much of it can be explained by the differing productivity performance of US and EU service industries. In particular, the differential between EU and US productivity is largest in the distributive trades and financial and business services
- In terms of the proximate sources of growth, poorer EU growth relative to the US can be explained with a smaller contribution from the "knowledge economy", that is, with smaller contribution from labour skills, ICT and innovation, with the latter proxied by Total Factor Productivity (TFP).

- Consistent with this picture is the observation that investment in intangible assets, including R&D, product and process development, software and workforce training among others, constitute a smaller proportion of final output in the EU compared to the US.
- Potential reasons for the poorer productivity performance of EU services, relative to the US, include the degree of labour and product market regulation in the EU having harmful effects on incentives to innovate and competition. The degree of regulation in the distributive trades in the UK and EU is noted in particular, with that industry being responsible for a significant proportion of the US-EU productivity gap.
- In developing policy to improve future EU productivity performance, the Lisbon Agenda focused on the importance of R&D. But the service sector actually performs very little R&D, instead it invests in other forms of innovative property and knowledge capital, such as software, product design, business process improvement, workforce training and reputation. If some of these assets generate social returns over and above the private returns appropriated by the original investor, then that is another reason for policy to consider such investments explicitly.
- The ability of firms to finance innovative activity is a well-documented barrier in the EU, and is another feature that sits in contrast to the US.

Completing Single Market II

Yvan Decreux (with support from the Department for Business, Innovation & Skills)

Conclusions

- Members of the European Union came together and created a Single Market for goods and services in 1992. Twenty years on, significant economic benefits has been achieved, however much remains to be done.
- This evaluation is based on an economic model of the European Union in the world, using a range of scenarios which model different reductions in trade costs, including full liberalisation. The paper assumes equal reduction in trade costs across all sectors.
- The larger the integration efforts, the greater the increase in GDP gains for the European Union. When non-trade barriers are reduced by 25% compared to the base scenario, Europe's GDP would gain US\$440 billion (in 2007 prices). At full liberalisation, this increases to US\$2,721 billion (in 2007 prices).
- EU exports to the EU could expand by more than US\$6.9 trillion (in 2007 prices) in 2025, as compared to the baseline, while total exports

from the EU to the world could increase by almost US\$5.3 trillion (in 2007 prices), net of trade diversion.

- At a sectoral level, the modelling suggests that the impact on services exports has become smaller and sometimes negative when the world market is considered. This phenomenon is due to the low level of services trade as compared to trade of goods and a shift of financial resources towards the production of goods.
- This should not lead to the conclusion that services sectors may suffer from further integration in the EU or that effort is best placed in tackling remaining barriers in other sectors. Overall, value-added in services sectors is still expected to progress significantly as a consequence of further liberalisation. Furthermore, modelling does not capture the benefits from reducing non-trade barriers which could help companies establish local subsidiaries for services delivery.
- Individual Member States may experience wide-ranging impacts across sectors, depending on their industrial make-up. For instance, the UK's income gains from liberalisation are lower in comparison to the larger EU countries due to the UK having a smaller proportion of trade with the rest of the EU relative to other Member States (the ratio of trade-to-GDP being smaller in relatively large economies like the UK); and obstacles to trade in services are already lower in the UK than in other EU countries.
- The UK is likely to gain substantially more in its services sectors from full liberalisation than suggested for the EU overall. This is because the UK has a fairly developed services sector and is likely to gain more from liberalisation of the services sector than some of the other Member States.

2 The European Union Single Market – what has been achieved in twenty years?

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Conclusions

- The European Union is now the most integrated region in the world, boasting the highest levels of liberalisation among sovereign states of any region. The Single Market has gradually developed from its formal inception at the start of 1993 and is still advancing. It currently comprises around 500 million people and approximately £11 trillion in GDP in 2011
- Between 1992 and 2006, the Single Market is estimated to have raised EU GDP by 2.2% in (or €518 per person) and created 2.75 million additional jobs across Europe. However, while progress has been made across all four freedoms, there are clearly still barriers that prevent the full potential benefits of the Single Market from being realised.
- Increased competitive pressure in the EU for goods has been reflected by greater instability in market leadership, market entry on national markets, and changes in the pricing strategies of firms. However, there are still persistent barriers in product market regulation, insufficient business dynamism and price rigidities.
- Services account for over 70% of EU GDP and over 95% of new jobs created, although these activities only account for around 23% and 22% of the EU's internal exports and imports respectively. While progress has been made (for example the 2007 Services Directive), services sectors still face, on average, higher obstacles to cross-border trade than goods.
- Although considerable progress has been made in enabling the freer flow of capital across member state, financial integration has progressed unevenly across different activities and market sectors. Cross-border financial activity has fallen sharply since the onset of the current economic crisis, and further integration will be highly

dependent on the shape of future regulatory frameworks across all Member States (both within the Eurozone and out of it).

- European markets account for just under half of UK exports of goods and services. The 2004 and 2007 enlargements of the EU have had a positive effect on the UK's trade with the new Member States – doubling exports to the EU12 since 2004. In addition, the UK has recorded a trade surplus in services since 2004, growing strongly to record a net surplus of £15.9 billion in 2011. The UK also benefits from being part of a larger trading bloc in trading negotiations with third parties.
- Other EU Member States are both the main source of and the main destination for foreign direct investment (FDI) in and from the UK. EU27 countries were responsible for 49% of the total inward flow of FDI in 2008, and received 44% of the total outward flow in FDI from the UK.

Introduction

1. The Single Market, which aims to establish freedom of goods, services, capital and people across participating Member States, has evolved since the signing of the Treaty of Rome in 1957. The development of the European Union means that it is now the most integrated region in the world, boasting the highest levels of liberalisation between sovereign states of any region.
2. Against the background of the current economic crisis, a number of questions are being asked about what the Single Market has delivered, how much further it might be expected to go and whether it can help address some of the challenges of emerging from the current crisis. The importance of the Single Market in driving long-term growth of the region and the need to strengthen it has been emphasised on a number of occasions over recent years¹, and as one of the ways of helping Europe maintain competitiveness in global markets. Indeed, the need for its completion was reiterated by President Barroso in his State of the Union Address in September 2012.²
3. This paper draws together some of the available evidence on the economic achievements of the Single Market to date. The analysis here focuses primarily on three of the four 'freedoms' – goods, services and capital – and provides a preliminary assessment of what the impact has been on the UK.

1 For example, President Barroso's Guidelines for the New Commission (2009); Europe 2020 Strategy (2010)

2 <http://europa.eu/rapid/pressReleasesAction.do?reference=SPEECH/12/596&format=HTML&aged=0&language=EN&guiLanguage=en>

An in-depth discussion of the Single Market and labour markets is included elsewhere in this series of papers. The focus here is the Single Market rather than the impact of a wider range of European policy areas such as the Common Agriculture Policy, regional funds, extra-EU trade or defence.

4. The following paper will build on this assessment, looking at where barriers still remain and what more can be expected from further liberalisation. While the current situation in the Eurozone has been mentioned, potential scenarios will not be covered.

The progressive nature of European economic integration

5. Following the Treaty of Rome in 1957, the first major milestone for economic integration was the establishment of the customs union in 1968. This removed customs barriers within the European Economic Community (EEC) and established a common customs tariff to be applied to goods from all non-EEC countries.
6. In 1987, the Member States adopted the Single European Act which streamlined decision-making procedures to facilitate the completion of the Single Market by the end of 1992. The primary rationale focused on enhancing efficiency through reducing or removing non-tariff barriers to support greater competition in product- and factor-markets. By 1st January 1993, around 90% of the legislative projects set out in the Single European Act had been achieved³, including full liberalisation of capital markets, removal of border checks on goods and significant progress on freedom of establishment and to provide services through harmonisation and mutual recognition.
7. In 1997, a further Action Plan for the Single Market included 62 actions with precise deadlines and introduced six-monthly monitoring of progress by Member States. This was followed by the Strategy for Europe's Internal Market (launched November 1999) which instigated a five-year plan of targeted measures with an additional review and further measures in 2003. In parallel, the pursuit of monetary union led to the launch of a common currency in 1999 and to the partial adoption of the euro in 2002 .
8. Steps to remove residual barriers to cross-border trade have been pursued in specific areas. For example, the 2007 Services Directive was a major step forward in tackling barriers to cross-border working in this sector and lower regulatory burdens.

³ http://www.europarl.europa.eu/factsheets/3_1_0_en.htm

9. In 2011, the European Commission proposed a new “Single Market Act” based on 12 key actions aimed at unlocking competitiveness, growth and employment across Member States.⁴ The subsequent document, “Single Market Act II”, launched 3rd October 2012⁵, builds on the original actions. Proposals include action on access to finance for European SMEs, facilitating the development of the digital single market, improving the efficiency of network infrastructure, improving the regulatory business environment and modernising public procurement legislation. The Commission plans to table legislative proposals relating to these priorities by next year in the expectation that they will be adopted by the Council and European Parliament (EP) by the end of the Commission’s current mandate.

The impact of the creation of the Single Market on European Member States

10. The Single Market has gradually developed from its formal inception at the start of 1993 and is still advancing. It currently comprises around 500 million people and approximately £11 trillion in GDP in 2011.⁶
11. The gradual and continuous nature of European actions to remove barriers to trade presents difficulties in estimating the full ‘impact’ of the Single Market. In addition to the complexity and interdependence of the wide range of policies and measures implemented, controlling for the various stages of enlargement from the original six founding members of the European Economic Community to the 27 participants in the European Union today, further complicates the analytical challenge.
12. The more general economic theory that supports the removal of tariff and non-tariff barriers, thus leading to greater cross-border trade and economic growth, is well-known. Increased mobility of goods, services, capital and labour can contribute to better economic performance through enabling a more efficient allocation of economic resources and leading to greater competition, thus increasing incentives to invest and innovate. The OECD (2003)⁷, for example, estimated that a 10 percentage point increase in “trade openness” (defined by lower tariff and non-tariff barriers) translates into an approximate 4% increase in income per capita. The European Commission (2007)⁸ also estimated that a 1% increase in the openness

4 European Commission (2011), *Communication on the Single Market Act: Twelve levers to boost growth and strength confidence*, COM(2011) 206

5 European Commission (2012), *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Single Market Act II – Together for New Growth*

6 Eurostat: National Accounts and Exchange Rate data

7 OECD (2003) *Economic Growth Study*

8 European Commission (2007) *European Competitiveness Report 2007*, COM(2007) 666

of an economy results in an increase of 0.6% in labour productivity the following year. Finally, according to the World Bank, per capita income grew more than three times faster for those developing countries that lowered trade barriers (5% per year) than for other developing countries (1.4% per year) in the 1990s.^{9, 10}

13. Many ex-ante and ex-post studies have attempted to quantify the gains from the creation of the Single Market. Estimates depend on the nature of the study, the methodology and time period covered.¹¹ In addition, in the context of regional integration (regional trade agreements) the impacts of greater openness are more complex as they can lead to trade diversion as well as trade creation.
14. One early ex-ante study¹² suggested that economic integration could provide an increase of 0.5% in GDP levels for the six founding members of the EEC. Later, the Commission launched a series of reports aimed at a comprehensive series of reports (the Cecchini Report, 1988) aimed at a comprehensive quantitative assessment of the economic gains that could be achieved from the Single Market.¹³ One of the series (*The Cost of Non-Europe*) specified the conditions for establishing the four freedoms (goods, capital, services and labour) by examining the costs and benefits of establishing a Single Market. Using partial equilibrium methods and 1985 data from 12 Member States, the report argued that nationally fragmented markets generated three types of barriers to trade: physical barriers, technical barriers and fiscal barriers.
15. The Cecchini Report identified three major areas for future cost-saving resulting from market integration: 1) static trade effects; 2) competition effects; and 3) restructuring effects. The analysis suggested the costs of non-Europe to be 4.25-6.5%¹⁴ of GDP depending on the variations made to assumptions.

9 OECD, ILO, WORLD BANK, WTO (2010), *Seizing the benefits of trade for employment and growth*, final report, Prepared for submission to the G-20 Summit meeting Seoul (Korea)

10 For a further discussion of links between economic openness and economic prosperity, please see: BIS/DfID (2010), *Economic Openness And Economic Prosperity*, Trade and Investment Analytical Papers, No. 2 of 18

11 A comprehensive assessment of the economic impact of market integration would need to cover both static gains (from, for example, increases in market sizes, economies of scale and increased competition leading to productivity gains) and dynamic gains (for example, from wider range of products and impacts on rates of accumulation of factors of production). However it is difficult to incorporate both angles with respect to the Single Market alone.

12 Balassa, B. (1975) *European Economic Integration*

13 Cecchini, P., M. Catinat & A. Jacquemin (April 1988) *The European Challenge 1992: The benefits of a Single Market (Cecchini Report)*, for the Commission of the European Communities

14 Detail provided in Emerson, M., M. Aujean, M. Catinat, P. Goybet, & A. Jacquemin, (1998), *The Economics of 1992: An Assessment of the potential economic effects of completing the internal market of the European Community*

Table 1 The gains from completing the EU Single Market

Category of gain	% EU GDP in 1985
(1) Elimination of trade barriers	0.2 - 0.3
(2) Elimination of production barriers	2.0 - 2.4
(3) = (1) +(2) Gain from reducing cost increasing barriers	2.2 - 2.7
(4) Economies of scale	2.0-2.1
(5) Competition effects	1.6
(6) = (4) + (5) Gain from reducing market-entry restrictions	2.1*-3.7
(7) = (3) + (6) Total gains from Single Market programmes	4.3-6.4

Source: Emerson et al (1988); Note: *if (4) and (5) are computed jointly.

16. The Cecchini Report, and its supporting analysis, was an important stepping stone in assessing the potential benefits of greater economic integration in Europe, although there were limitations to its analysis. The report did not take into account welfare costs of adjustments or the enlargement effect which has had a significant impact on regional specialisation and the development of European value and supply chains. Finally, the estimates are static and did not fully take into account the long-term dynamic gains associated with the increased competition.
17. Studies that have tried to estimate the actual (ex-post) impact of the creation of the Single Market state that it has generated substantial economic benefits to UK and European businesses and consumers. Gains have come from greater competition, increased markets access, higher productivity and investment and innovation levels. Consumers have also benefited from increased variety and lower prices.
18. In 1996, the Commission carried out its first ex-post analysis of the achievements of the Single Market.¹⁵ The study undertook 38 in-depth sectoral analyses assessing the degree of implementation of the Single Market in a range of European industries and across them. The analysis found that the Single Market had increased output by 1% on a permanent basis and created between 300,000 and 900,000 new jobs. Further, the analysis highlighted that inflation had been reduced by 1-1.5% and investment stimulated by an additional 2.7%. Finally, transport costs had decreased by an estimated €5 billion and the price of telecom services decreased by 7%, saving European consumers more than €1.5 billion per annum.

¹⁵ Monti, M (1996), *The Single Market and Tomorrow's Europe: A progress report from the European Commission*.

19. The Commission conducted a subsequent Single Market Review in 2007, which focused on establishing the benefits of the Single Market since its inception in 1992. The study focused on the period 1992-2006 (therefore not capturing the progressive benefits realised before that point, such as the benefits of eliminating tariffs) and attempted to capture the effect of enlargement by distinguishing between the impacts on the EU15 and on the EU25.¹⁶ The study simulated the competition and innovation effects on manufacturing, along with a more targeted simulation of the impact of the opening up of electricity and telecommunication markets.
20. The study concluded that the Single Market had raised EU GDP by 2.2% in 2006 (or €518 per person) and created 2.75 million additional jobs across Europe. It had resulted in a 0.9 percentage point decline in the aggregate price-cost mark-up and boosted total factor productivity by 0.5% over the period 1992-2006. Competitive government procurement has led to savings of on average between 10-30%.
21. A later discussion paper by the Centre for Economic Policy Research (CEPR, 2008)¹⁷ suggested that the Common Market and Single Market Programme might have increased EU GDP by around 5% in comparison to what it might have otherwise been, based on the strength of trade liberalisation that was occurring in the world at large at the time.
22. These ex-post studies are consistent with more general literature in this area. In terms of employment impacts, for example, the OECD (2007) found that reductions in industrial employment are predominantly caused by technological change rather than as a result of competition from imports.¹⁸ A recent paper by the European Commission also finds that trade openness has not led to a decline in overall employment in the EU.¹⁹ However, although overall benefits of the Single European Market are positive, it is important to note that particular sectors and some types of employees do face adjustment costs as markets and market structures adjust to greater competition through the reduction or elimination of trading barriers.

16 Ilzkovitz, F, A. Dierx, V. Kavocs and N. Sousa (2007) *Steps Towards a Deeper Economic Integration: the Internal Market in the 21st Century, A Contribution to the Single Market Review*, European Economy Economics Papers 271

17 Boltho, A & Eichengreen, B. (2008) *The Economic Impact of European Integration*, CEPR Discussion Paper No 6820

18 OECD (2007), *Trade and Labour Market Adjustment*, OECD Working Paper

19 European Commission (2010), *Trade as a Driver of Prosperity*, Staff Working Document

Progress on the freedoms

23. Progress in completing the Single Market has varied across the four freedoms – goods, services, capital and labour. For example, considerable progress has been made in goods, but there are still substantial barriers in place which inhibit cross-border trade in services. The success in removing a wide range of non-tariff barriers when establishing the Single Market initially and the continued effort since then to make further progress on specific issues, such as the market for services, (including greater focus on prosecution of infringements) has led to a reasonably well functioning market for goods across EU27 countries.
24. The latest OECD Economic Survey of the EU²⁰ highlighted that the share of goods and services exports in GDP is above 40% of GDP for the EU, a level which is well above the trade shares of other major OECD economies. The study highlights that, in contrast to other large OECD countries, the extra-EU trade is a low proportion of EU GDP – intra-EU exports account for around 26% of EU GDP compared to 15% for extra-EU.

Goods

25. The OECD Economic Survey highlights “trade in intermediate goods” as a useful indicator of the level of integration of cross-border production processes. For example, half of all intermediate and final consumption of goods in the machinery and equipment sector is sourced from other EU countries. In comparison, only a tenth comes from outside the EU. However, overall, the analysis shows that intra-EU trade in manufactures is still considerably lower than interstate trade with the US.
26. There is limited evidence on the specific effects of the Single Market on goods, and the task has become increasingly complicated with the growing importance of global value chains that blur the distinction between sectors. However, the Commission’s first ex-post assessment of the Single Market in 1996²¹ highlighted the following examples:
 - *Automotive*: the creation of a single harmonised pan-EU Type Approval system for authorising sales is estimated to have led to savings of up to ECU 30 million for car manufacturers, primarily from a 10% cost reduction in developing a new model;
 - *Telecommunications equipment*: between 1985 and 1995 there was a decrease in equipment prices by approximately 7% equating to annual cost savings of ECU 1.5-2 billion;

20 OECD (2012) *Economic Surveys: European Union 2012*

21 Monti, M (1996), *The Single Market and Tomorrow’s Europe: A progress report from the European Commission*

- *Pharmaceuticals*: the creation of a centralised procedure for granting marketing authorisation at the European Medicines Evaluation Agency (EMA) reduced the time to authorisation from five years before 1995 to up to one year.
27. The subsequent assessment in 2007²² highlighted that the increased competitive pressure in the EU market for goods was reflected in greater instability in market leadership, market entry on national markets, and changes in the pricing strategies of firms. However, the study noted the further benefits realisation was hampered by persistent barriers in product market regulation, insufficient business dynamism and price rigidities.

Services

28. Despite the importance of services across Member States (estimated to account for over 70% of EU GDP and over 95% of new jobs created²³), these activities only account for around 23% and 22% of EU's internal exports and imports respectively²⁴. This low share can be partly explained through the non-tradability of a high share of services output, and that services are delivered to overseas customers by means other than cross-border trade (for example, by establishing offices in the different countries). It also reflects that services sectors face, on average, higher obstacles to cross-border trade than goods. With the increasing globalisation of value chains, and the 'servicification' of many manufacturing sectors (where manufacturers are both buying and producing more services in-house than before, but also sell and export more services²⁵) suggests that obstacles in the services market could have a knock-on impact on the goods market (and hence potentially greater indirect gains through reducing those barriers).
29. The regulation of services and services trade is exceptionally difficult and highly complex. Efforts to liberalise the Single Market for services via the 2007 Services Directive have led to some improvements in trade from the reduction in barriers although it only covered a subset of European services activities. However, despite the intended completion date of 2009, progress on implementation has been slower than desired and the Commission has focused on particular subsets of activity such as regulated professions.

Financial services

30. Numerous regulatory measures have been adopted by the EU in order to create a Single Market for financial services, and a level playing field for

22 Ilzkovitz, F, A. Dierx, V. Kavocs and N. Sousa (2007) *Steps Towards a Deeper Economic Integration: the Internal Market in the 21st Century, A Contribution to the Single Market Review*, European Economy Economics Papers 271

23 Hatzopoulous, V. (2012), *Regulating services in the European Union*, Oxford University Press

24 UN Service Trade data

25 Kommerskollegium, (2010) *Servicification of Swedish manufacturing*

enabling the free movement of capital between Member States. However, financial integration has progressed unevenly across different activities and market sectors – for example, there are high levels of integration in wholesale banking, and in certain areas of corporate finance, but relatively low levels in retail banking where cultural differences, language barriers and unfamiliar legal systems may be more significant.²⁶ Since the economic crisis, progress on the removal of remaining barriers within the Single Market more broadly (such as differences in legal and regulatory framework for financial institutions and consumer protection rules, as well as divergent technical standards and levels of technology) has slowed as focus has turned toward stability in the 17 Eurozone countries.

31. Earlier studies suggested that there could potentially be significant gains from a more integrated Single Market in financial services. London Economics (2002)²⁷ estimated that fully integrated financial markets could raise the level of EU GDP by 1.1% in the long run, as well as raising the level of business investment by 6%, private consumption by 0.8% and employment by 0.5%. In particular benefits would arise from improved allocation of capital and through more efficient intermediation between savers and investors – the reduction in the cost of equity finance alone accounts for 0.5 percentage points of the 1.1 percentage point increase.
32. The potential gains for further financial integration will be highly dependent on the outcome of the current economic crisis and the implications for future regulatory frameworks across all Member States (both within the Eurozone and out of it). The OECD²⁸ highlight that cross-border financial activity has fallen sharply since the onset of the current economic crisis and suggests that this points to less longer-term integration of the European financial services than previously assumed. They further suggest that the some of the loss of cross-border activity since 2008 is likely to be permanent.

The UK perspective

33. The UK joined the European Economic Community (EEC), forerunner of the EU, in 1973 and, as highlighted above, the Single Market now provides UK-based businesses with access to a market of 500 million customers. European markets account for just under half of UK exports of goods and services²⁹.

²⁶ ECB (2007) *Financial Integration in Europe*

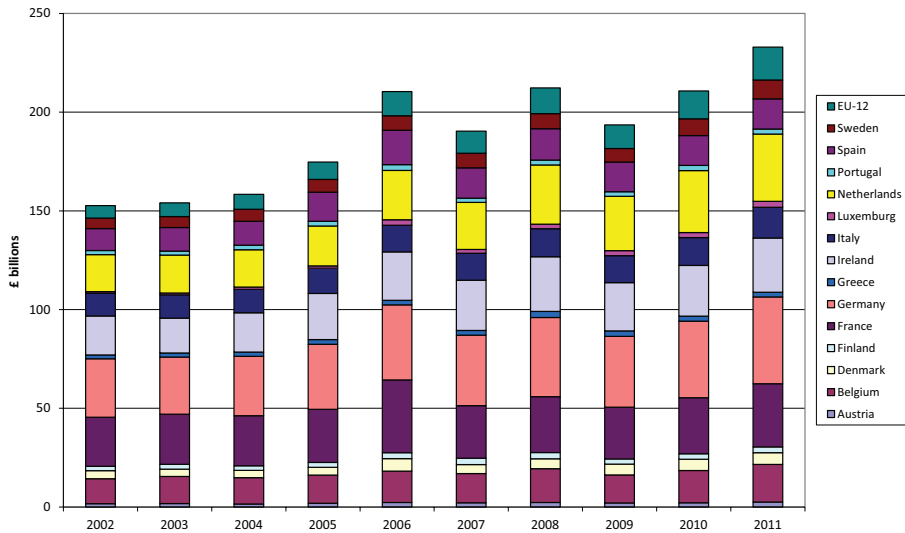
²⁷ London Economics (2002), *Quantification of the Macro-economic impact of Integration of EU Financial Market*, for the European Commission – Directorate-General for the Internal Market

²⁸ OECD (2012) *Economic Survey of the European Union 2012*

²⁹ Around 47% in 2011.

34. Most assessments of the benefits realised from the creation and development of the Single Market do not provide a breakdown of the impacts on individual Member States. As highlighted above, it is important to note that there are costs of adjustment associated with economic integration as markets and market structures adjust to new competitive pressures. As such, given the variance in impacts across industrial sectors, and the different industrial make-up of Member States, the overall impact is likely to vary widely between individual or regions of Member States. The impact is further complicated by the interdependency of industrial sectors through the globalised nature of supply and value chains.
35. However, the 2004 and 2007 enlargements of the EU have had a positive effect on the UK's trade with the new member states, having opened up new export markets for UK companies. Over the last decade, Germany, France, the Netherlands, the Republic of Ireland and Belgium remain the principal destinations for UK exports in Europe (together accounting for approximately 70% of total UK exports to the EU in 2011), but exports to the new Member States have been growing rapidly. In 2011, UK exports to the EU12³⁰ were worth around £16.6 billion – over double the value of 2004. In 2011, UK exports to the EU15 were worth £216 billion.³¹ With the exception of the Netherlands, the top ten fastest growing markets for UK exports in the EU were in the EU12.³²

Figure 1 UK Exports to the EU by destination Member State



Source: ONS (2012) Pink Book. Note: EU-12 includes Bulgaria, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia, Slovenia.

30 Bulgaria, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia, Slovenia.

31 HMRC/ONS (2012), *Overseas Trade Statistics*

32 *Ibid.*

36. In contrast to the goods trade position with the rest of the EU, the UK has recorded a trade surplus in services since 2004, growing strongly to record a net surplus of £15.9 billion in 2011. This increase in exports of services (largely to Italy, Germany and France) has led to an overall reduction in the trade in goods and services deficit with the EU27 to £27.6 billion in 2011. Services make up around 32% of the UK's exports to the EU.³³
37. Baldwin & Evenett (2012) suggest that on a net position, a more integrated economy will support greater value creation by UK manufacturing, through enabling UK firms to source from a wider range of suppliers and highlighted research that showed the increasing interdependence between areas of national (UK) and regional (European) comparative advantage.³⁴
38. The UK is the EU's largest financial centre, with financial services accounting for around 9% of UK GDP in comparison to almost 6% for the rest of the EU.³⁵ Other EU Member States are both the main source of and the main destination for foreign direct investment (FDI) in and from the UK. EU27 countries were responsible for 49% of the total inward flow of FDI in 2008, and received 44% of the total outward flow in FDI from the UK. In terms of the relationship with the EU27 on FDI stocks:
- inward FDI stocks from EU27 has risen from £151bn at the end of 1999 (EU15) to £465bn at the end of 2008 – i.e. from 35% to 49% of the total; and
 - outward FDI stocks into the EU27 (£465bn) generated 48% of total earnings from UK investments abroad in 2008.³⁶
39. The UK also benefits from being part of a substantial trading bloc in trade negotiations with the rest of the world. The progress made in establishing the Single Market has also made the European Union a key player in all global markets, with a large number of Free Trade Agreements in place or in the process of being negotiated. A recent study on the European economic model by the World Bank³⁷ highlighted that before the 2008-09 global crisis, around half the global goods trade (estimated to worth around €15 trillion) involved Europe, and that in 2007, annual FDI in Europe exceeded \$1 trillion. Separately, the study also highlights the unique experience of the EU in driving convergence between Member States – the analysis states that over the last four decades annual per capita consumption grew by 4% in the poorer parts of Europe and by a still-impressive 2% in wealthier countries, while the rest of the world (with the exception of East Asia) has seen little or no convergence.

33 ONS (2012), *Pink Book*

34 Baldwin, R.E, & S. J. Evenett (2012), *Value Creation and Trade in 21st Century Manufacturing: What Policies for UK Manufacturing*, for BIS, CEPR, ESRC (2012), *The UK in a Global World – How can the UK focus on steps in global value chains that really add value?*

35 EU figures for 2010, Eurostat; UK figures from ONS Blue Book.

36 OECD.Stat, *FDI flows by partner country & FDI positions by partner country*.

37 World Bank (2012), *Golden Growth: Restoring the lustre of the European economic model*

3 Looking forward – what more is there to achieve through strengthening the Single Market?

HM Government

Conclusions

- Economic integration in the EU has been achieved gradually, with initial focus on targeting more easily defined barriers to cross-border trade. As a result, what remains are the potentially more sensitive and complicated barriers to cross-border trade, namely non-tariff measures (NTMs).
- Recent focus has tended to be on particular sets of regulations or sectors, such as network industries and the market services sector. However, the Single Market Act (2011) and its successor, Single Market Act II (2012) mark a return to a more cross-cutting approach to achieving a Single European Market. Effort should focus on barriers that are expected to yield the greatest potential benefit (net of cost of implementation) and, in the context of the objectives of the Europe 2020 strategy, those that are most likely to contribute to setting the EU as a whole and individual Member States on a long-term, sustainable growth path.
- Barriers can also persist through difficulties and/or delays in the transposition and delivery of agreed European directives and regulations. Obstacles are caused by information gaps (where individuals do not have sufficient information about their rights) and by implementation or application gaps (where national rules may not be in line with EU law or are incorrectly applied).
- Estimates of the potential future gain from implementation of the Single Market vary. The Commission (2007) estimated that the benefit could be as much as a further 2.2% GDP and 2.75 million jobs. More recent analysis has suggested that full liberalisation could deliver very strong positive benefits for all Member States and that, after a ten-year implementation period, the EU's national income could be 14% higher than under a baseline scenario of no change.

- With respect to services, there could be significant gains from:
 - deeper and more consistent implementation of the Services Directive, including improvements to governance and enforcement; and
 - further liberalisation of services through new secondary legislation to enable further integration to take place, for example, through greater use of mutual recognition, and removal of specific regulatory barriers such as the reduction of reserved activities.
- Completion of the DSM is considered fundamental to the future growth and prosperity of the EU. Further action should be taken to:
 - improve the integration of the European telecoms market (through greater harmonisation of regulatory regimes);
 - create a clear and consistent legal and regulatory framework for the DSM (through harmonisation or mutual recognition in legislation); and
 - remove technical barriers, particular in cross-border delivery and payments.
- On achieving a single market for energy, the focus should continue to be on the implementation throughout the EU of the Third Energy Package, including effective unbundling of production and supply from transmission. In addition, further integration may be helped by EU action to facilitate investment in cross-border energy interconnectors, for example, by streamlining consenting procedures, through the Connecting Europe Facility and innovative financing of projects, where the benefits accrue to the EU as a whole but the costs cannot be easily allocated between specific member states. Finally, agreement on cross-border technical rules and cooperation by NRAs in ACER should help national regulatory regimes become more consistent over time.
- Further progress in developing the Single European Transport Area should focus on delivering a Fourth Rail Package that further liberalises European passenger rail markets and more consistent implementation of legislation across the rail freight sector.

The importance of non-tariff barriers as obstacles to further integration

1. Economic integration in the EU has been achieved gradually, with initial focus on targeting more easily defined barriers to cross-border trade (including the removal of tariffs or quantitative restrictions on imports between Member States). As a result, economic integration has occurred most in goods and capital markets. What remains are the potentially more

sensitive and complicated barriers to cross-border trade, namely non-tariff measures (NTMs). Given the importance of cross-border trade in EU output¹, further progress to remove remaining barriers could be highly beneficial.

2. With the intention of reducing or removing remaining NTMs between Member States, the Single Market Programme outlined by the European Commission to be implemented by the end of 1992 followed a mixed strategy of:
 - *Liberalisation* – where regulatory barriers to trade are prohibited and removed;
 - *Harmonisation* – where regulations are maintained but standardised; and
 - *Mutual recognition* – where Member States are obliged to recognise goods or services which have been legally produced in another Member State but are free to retain different regulations.
3. These objectives have underpinned further action on remaining NTMs since the formal inception of the Single Market 20 years ago. Focus has tended to be on particular sets of regulations or sectors, such as network industries and the market services sector. For example, the 2007 Services Directive sought to liberalise services covering more than 40% of EU GDP. Given the current economic crisis, particular focus has also unsurprisingly been applied to the operation of financial sectors.
4. The Single Market Act², adopted in April 2011, and the recently published Single Market Act II³ signal a return to a more cross-cutting approach to achieving a Single European Market, with particular emphasis on the role of the Single Market in delivering growth and basic social rights for European citizens. Box 1, below, provides further detail on the twelve levers to boost growth and strength confidence in the EU under SMA and SMAII.

1 OECD (2012) *Economic Surveys: European Union 2012*: Cross border trade is an important part of the EU economic structure, with a trade share (40% of GDP) that is well above other major OECD economies. While this figure remains lower than inter-state trade in the US, it is higher than other regional trade areas. Further, intra-EU exports account for around 26% of EU GDP in comparison to 15% for extra-EU trade. Similarly European capital markets have become closely integrated with firms directly establishing subsidiaries in other countries through foreign direct investment (FDI). FDI across EU borders rose rapidly during the five years up to 2006, from 30% to 48% of GDP.

2 European Commission (2011), *Communication from the Commission to the European Parliament, the Council, the Economic and Social Committee and the Committee of the Regions: Single Market Act – Twelve levers to boost growth and strength confidence – “Working together to create new growth”*, COM 2011 0206 final.

3 European Commission (2012), *Communication from the Commission to the European Parliament, the Council, the Economic and Social Committee and the Committee of the Regions: Single Market Act II – Together for new growth*, COM(2012) 573 final.

Box 1 Single Market Act II: Together for new growth (October 2012)

Single Market Act II builds on the first Act, adopted in April 2011, and puts forward four drivers for new growth that are supported by twelve levers and key actions:

1. *Developing a fully integrated Single Market for transport and energy*

- *Rail transport:* Open domestic rail passenger services to operators from another Member State to improve the quality and cost efficiency of rail passenger services.
- *Maritime transport:* Establish a true Single Market for maritime transport by no longer subjecting goods transported between EU seaports to the same administrative and customs formalities as goods arriving from overseas ports.
- *Air transport:* Accelerate the implementation of the Single European Sky to improve safety, capacity, efficiency and the environmental impact of aviation.
- *Energy:* Improve the implementation and enforcement of the Third Energy Package and make cross-border markets that benefit consumers a reality.

2. *Fostering mobility of citizens and businesses across borders*

- *Mobility of citizens:* Develop the EURES portal into a true European job placement and recruitment tool.
- *Access to finance:* Boost long-term investment in the real economy by facilitating retail access to long-term investment funds.
- *Business Environment:* Modernise EU insolvency rules to facilitate the survival of businesses and present a second chance for entrepreneurs.

3. *Supporting the digital economy across Europe*

- *Services:* Support online services by making payment services in the EU more efficient.
- *Digital Single Market:* Reduce the cost and increase efficiency in the deployment of high speed communication infrastructure.

- *Public procurement and electronic invoicing:* Make electronic invoicing the standard invoicing mode for public procurement.
4. *Strengthening social entrepreneurship, cohesion and consumer confidence/non-discrimination*
- *Consumers:* Improve the safety of products circulating in the EU through better coherence and enforcement of product safety rules and market surveillance rules.
 - *Social cohesion and social entrepreneurship:* Give all EU citizens access to a basic payment account, ensure bank account fees are transparent and comparable, and make switching bank accounts easier.

The European Commission believes that these measures will contribute to growth, employment and confidence in the Single Market and that they can be delivered within the current Commission's mandate.

5. The areas highlighted by the SMA and its successor provide an indication of where NTMs are thought to be still prevalent and particular issues that prevent greater cross-border trade across the European Union. Liberalisation of key infrastructure, the reduction of regulatory barriers and facilitating access to finance and information are crucial.
6. Part of the difficulty in judging the progress of integration is one of bench-marking – what does a 'true Single Market' look like? The USA is the often cited as the closest example of a perfect Single Market. As a federal economy it is made up of a number of different states, with responsibility for economic management allocated to different levels of the political system. While there are some barriers to integration, notably in the network industries, the US is regulated on a more integrated and homogenous base than exists across the states of the EU.
7. Although similar in some areas (such as managing issues associated with geographical barriers), the EU situation is not entirely comparable with the experience of the USA. In particular there are some significant obstacles to full economic integration that are likely to persist even if the right policies were to be pursued at the European level, including language barriers⁴ and cultural differences. As such, it is clear that efforts should therefore focus on barriers that are expected to yield the greatest potential benefit (net of cost of implementation) and, in the context of the objectives of the Europe 2020 strategy, those that are most likely to contribute to setting the EU as

⁴ Although some of these may decline over time, for example, the ability to have websites in multiple languages may reduce some of the associated barriers.

a whole and individual Member States on a long-term, sustainable growth path.

8. Barriers can also persist through difficulties and/or delays in the transposition and delivery of agreed European directives and regulations. The Commission⁵ states that in many cases obstacles are caused by information gaps (where individuals do not have sufficient information about their rights) and by implementation or application gaps (where national rules may not be in line with EU law or are incorrectly applied).
9. The rules establishing, maintaining and developing the Single European Market can only affect economic integration between Member States if they are correctly transposed into national law in line with agreed timetables. The European Council agreed in March 2007 to set a target of 1% for the transposition deficit⁶. Despite previous improvement in reaching and passing this target, it was missed in 2011, rising to 1.2% (although this is partly due an increase in the overall number of directives that required transposition).
10. In the most recent Internal Market Scoreboard monitoring exercise⁷, the Commission highlights the importance of improving governance and enforcement further. It stated that in 2011, only 11 of the EU27 met the target, although the majority of Member States had reduced the backlog of directives awaiting transposition (in particular those that were long overdue). The Scoreboard also highlighted the importance of improving conformity of national legislation, and thus reducing unnecessary NTMs, through correct transposition into national law. The EU average compliance deficit stood at 0.8% at the end of 2011, with more than one third of Member States already in line with the proposed 0.5% target.
11. The next section of this paper looks at four key areas of the Single Market where progress could be beneficial, which are broadly in line with the areas highlighted in the Single Market Act and its successor.

Where can further progress be made?

12. Evidence suggests that an increase in trade openness can lead to an increase in income per person.⁸ The OECD (2011)⁹ suggests that increased trade can

⁵ European Commission (2012), *Making the Single Market Deliver: Annual Governance Check-up 2011*.

⁶ The transposition deficit is the percentage of Internal Market Directives that have not yet been notified to the Commission (via national transposition measures), in relation to the total number of directives that should have been notified by the deadline.

⁷ European Commission (2012), *Making the Single Market Deliver: Annual Governance Check-up 2011*

⁸ OECD (2003), *Economic Growth Study*.

⁹ OECD (2011), *The impact of Trade Liberalisation on Jobs and Growth: Technical Note*, OECD Trade Policy Working Papers, No. 107.

also help to reduce unemployment caused by the current economic crisis. In particular, if G20 trade barriers fall by 50% the study suggests gains of:

- *More jobs:* A 0.3-3.3% rise in jobs for lower-skilled workers and 0.9-3.9% for higher-skilled workers, depending on the country;
 - *Higher real wages:* A 1.8-8% increase in real wages for lower-skilled workers and 0.8-8.1% for higher-skilled workers, depending on the country; and
 - *Increased exports:* All G20 countries would see a boost in exports if trade barriers were halved, and in the euro area a boost of more than 10%.
13. UK and EU businesses form part of international value chains, with intermediate goods accounting for more a significant part of EU imports¹⁰. As such, an economic framework that minimises barriers and provides firms with a genuinely level playing field is vital in order to enable them to compete and fully exploit the opportunities from new markets. The Single Market is a fundamental part of establishing that level playing field, alongside other crucial areas such as EU competition and State Aid frameworks. The quality and effectiveness of EU competition policy is one of the key factors that make the EU Single Market different from, and more effective than, other areas operating under free trade agreements. These frameworks will be fundamental in enabling the EU to face growing competition from emerging economies and take advantage of market opportunities from those growth areas in the global market.
14. Several studies have attempted to estimate the potential future gain from full implementation of the Single Market. One of these¹¹, carried out by the European Commission, found that the benefit could be as much as a further 2.2% GDP and 2.75 million jobs, driven by progress on services (0.5-1% increase in EU GDP); financial markets (1.1%); energy (0.6-0.8%) and tax cooperation (0.2%). Further analysis by the Commission in 2010¹² suggested that the Single Market could deliver a further 4% GDP over the next ten years (and potentially 5.4% over the next 20 years). This would mean additional growth of 0.4% per annum to 2020.

¹⁰ For example, the OECD STAN Bilateral Trade Database, suggests that intermediate goods have accounted for on average 55% of total goods imports over the last decade across the EU27. For some EU countries, particularly of the newer accession countries, this percentage tops 60%.

¹¹ Ilzkovitz, F., A. Dierx, V. Kovacs & N. Sousa (2007), *Steps Towards a Deeper Economic Integration: the Internal Market in the 21st Century, A Contribution to the Single Market Review*, European Economy Papers 271.

¹² European Commission (2010), *Quantifying the potential macroeconomic impact of the Single Market*, Note for the LIME working group, November.

15. Recent analysis¹³ by the Centre d'Etudes Prospectives et d'Information Internationale (CEPII) and the Department of Business, Innovation and Skills (BIS) assesses a number of scenarios for further economic integration, including one which assumed the complete elimination of all remaining barriers to trade inside the EU. The analysis suggested full liberalisation could deliver very strong positive benefits for all Member States and that, after a ten year implementation period, the EU's national income could be 14% higher than under a baseline scenario of no change. Further, it could translate into a 24% increase in the volume of products (at constant prices), with the difference in percentages explained by the fall in prices. Such a fall would benefit both EU consumers through improvements to purchasing power and the external competitiveness of EU businesses.
16. The benefits of the 'full elimination' scenario translate to national income gains of around 7% of GDP for the UK, with a 19% increase in services and 6.2% increase in manufacturing. UK exports would increase by 47% and its imports by 38%, with much greater trade with the rest of the EU.
17. Part of the difference in comparison the higher EU figure is that the UK already has comparatively lower obstacles to trade in services than most other EU countries and therefore many of the gains for liberalisation of this sector have already been realised. Further, the UK dependence on other Member States for trade is lower than the average.¹⁴ It is also worth highlighting that the analysis also showed that the UK would not experience these potential gains if it chose not to reform alongside the rest of Europe. Under this scenario, the UK would link with NAFTA countries and the analysis suggested that such an arrangement would only marginally compensate, as the NTMs would still persist.
18. New analysis¹⁵, published as part of these series of papers, extends these scenarios and assesses the potential impact of further reductions (including the complete removal) of remaining NTMs. The estimated rewards are significant with potential additional gains to EU GDP of between US\$440 and \$2,721 billion (2007 prices) in 2025. The potential impact on trade between EU member states is also significant – overall EU export to other EU countries could expand by close to US\$7 trillion (2007 prices) in 2025, compared to the baseline, while total exports from the EU to the rest of the world could rise by almost US\$5.8 trillion (2007 prices).¹⁶ Further detail is included separately in this series of papers.

13 Aussilloux, V., Boumellassa, H., Emlinger, C. & Fontagné, L. (February 2011), *The economic consequences for the UK and the EU of completing the Single Market*, BIS Economics Paper No. 11.

14 The lower gain in the UK is also driven by the fact that large countries tend to retain fewer gains from trade agreements as they tend to have lower trade to GDP ratios than smaller countries.

15 Decreux, Y. (2012) *Completing single market II*, in this volume.

16 Note that as a consequence of trade diversion, total world trade would expansion would be limited to US\$ 5.3 trillion (2007 prices).

19. The remainder of this paper examines the barriers and potential for further reform and hence further benefits in a number of particular areas in more detail.

Market Services

20. A well-functioning Single Market for services is a prerequisite for generating growth and employment in Europe, given the dependence on services in the economic structure. Whereas the growth of the European economy was on average 2.1% per annum between 1998 and 2008, the services sector grew on average by 2.8% per annum. Employment in this sector increased by 2% per annum, compared with 1% for the economy as a whole.¹⁷ Professional and business services (PBS), for example, delivered 11% of European output in 2011¹⁸ and this share is expected to increase as these activities underpin the development and success of other sectors of the economy. For example, the contribution of legal and architecture activities is on average a factor of 3.5-4 times the output of the sub-sector itself.¹⁹
21. Despite the growth of the EU services sector (now accounting for over 70% of EU output), it is also one where the productivity gaps with the US are most pronounced.²⁰ If the EU had matched US productivity levels in 2007, EU business services sector output could have been 48% higher, assuming no change in employment. This represents 5% of the EU-15 GDP in 2007.²¹ Further discussion of services sector productivity is included separately in this series of papers.
22. Firms in market services are subject to a wider range of barriers when operating or establishing themselves across borders. While overall levels of regulation can potentially have negative impacts on growth in Member States, a particular concern is the heterogeneity of regulation. In a similar way to those who wish to trade goods across borders, firms that want to operate across different countries can incur significant additional costs in becoming compliant with each regulatory regime. Some of these requirements, and the associated compliance costs, can make cross-border provision of services unfeasible in some cases, and will, of course, disproportionately affect small and medium sized enterprises (SMEs).

¹⁷ Eurostat 2011, Gross Value-Added data.

¹⁸ Eurostat 2011, Gross Value-Added data.

¹⁹ Centre for Strategy and Evaluation Services (2012), *Study to provide an inventory of Reserves of Activities linked to professional qualifications requirement in 13 EU Member States and assessing their economic impact*

²⁰ McKinsey estimates that 70% of Europe's 1995-2005 labour productivity growth gap with the US came from local services such as retail, wholesale, hotels and restaurants. McKinsey (2010), *Beyond Austerity: A path to economic growth and renewal in Europe*.

²¹ BIS analysis of EU KLEMS data.

23. The two main types of regulatory barriers are those that restrict market access (which affects firms) and those that restrict the movement of professionals across Member States (which affects employees). The most damaging restrictions on the movement of professionals are reserved activities, where the Member State reserves the exercise of a service activity to the holders of a specific professional qualification.
24. With respect to types of barriers relating to market access, legal form or capital ownership requirements (which limit the types of businesses that are able to provide certain services or inhibit the ability of service providers to provide cross-border services) and barriers to the freedom of establishment (which can restrict the ability for firms to establish subsidiaries in other Member States) can limit competition (particular where there are significant advantages to delivering services locally) and hence productivity in these sectors through favouring domestic companies.
25. The 2007 Services Directive made a major drive towards reducing the regulatory barriers that inhibited cross border trade in services, although it did fall short of original ambitions, and many of the pertinent regulations remain in place. For example, Spain and Austria both had heavily regulated services sectors before the 2007 Directive, but whereas Spain reduced its barriers by more than 50%, the change in Austria was less than 10%.²²
26. Recent efforts by the Commission to step up services integration and improve the 'governance' of the Single Market included highlighting the importance of enforcement of the Services Directive²³. These are welcome changes, but the current enforcement regime is unlikely to be sufficient to fully deal with remaining barriers. This is especially true as many product market regulations fall within a 'grey' legal area under the Services Directive, where a strict application would see these regulations as disproportionate to their effect on trade and FDI. While the Commission's mutual evaluation exercise offered a chance for Member States to question the proportionality and justification of other Member States' regulation, it did not set up a mechanism for removal. Within the legal scope of the Directive it is estimated there are large gains still to be had from pursuing deeper and more consistent implementation: between 0.4% and 0.8% of GDP through moving the worst performers up to an average, and between 1.8% and 3.6% of GDP through moving Member States up to an average of the best five performing countries. In the latter scenario UK GDP is predicted to grow by around 3%.²⁴

22 ECFIN (2012) *The Economic Effects of the Services Directive*.

23 For example, European Parliament (2011) *Report on the on implementation of the Services Directive 2006/123/EC (2010/2053(INI))*.

24 ECFIN (2012) *The Economic Effects of the Services Directive*.

27. This suggests a return to a mutual recognition approach to services integration. The first draft of the Services Directive initially had at its core the application the country of origin principle (CoOP), whereby a firm that complied with the regulation of its home state could not have additional requirements added to it by the host state. This would have precluded host states from imposing obligations on a service provider to have an establishment in the host state, to notify or register its services with the host state, or to comply with requirements relating to the exercise of a service activity. The principle was at the centre of the political controversy surrounding the Directive and was removed during negotiations. De Bruijn *et al* calculated that excluding the CoOP reduced the trade-effects of the Directive by a third.²⁵ Not only would re-introducing a CoOP bring additional benefits compared to full implementation of the SD, it also offers a way of achieving the full benefits of the latter without requiring Member States to actually deregulate.
28. The original Services Directive was perhaps too ambitious in its attempt to introduce mutual recognition across all service sectors. A sector-by-sector approach would be an easier way forward, with the advantage of dealing with the specificities of different service markets. For example, mutual recognition can more easily be introduced without harmonisation of standards where purchases are one-off, and severe information problems are not apparent.²⁶ Much of business services and retail and wholesale trade would fit these criteria. The political landscape has also moved on: Italy and Portugal have made large structural reforms to their service sectors and Spain has published a programme of structural reforms with a timetable for implementation of March 2013. Amongst the 43 measures to be implemented are measures to liberalise the services sector.
29. In short, there could be significant economic gains from:
- Deeper and more consistent implementation of the Services Directive, including improvements to governance and enforcement; and
 - Further liberalisation of services through new secondary legislation to enable further integration to take place, for example, through greater use of mutual recognition, and removal of specific regulatory barriers such as the reduction of reserved activities.

25 De Bruijn, R. *et al* (2006), *The trade-induced effects of the Services Directive and the country-of-origin-principle*, European Network of Economic Policy Research Institutes. Without the principle, the welfare effects on the induced trade growth were lower: GDP could rise by 0.2 to 0.4% as opposed to 0.3 to 0.7. If this is scaled up to DG ECFIN's model the effects are even more significant.

26 Springford, J. (2012), *How to build European Services Markets*, Centre for European Reform.

Telecommunications and the Digital Single Market

30. The past decade has seen rapid and exponential growth in the use of information and communication technology (ICT) in everyday life. Investment in ICT has been found to have a direct link to increased productivity²⁷, and the internet and digital technology more generally offers tremendous benefits to the citizens and businesses of the EU. Among others, its use can help remove the remaining barriers to the four freedoms, particularly in trade of goods and services²⁸. The creation of a Digital Single Market (DSM) should enable businesses and consumers to buy and sell digital and physical products trade electronically, without any borders, across the whole of the EU.
31. Information and Communications Technology (ICT), Media and Telecommunications sectors account jointly for 7.7% of UK GDP and employ 1.3 million people (2010)²⁹, which is a greater proportion than the overall EU position (5.4% of EU GDP, 6.6 million employees in 2008)³⁰. The UK is at the forefront of ICT technology usage in the EU, particularly in e-commerce. In comparison to a 7.8% average in the EU, 12% of retail in the UK is already conducted online³¹ and UK internet traffic is expected to increase by 37% annually between 2010 and 2015³². McKinsey (2011)³³ suggests that the internet accounts for 5.4 % of the UK economy and that it contributed 23% to the UK's growth between 2005 and 2009³⁴.
32. However, much remains to be done to help establish a Digital Single Market (DSM) to achieve just this, with remaining constraints falling broadly into three categories:
- *Infrastructure* – including broadband coverage and spectrum allocation. Other considerations include cloud computing and smart networks.
 - *Demand side* – consumers still lack confidence in buying goods and services across borders. Issues such as data protection and security, consumer rights (e.g. when obtaining redress) and delivery and payments all need to be addressed.

27 0.3 percentage points of Europe's annual growth gap with the US directly attributable to lower ICT capital investment between 1995 and 2004 (Rimmer, M. P *et al*, 2003, *IT in the European Union: Driving Productivity Divergence?*, updated June 2005); A 10% increase in ICT capital is associated with a 0.23% rise in firm productivity, whereas theory suggests it should be closer to 0.16% (Van Reenen, J., 2010, *The Economic Impact of ICT*, SMART N.2007/0020, January, Centre for Economic Performance).

28 To note, that interpretation of figures relating to the benefits from reducing barriers to internet-based business models, e-commerce etc should not be automatically cumulated with the proposed benefits from improving the Single Market for services, given the likely overlap in some areas, and hence potential for double-counting of potential benefits.

29 ONS National accounts data.

30 Eurostat, please note that the latest available data is for 2008.

31 Kelko estimates (2012) accessible at <http://www.retailresearch.org/online/retailing.php>

32 ATKearny (2012), *The Internet Economy in the UK*.

33 McKinsey (2011), *Internet matters: The Net's sweeping impact on growth, jobs and prosperity*.

34 Note: the expenditure method to estimate the contribution of the internet to the economy which may overestimate the results. Lack of data prohibits the use of the more reliable alternative methods.

- *Supply side* – suppliers must also be encouraged to sell across borders. Delivery, payments and consumer rights are contributing factors here as well, whilst intellectual property laws and fragmented legal standards are crucial.
33. Bruegel (2012)³⁵ estimated the average annual contribution to growth between 2012 and 2020 of a number of general purpose ICT technologies, and identified the largest obstacles to unlocking growth, suggesting that the lack of an EU Single Market and overly restrictive product and labour market regulations had the biggest impact on competitiveness. The analysis also suggested that considerable gains could be made in areas such as privacy and data security, intellectual property relating to the digital economy (particularly in the context of cloud computing), and next generation network infrastructure.
 34. A more integrated DSM which enables higher rates of cross-border trade will benefit consumers through lower prices and wider choice. Firms can better exploit economies of scale to reduce costs and further lower prices for consumers, while increased competition also helps create the right environment to encourage innovation.
 35. Copenhagen Economics³⁶ argues that if ICT had contributed as much to productivity growth in Europe as it did in the US since 1995, EU15 GDP for 2004 would have seen an increase of 3.2%. They also suggest that the EU could gain 4% GDP or €1,000 per person³⁷ by stimulating fast development of DSM by 2020 through stimulating greater information flow and innovation in processes and organisational practices, as well as structural change towards more productivity business services.
 36. Analysis by Ecorys³⁸ suggests that by 2020, EU GDP can increase by extra 2-4% if the EU becomes as competitive in telecoms markets as the current best-performing Member State. There are currently still widely differing prices for roaming charges for use of mobiles and for use of fixed and mobile broadband infrastructure. For example, amongst EU members of the OECD, the cheapest monthly subscription rates below 15Mbps are approximately three times cheaper than the most expensive.³⁹ These significant price differences demonstrate a lack of cross-border competition and entry possibility for foreign providers, highlighting differences in the transposition of the two EU telecoms packages. As such, national markets have not been opened up for competition, and market fragmentation means that there is no pan-European telecoms market, limiting options to gain economies of scale and greater efficiency.

35 Bruegel (2012), *ICT for Growth: A Targeted Approach*.

36 Copenhagen Economics (2010), *The Economic Impact of a European Digital Single Market*.

37 European Commission Communication (2011), *A coherent framework for building trust in the Digital Single Market for e-commerce and online services*.

38 Ecorys (2011) *Steps towards a truly Integrated Market for e-communications in the run up to 2020*.

39 OECD (2011), *Communications Outlook 2011*.

37. Within the scope of action at a European level, businesses are deterred from selling online by divergent regulatory and legal systems and, on the demand side, consumers primarily cite lack of trust as being the main reason they are less confident buying cross-border. The Commission introduced the Digital Roadmap in 2012 to address these barriers. Although generally promoting maximum harmonisation, which eliminates regulatory divergence for business, the Commission has enabled the mandating of relatively high levels of consumer protection (for example, as outlined in the 2012 proposals for data protection⁴⁰). The estimated savings to business from only having to comply with only one set of rules are around €2.3 billion a year.
38. Another issue of significant importance to the supply side of the DSM concerns intellectual property. Currently the IP legal framework is fragmented along national lines, with rights to copyrighted material having to be negotiated in each Member State. This can add significant costs to businesses looking to operate across Europe. The impact of IP, and in particular of copyright laws, will be increasingly important as the digital economy grows. UK business investment in intangible assets has outstripped that in tangible assets every year in the last decade (by £137bn to £104bn in 2008)⁴¹.
39. With respect to the DSM overall, the OECD suggested that it was necessary to harmonise regulations to improve existing national approaches, and in particular to reduce the heterogeneity in the implementation of these regulations. They also suggested that better co-ordination of regulatory authorities would be warranted.⁴²
40. Completion of the DSM is considered fundamental to the future growth and prosperity of the EU. Further action should be taken to:
- improve the integration of European telecoms market (through greater harmonisation of regulatory regimes);
 - create a clear and consistent legal and regulatory framework for the DSM (through harmonisation or mutual recognition in legislation); and
 - remove technical barriers, particularly in cross-border delivery and payments.

40 European Commission (2012) *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions Safeguarding Privacy in a Connected World A European Data Protection Framework for the 21st Century*, COM/2012/09 final..

41 Haskel J, Goodridge P, Pesole A, Awano G, Franklin M and Kastrinaki Z (2011), *Driving economic growth Innovation, knowledge spending and productivity growth in the UK*, NESTA, quoted in Ian Hargreaves (2011), *Digital Opportunity: A Review of Intellectual Property and Growth*.

42 OECD (2012), *Economic Survey of the EU*.

Energy

41. The electricity and gas industry accounts for 2.3% of total value added in the EU.⁴³ The main focus of creating a Single Market in energy has been to improve the functioning of and facilitate integration of EU electricity and gas markets where competition can only be enabled by opening up the network to third party access. Copenhagen Economics (2006)⁴⁴ estimated that full market opening in the EU15 could increase cross-border trade in electricity by 31%, leading to an increase in output of 3% and reduction in prices by up to 13%. The gains from further liberalisation of gas markets were more modest, with output and trade growing by 3% and 5% respectively, and little or no impact on prices. As energy prices are a key input for the wider economy, this will have wider benefits beyond the sector. In addition, an integrated market is also considered essential to meeting European policy objectives on security of supply and the reduction of greenhouse gas emissions. Integration should reduce the amount of spare capacity required to deliver European energy demands, particularly with greater penetration of intermittent renewable generation.
42. Progress has been made over the last 20 years through three European legislative Energy Packages (1996-98, 2003 and 2009). These reforms began the process of liberalisation in the European energy sector, but the effectiveness of the first two packages was hindered by poor compliance and transparency, lack of physical interconnections and vertical integration. EU gas and electricity retail markets are still characterised by substantial disparities in price with, for example, electricity for German consumers costing roughly €50/thousand kwh more than for French before tax.⁴⁵ Electricity and gas retail markets remain highly concentrated with little evidence of new entry of independent suppliers in some Member States.
43. Lack of interconnection capacity between member states is still a key driver of price disparities, with infrastructure bottlenecks preventing convergence of gas and electricity prices between countries. Changing patterns of energy supply (such as the increase in renewable energy generation and the location of that generation, such as offshore wind) will necessitate considerable investment to upgrade and build the necessary infrastructure. Although the problem is primarily one of physical infrastructure, different regulatory regimes between countries compound the issue – even where interconnections exist, the absence of harmonisation of market rules leads to higher transaction costs.

43 Eurostat, GVA (at basic prices). Although energy also covers coal and oil, these have not been Single Market issues as both are traded on global competitive markets and are not reliant on monopoly networks for transportation..

44 Copenhagen Economics (2006), *The Potential Gains from full market opening in Network Industries*.

45 OECD (2012), *Economic Survey of the EU*.

44. Funding for infrastructure of European significance is estimated by the European Network of Transmission System Operators (ENTSO) to be €3-4.7 billion per year, or €50-70 billion for the period 2010-2025.⁴⁶ When the new infrastructure required by offshore wind is factored in, this rises by €32 billion.
45. The Third Energy Package (2009) marked a change. Its scope was broadened to focus on integrating national markets by incentivising investment in cross-border infrastructure and facilitating cross-border trading. The liberalisation of national markets focused on unbundling the non-monopoly supply and production activities from the operation of electricity and gas networks themselves, to enable greater competition in the former and enabling regulated non-discriminatory access to the latter. However, the liberalisation package allows two further unbundling models in addition to ownership unbundling. In the first, vertically integrated companies leave day-to-day management of the physical network to a completely independent company (Independent Systems Operator); in the second, this role can be carried out by a subsidiary of the parent company (Independent Transmission Operator). As such, despite detailed measures to ensure the day-to-day independence of the ITO, ultimately the parent company is able to continue to exercise a degree of control over investment decisions regarding the networks. It is important, therefore, that the Commission monitors the operation of the ITO model to make sure that it delivers the necessary independence of the system operator.
46. The Third Energy Package also established fully independent and powerful national regulatory authorities (NRAs) to oversee the operation of energy markets, with responsibilities for regulating tariffs for access to transmission and distribution networks, preventing cross subsidies between vertically integrated companies, and guaranteeing consumer protection. NRAs should overcome some of the concerns over lack of full unbundling. National regulatory frameworks differ in how they set tariffs for distribution, value networks and set performance criteria for capital and operational expenses, and the Third Package leaves NRAs with plenty of autonomy. However, although they are national bodies with primarily national responsibilities, they have a duty to cooperate with each other and ACER (the Agency for the Cooperation of Energy Regulators) in order to promote a competitive and well-functioning EU energy market. A primary duty is to minimise tariffs for consumers and ensure secure supplies, but this should not be at the expense of providing a necessary rate of return for projects with higher regional benefit, or approving difficult cost-allocation across borders.

⁴⁶ European Commission (2010), *Impact Assessment - Accompanying document to the Communication from the Commission to the European Parliament, the Council, the European Economic And Social Committee and the Committee of the Regions: Energy infrastructure priorities for 2020 and beyond - A Blueprint for an integrated European energy network*, SEC(2010) 1395 final.

Continued cooperation by NRAs through ACER should help national regulatory regimes become more consistent over time.

47. Some coordination of infrastructure and investment requirements has been achieved by the ENTSOs, which bring together national TSOs (such as National Grid), being required to produce EU-wide Ten-Year Network Development Plans. These are non-binding, but give a better indication of what infrastructure investments are needed. The ENTSOs are also developing network codes, under the direction of ACER. Once formally adopted by Member States and made binding, these codes should contribute to the harmonisation of technical and regulatory standards and hence lower transaction costs.
48. The UK was one of the first Member States to fully liberalise its energy markets. As the UK and other Member States continue to take steps to fully implement the Third Energy Package, significant benefits should accrue to the UK from having access to competitive and liquid markets in the rest of the EU. In the gas sectors, investors have been attracted by the highly liquid UK gas market and trading opportunities with the rest of the EU.
49. As such, building on recent progress, the focus should continue to be on the implementation throughout the EU of the Third Energy Package and effective unbundling of production and supply from transmission. In addition, further integration may be helped by action to facilitate investment in EU cross-border energy interconnectors, for example by streamlining consenting procedures, through the Connecting Europe Facility and innovative financing of projects, where the benefits accrue to the EU as a whole but the costs cannot be easily allocated between specific member states. Finally, agreement on cross-border technical rules and cooperation by NRAs in ACER will help national regulatory regimes become more consistent over time.

Transport

50. Transport is fundamental to economic growth through facilitating the movement of goods, labour and services. Total demand for passenger transport and freight transport is forecast to increase from 2005 to 2030 by 34% and 38%, respectively.⁴⁷ Deepening the Single Market across the different transport sectors is therefore fundamental to ensuring the economic integration of three of the four freedoms, and underpinning long-term growth.

⁴⁷ European Commission (2011), *Impact Assessment: Accompanying document to the White Paper - Roadmap to a Single European Transport Area – Towards a competitive and resource efficient transport system*, SEC(2011) 358 final.

51. The 1985 White Paper on Completion of the Internal Market identified transport services as a serious barrier to open trade across Member States and since then considerable progress has been made across most of the transport networks. Looking forward, the Commission published its vision for a sustainable and competitive Single European Transport Areas by 2050 in 2011, with the aim of removing major barriers and bottlenecks in key areas including transport infrastructure and investment, innovation and the internal market. In addition to providing greater competition and a more integrated network, the Commission aims to dramatically cut dependence on imported oil and cut carbon emissions by 60% by 2050.
52. The road freight sector is relatively open, harmonised and interoperable, with progress made in particular on worker qualifications and market access, the freedom to establish a business, provide services and driving times. However, more could be done. A recent McKinsey study⁴⁸ suggested that productivity gains could be made in the sector by reducing regulation relating to cabotage⁴⁹, although such reforms would potentially carry significant economic and political concerns for the UK, given the potential impact on the UK's domestic road freight industry.
53. International shipping has always been an open market, with few of the restrictive practices that have affected other transport sectors. The EU shipping sector is more liberalised than in the US, so opportunities for pro-growth reform are more limited. UK ports, in particular, are already largely liberalised and so potential gains might not be significant. SMAII highlights specific action for the greater liberalisation of port services for ships travelling from other Member States, which removes some of the final layers of regulatory barriers in this sector.
54. The establishment of a common air transport policy has been crucial to respond to the effects of world-wide competition. European skies have been liberalised in stages, with a result of greater scope for capacity-sharing between major airlines, reciprocal market access and the freedom to set fares. Liberalisation has led to an increase in number of routes across the EU and facilitated competition between carriers. The opening up of the market, which began in 1987 with the first aviation package, has culminated in a free and open EU market where new operators have been able to venture into many European markets. However, there are still some issues, such as those with respect to air traffic management – it is estimated that the operation of 27 air traffic management systems add an average 49km to each journey.⁵⁰

48 McKinsey (2010), *Beyond Austerity: A path to economic growth and renewal in Europe*.

49 Cabotage is the carriage of goods between two points in one country by a vehicle registered in another country.

50 European Commission (2008) *Communication on Single European Sky II*, COM (2008) 389 final.

55. The sector where bottlenecks are still most evident is the internal market for rail services.⁵¹ In terms of rail freight, the sector has been open to competition since 2007, but implementation has been inconsistent due to the lack of uniform regulation across Europe's internal borders⁵². For rail passenger services, state-owned nationally integrated players still dominate the sector. The rail sector still suffers from fragmentation across national borders.⁵³
56. The Commission has made liberalisation of the rail sector a key ambition of its 2011 White Paper, although there are currently no estimates yet of the potential economic gains from further liberalisation. The UK experience demonstrates the scale of potential benefits. Since the introduction of a franchising system in the UK, passenger volume has risen 70%, modal share by 43.7%, service frequency by 36.7% and productivity by 24.1% per train km and 39.5% per passenger km⁵⁴. However, the UK experience also demonstrates the complexities and challenges of liberalisation. To deliver productivity gains and benefits to the consumer, privatisation needs to be structured around a franchise system that creates genuine competition. Until the Commission publishes detailed proposals, it is very hard to estimate aggregate benefits and the precise impact on the UK (though given the already liberalised state of the sector in the UK, the latter is likely to be limited). But this is an area where well-designed reform could deliver substantive gains for the EU.
57. Finally, given the size of this sector and its importance to economic growth, there is a lack of quantitative evidence about the scale of benefits achieved so far and the potential of future reforms. This makes identifying its importance to growth difficult and more effort should be made to fill these evidence gaps.
58. Further progress in developing the Single European Transport Area should focus on delivering a Fourth Rail Package (expected Autumn 2012), that further liberalises European passenger rail markets, and more consistent implementation of legislation across the rail freight sector.

51 http://ec.europa.eu/transport/strategies/2011_white_paper_en.htm

52 There are 11 separate traffic management systems for rail freight across the EU-15; each EU country has its own safety certification for train rolling stock.

53 European Commission (2011), *Impact Assessment – Accompanying document to the White Paper “Roadmap to a Single European Transport Area – Towards a competitive and resource efficient transport system”*, Commission Staff Working Document, SEC(2011) 358 final.

54 Everis & NTU (2010) *Study on the Regulatory Options on Further Market Opening in Rail Passenger Transport*, for the European Commission.

4 The internet and the Single Market

Peter Goodridge, Jonathan Haskel and Gavin Wallis
Imperial College London

Conclusions

- The European Commission estimates the single market to have raised EU GDP by 0.15%pa from 1992 to 2006, mostly due to a once and for all benefit from economies of scale from expansion of network industries and competition effects on innovation.
- Estimates of the contribution of investment in computers, in its infancy at the start of the Single Market Programme, SMP, put them at 0.39% pa for the UK and continuing.
- Early estimates of the effect of the internet in the US were a one off effect of 1-2% of GDP.
- Our estimates for the UK suggest a contribution of the internet of 0.26%pa, about 12% of LPG, which applied from 1995-2011, has raised UK GDP by £49bn in 2011 prices, around 3.3% of 2011 UK GDP. Most of this increase comes from the network effects of the internet.
- The internet is symptomatic of the importance of the knowledge economy in the EU. EU legislation should concentrate on facilitating knowledge investment and its dissemination through mechanisms such as IP.

1. Introduction

1. The internet had not even been thought of at the inception of the Single Market Programme (SMP). The view then was that increased freedom of physical goods across boundaries would help companies yield economies of scale and hence boost GDP. Nobody had the faintest clue that shoppers would be comparing across countries and buying bytes of information or downloading music and movies from servers thousands of miles away onto their mobile phones. Indeed, computers and the entire information and

communication technology (ICT) revolution were in their infancy (as was competition from China and Asia).

2. In the light of this one might ask (at least) three questions. First, what gains were there from the SMP, both in anticipation and actuality? This is to put into context a second question which is, what gains have there been from the internet and how do they compare with the SMP gains? A third question is, does the EU need to form policies around the internet in the same way that it pushed the SMP?

2. A comparison: The gains from the SMP

3. To get some sort of yardstick, what are the gains from the SMP? A very widely cited study by the European Commission (2007) estimates the gains from the EU SMP to be 2.2% of EU value added up to 2006.
4. What are the sources of these gains? They are derived from the simulation of a macro economic model of the EU. The main gains derive from (a) a rise in manufacturing total factor productivity (TFP) growth of 0.5% over 10 years due to increased competition in the original EU15; (b) a reduction in price-cost mark-ups in the electricity and telecoms industries, raising GDP by 0.6% over 10 years, again in the original 15; and (c) the enlargement of the EU, which is also reasoned to have raised TFP growth in the new member states from 2002. All this adds up to a 2.18% total effect on GDP between 1992 and 2006, of which 1.43% are the effects in the original 15 and the rest from the new states. It is not quite clear whether these are one-off effects which will fade away or are permanent. The time series of the effects (Tables 3-5 to 3-7 in the original study) suggest the benefits in the original EU15 are falling, but rising somewhat in the accession states. Thus the overall benefits are more or less static, suggesting that this is more like a one-off effect but with still some years to run. Averaged over the years of the study, the benefits work out at 0.15%pa from 1992 to 2006.

3. The gains from the internet and computers

5. With these benefits as a yardstick, how do they compare with those from the internet and/or computers more generally?

a) **The internet economy as a share of GDP**

6. A number of studies have attempted to quantify the size of the “internet economy” as opposed to the effect on growth (see below). The Boston Consulting Group (2010) report proceeded as follows. One obvious feature of the internet is e-commerce. So, one way of approaching the problem is to ask, what fraction of commerce is now conducted by e-commerce. Their finding, see their exhibit 3, is that final consumption mediated on the internet by e-commerce, is worth around £50bn in 2009 (note that total household consumption is about £900bn). They also note that such commerce requires spending by households on e.g. subscriptions to ISPs, computers etc.. Adding in investment and government spend on the internet yields a total of £100bn or 7.2% of GDP. The figure of 7.2% of GDP is then used to point out that if the internet were an industry, it would be the 5th largest behind real estate and business services (23% of GDP), manufacturing (12%), retail/wholesale (11%), and financial services (9%, see exhibit 3).
7. McKinsey Global Institute (MGI, 2011) do something similar. They count parts of consumption due to the internet, including e-commerce and spending needed to get internet access. In the UK for example, online buyers spent in 2009, \$2535 on goods and services, as against \$1,773 in the US. To this they add investment in internet related technologies, such as telecoms, Websites etc., public spending on the internet e.g. software, hardware pro-rated to be allocated to the internet plus the trade balance. This adds up to 5.4% of GDP in the UK in 2009 (p.15).¹
8. In making this calculation one has to be careful of the implied counterfactual. If the internet did not exist, would GDP fall by 7.2% and 5.4%? No. Before the internet, people still shopped at home, but via catalogues and the phone. At least some of this activity therefore is merely a shift from one shopping mode to another.² One also has to be slightly careful in interpretation since time spent by the household is not part of GDP. If the internet has merely replaced the search activities of travel agents to search activities at home, then it would lower GDP (analogous to Samuleson’s famous example of the man who marries his maid and so

1 Both these studies count up the value of the internet in terms of GDP from the expenditure side of GDP, that is, in terms of final consumption, investment, government spending and net exports. The alternative is to count it from the production side, but this is very hard to do. BCG Chapter 4 box on page 20, suggest a nice scheme, by proposing dividing the areas of the Internet Economy into four “layers”: (1) the internet infrastructure layer (mostly hardware manufacturing); (2) the internet applications layer (mostly software); (3) the internet intermediary layer (B2B commerce, an intermediate); and (4) the internet commerce layer (selling to final consumers). This chapter measures the revenues of many companies involved in these layers and points out they are considerable: around £50bn, but as the text points out are not part of GDP since many of the products sold are sold from one firm to the next.

2 The importance of the counterfactual is stressed in Greenstein and McDervitt (2010) in thinking about the contribution of broadband. Is the contribution relative to having no internet at all or relative to having dial-up? Likewise the contribution of high-speed broadband etc.

lowers GDP, since the new bride carries on with the housework but is not paid).

9. It is not really appropriate to compare the “size” of the internet economy with industries, as BCG do. The figure they obtain is the fraction of final expenditure in the economy that is mediated by e-commerce/the internet: children’s toys for example. But the entire value added of the consumption of children’s toys cannot be attributed to just one industry, since that value added is made up of the contributions of the industries underlying its production and sale: manufacturing, wholesaling and retailing for example.
10. An additional point is to measure the value of consumer utility from reduced prices, extra choice, convenience etc. These are not counted in GDP and are very hard to value, suggesting at least that the calculations above are a lower bound on the total value of the internet (so, for example, 0.5% of all internet browsing time is spent looking at Wikipedia. Neither the time spent browsing, nor the time spent writing Wikipedia entries, shows up in GDP). McKinsey calculate this at €20 per month per internet user in the UK, summing to €9bn of user surplus in 2009.³ They cite survey evidence as suggesting this value exceeds the annoyance value from spam, excessive advertising etc.

b) The internet as a growth enabler

11. On the supply side, one might wonder if the internet makes things cheaper and faster for firms, thus lowering cost per unit and raising productivity and productivity growth.
12. Litan and Rivlin (2001) are an early direct investigation into this. Their method is to ask industry experts what cost savings they expect from the internet. Such cost savings will enable the economy to get more with less and so raise productivity and hence GDP per capita.
13. They think the internet has the potential to raise productivity growth in three main ways:
 - i. Reducing costs of many transactions needed to produce and distribute goods and services. Their interviewees suggest, for example, the moving health claims from paper to electronic could bring processing costs per claim down from \$10-15 to \$2-4.
 - ii. Increasing management efficiency e.g. via cheaper supply chain management and communication within and outside the firm.

³ See www.mckinsey.com/insights/mgi/research/technology_and_innovation/internet_matters, page 23.

- iii. By increasing competition pressuring suppliers into cost savings.
14. Their interviews lead them to add these up to be a saving of 1-2% of GDP, which, if realised over 5 years, would add around 0.2-0.4%pa to productivity growth. They do not count in these data the investments necessary for these cost savings. As they point out, they expect such investments to be in the form of organisational change, which they think might be small.
15. A more econometric approach is taken by other studies. To get some reference point and early study using cross-country data is Roller & Waverman (2001). Their main finding is that the penetration of telecoms (measured by the fraction of fixed lines per capita, data for which is available in both developing and developed countries), controlling for simultaneity etc. contributes around 0.59%pa, being 1/3rd of OECD GDP per capita growth of 1.96%pa (for the UK, 0.94%pa out of 2.11%pa = 45% of growth, see their Table 1).
16. MGI also use cross-country data estimate the internet contributes 11% of UK's growth, 1995-2009. This is done by means of a statistical association between TFP growth in a country (page 16 and page 20) and its internet ecosystem index, as devised by MGI, page 25. This figure is less than the Roller and Waverman figure, but the latter is for all communications technology.
17. Corrado (2011) uses data for a single country, the US, and a mix of growth accounting and econometric approach. Her paper gives careful attention to some of the measurement issues that other papers have insufficient data to address and so is worth discussing in some detail.
18. If the internet might raise productivity, how does it fit into the standard sources of growth method? This says that productivity growth comes from an increased flow of effective services from three main sources: capital, labour and ideas. As far as capital is concerned, the internet is of course a (gigantic) piece of capital equipment which lowers the costs of providing the capital services from communications via lower price phone calls, increased connectivity, cheaper and faster email etc. Additional effects on growth might come from the network spillovers as customers and producers join the network and benefit from each other's presence.
19. As far as ideas are concerned, the internet enables new ideas to be communicated (search engines like Google are surely important here), lowering the price of R&D, and new forms of business model to emerge like online bookshops and banking. Thus what do we know about the empirical contributions of these factors?

20. Regarding capital services Corrado (2011) points out that statistical agencies regularly calculate the contribution of various parts of the capital stock to growth. The capital stock is typically split into, for example, plant and machinery, ICT, vehicles, buildings and communications equipment. To build such capital stocks one has to deflate nominal investment to get real investment. So the internet's contribution is via the capital services from that part of the communications capital stock due to the internet. However, that contribution may be mismeasured if the quality of telecoms products has not been adequately measured.
21. Byrne and Corrado (2009) therefore develop a new communications price index that takes advantage of this quality change and falls 3-4 percentage points faster than the existing price index 1995-07. This turns out to generate a contribution from communications capital services of 0.19%pa which is 7% of the non-farm annual labour productivity growth rate 2.72%pa over this period.
22. Regarding network effects, Corrado examines the following. Based on a survey by a commercial market research firm (Harte Hanks Market Intelligence) Forman, Goldfarb and Greenstein (2003a, b) generate an industry measure, for 2000, of the fraction of establishments who used the Internet because it was necessary for business (e.g., email and browsing) versus those who adopted Internet technology to enhance competitive advantage (e.g., to change internal operations or implement new services). They called the former Internet participation and the latter Internet enhancement. Corrado looked for a relation between the share of industry Internet enhancement in 2000 and later TFP growth. These should be correlated if the commercialisation of the internet has driven network effects, measured by subsequent TFP productivity gains. She finds a significant correlation and that the build out accounted for 32% of overall TFP growth between 2000-07 in the US.
23. What might the total effects for the UK be? Table 1 sets out sources-of-growth decomposition of market sector growth in value added per hour, 1995-09, calculated by Goodridge, Haskel and Wallis (2012a, GHW), which includes the contribution of telecoms equipment over that period.

Table 1 Sources-of-growth decomposition of market sector growth in value added per hour

	DlnV/H	sDln(L/H)	sDln(K/L) cmp	sDln(K/L) telecom	sDln(K/L) othan	sDln(K/L) intan	DlnTFP
1995-2009	2.08%	0.29%	0.39%	0.04%	0.54%	0.19%	0.62%
% of DlnV/H		14%	14%	2%	26%	9%	30%

Notes: Data are average growth rates per year for interval shown, calculated as changes in natural logs. Contributions are Tornqvist indices. First column is labour productivity growth in per hour terms. Column 2 is the contribution of labour services per hour, namely growth in labour services per hour times share

of labour in MGVA. Column 3 is growth in computer capital services times share in MGVA. Column 4 is growth in telecommunications capital services times share in MGVA. Column 5 is growth in other tangible capital services (buildings, plant, vehicles) times share in MGVA. Column 6 is growth in intangible capital services times share in MGVA, where intangible assets here are software, artistic originals, mineral exploration and company R&D. Column 7 is TFP, namely column 1 minus the sum of columns 2 to 5.

24. As the first column shows, market sector growth in value added per hour (what we shall call labour productivity growth, or LPG) was 2.08%pa over the period, with, column 2, labour quality contributing 0.29%pa (14% of LPG), computers contributing 19%, telecoms equipment 2%, other tangibles 26% and intangibles 9%, leaving the remaining 30% for TFP growth.
25. It is worth noting the contribution of computers of 0.39%pa. Computers had been invented when the SMP was proposed but had not shown up yet in the productivity statistics. Recall the SMP is supposed to have contributed 2.2% extra GDP over 14 years. 14 years of 0.39%pa gives 5.6% extra GDP, so the effect of computers alone has completely dwarfed that of the SMP at least on these data.
26. From these data, can one make a guess on the effect of the internet? First, column 3 shows the contribution of telecoms is 0.04%pa. The bulk of bulk of telecoms equipment spending over this period is likely strongly related to the internet, e.g. connectivity to the internet, the fibre optic cable itself etc. (note computer hardware separate, see column 3). Let us then take this as the direct contribution of the internet, which is 0.04%pa.
27. As the table shows, TFP growth is equal to 0.62%pa (these years span the recession where TFP growth falls very sharply). If we assume, using the Corrado figures, that 32% of TFP growth is from network effects, which is 0.20%pa ($0.62\% \times 0.32$). This gives a contribution of the internet to productivity growth, via the capital contribution of capital services from the internet, plus externalities, of $0.04\%pa + 0.20\%pa = 0.24\%pa$, 1995-09. This is 11% of LPG, which, interestingly, is exactly the MGI figure.
28. What about the contribution of the internet to the increased dissemination of ideas, new forms of business activity and the like? One contribution, not measured in the National Accounts relates to the role of the internet in facilitating search. The innovation process itself has likely benefitted from the ability to share knowledge via the internet and search engines. Thus, one would suspect that the process of R&D has become more productive.⁴

⁴ This seems to underlie some of the discussion around Gordon (2012) see e.g. Cochrane (2012). Gordon argues that despite the internet future growth is to stagnate as the contribution of the internet and such is only temporary and small relative to the important innovations in the past such as running water and indoor toilets (he asks would you rather give up these or your iPad?). One answer would be to indeed keep the iPad but immediately Google "Toilet" and rely on the information revolution to supply the answer to how to build one. That is to say, that if the fundamental innovation is systematic communication of ideas, starting with Gutenberg and then amplified by the internet, then there could be an effect on innovation via the improved productivity of communication.

We see some direct evidence of this in the increasing formation of (a) teams and (b) international teams in all forms of academic research (both scientific and non-scientific) just after the introduction of the internet (Wuchty *et al*, 2007). Corrado, Goodridge and Haskel (2011) estimate that the implied “price” of R&D has fallen very strongly as this communication has effectively made it much cheaper to “produce” new ideas. If one uses these new price deflators to capitalise R&D, it raises the implied contribution of R&D from 0.03%pa 1995-09 using a GDP deflator to 0.15%pa using the new deflator (reducing TFP growth *pari pasu*, to 0.50% (=0.62-0.12)). The reason for the increased contribution is that the price of R&D has been falling very rapidly due to productivity gains in the R&D sector. Thus to be conservative, if we ascribe a quarter of this rise to the internet, this gives 0.03%pa (= $\frac{1}{4} * (0.15\% - 0.03\%)$). Note however that TFP growth has fallen to 0.50%, 32% of which is 0.16%pa, giving a grand total of contribution of 0.04%pa+0.16%pa+0.03%=0.23%pa, very close to figure above.

29. What about the effect if the internet raises competition? Whether this raises TFP growth depends upon the mechanism by which competition raises TFP growth. If it causes firms to invest more in e.g. product development, R&D, managerial time etc. then it drives at least part of the investment in intangibles set out in GHW (2012a). The alternative is that it might speed the free dissemination of ideas, in which case it would speed up TFP growth, as indeed was the case in the US.
30. Can we get a feel for these numbers? GHW show that TFP growth sped up 1995-00 to 1.54% having been 1.38% in 1990-05 i.e. before the internet (and TFP growth then slowed down). Note this is net of the organisational investment needed to do this. If we ascribe this rise to the internet it is $(1.54-1.38)/5=0.03\%$ pa for five years, a small one off effect which we shall subsume into the network effects.
31. As for the effects of competition on TFP growth, Disney, Haskel and Heden (2003) show TFP growth varies by 1.3 percentage points between firms at facing the 80th and 20th points on the competition distribution (competition measured by a mark-up). Suppose that the competitive pressure of the internet is equivalent having all firms moved 5 points on the competition distribution: on their sample, this would raise TFP growth by 0.11%, which is 2.4% of the firm sample TFP: 2.4% of market sector TFP growth above is 0.02%pa.
32. This then gives the internet contribution being the sum of (a) the direct contribution of telecoms equipment investment (0.04%pa); (b) the indirect contribution of network externalities (including the contribution of the internet to managerial and organisational restructuring) (0.17%pa); (c) the contribution of the internet to improving the R&D process (0.03%pa);

and (d) the contribution of the internet to raising competition and so TFP growth (0.02%pa). All this sums to 0.26%pa, which is 12% of LPG. Applied to 1995-2011, this comes to £49bn in 2011 prices, around 3.3% of 2011 UK GDP. The Litan estimated cost savings were a one-off of 1-2% of GDP in total: these calculations would suggest they are an understatement. As they stand they are permanent gains, although if the internet becomes congested they might be reduced.

4. Implications for the SMP

33. There are a number of implications for the SMP. First, the SMP gains seem small in relation to those from computers. And they will be small in relation to the internet, if the internet keeps delivering the type of benefits to growth set out above (although note the internet and SMP might both have larger unmeasured benefits such as expansion of consumer choice).
34. Second, these calculations are somewhat of a cautionary tale for economic forecasters, who, at the time of the SMP, saw the benefits primarily in terms of expansion of manufacturing industries to take account of scale economies.
35. Third, there is large potential for the SMP with regard to services. Productivity growth in EU services has been very poor compared with the US, especially TFP growth. The SMP programme has been much less focussed on services than on manufacturing and this suggests ample scope to expand the program to services more than is already the case: see the accompanying chapter on services.
36. Fourth, and perhaps most significant, the internet is but indicator of the importance of the knowledge economy in the EU. This naturally raises the question of whether the current EU IP regime is fit for purpose and so whether the energy behind the SMP might be channelled in that direction.
37. The key IP instruments are trademarks, patents and copyright. Trademarks have been effectively harmonised. Patents by contrast seem an area ripe for reform. EU patenting costs are much higher than the US and relatively little progress seems to have been made since the discussion of an EU wide patent started in 1974. The main sticking points are (a) the patent language, (b) location of Patent courts, and (c) the ability of the European Court of Justice to have overall jurisdiction overruling member states. In November 2011 the European Parliament reached agreement on location (Paris, London, Munich), language (English, German, French) and the jurisdiction of the Court. However, at time of writing, the Spanish and Italians have refused to accept the language and the European Council

have removed the agreement on the Court's jurisdiction over member states. Without such overall jurisdiction, patent law goes back to being of national competence and hence one might win a patent case in member state A but lose it in member state B.⁵

38. On copyright, the question is the following: why didn't Google start in Europe? This question was posed by UK Prime Minister David Cameron to the Hargreaves review of UK Intellectual Property which then analysed "Fair Use" provisions in the US and EU. The main point is that EU law only gives copyright exceptions to a closed list of categories, e.g. criticism, news reporting, research, or archiving. There is no flexibility to create new exceptions in new areas. By contrast, the US uses the concept of "Fair Use", which alleged infringers can call upon to defend themselves if accused of infringement. This difference in approach is very important when technology moves faster than categories can be reformed. So under the European approach, new kinds of copying via advancing digital technology are automatically unlawful. By contrast, in the US, Hargreaves writes "Fair Use offers a zone for trial and error, for bolder risk taking, with the courts providing a backstop to adjudicate objections from rights holders if innovators have trespassed too far upon their rights."⁶
39. Following this line of inquiry, why didn't the internet start in Europe? Of course, the linking of pages by Tim Berners-Lee was a key contribution, although he then moved to the US. As Greenstein (2011) notes, the internet was funded by the US military to devise new communications systems that would route information over many channels, not just one pre-programmed one as in analogue telephony. In 1995 it was privatised. The early period of development required some planned standard setting. The later period of development, post privatisation, required open copyright and interconnection to encourage the free market, both of which were promoted under US anti-trust legislation. The need for free experimentation that underlies the internet is something that EU legislation could help. Likewise, the lack of standard setting for patents and state of copyright law suggest the EU could profitably devote some attention to those areas so that a volume in 20 years can report some progress.

5 See for example press release from the European Parliament, 10th July 2012, EU unitary patent: Council move would infringe EU law, says EP rapporteur".

6 Given the way the law currently stands, Hargreaves did not recommend moving to Fair Use in the UK, but recommended using existing EU law but extending it to accommodate future technological change (Hargreaves Review, p.5).

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5 Eight new ways to make the Single Market work

John Longworth

British Chambers of Commerce

Conclusions

- After 20 years of comparatively free movement of goods, people, capital and, to an extent services, it is fair to say that we are all better off. Trade between EU countries has ballooned and millions of jobs have been created.
- The EU is the world's largest integrated trading bloc and the most popular destination for UK exports, with 88% of BCC members exporting to the EU; and for smaller BCC members, EU markets present the greatest opportunities for export growth.
- But faith in the inexorable goodness of the Single Market is wavering. A sizeable number of BCC members feel that the benefits of the Single Market are outweighed by impact of rules imposed by Brussels, making them less competitive in the global market.
- There are still gaps in the Single Market which is inhibiting growth, such as energy markets, the digital sector and services. Moreover, those Single Market rules that are in place are being flouted whether they are two years old or twenty years old. The principle of mutual recognition is also not implemented as it should be.
- Two years ago the BCC published a series of steps it believed would make the Single Market work more effectively. Two years on and most of the eight steps have yet to be taken:
 1. *Spread the word* about the opportunities of trading across the EU.
 2. *Help business provide services across borders* including fully function Points of Single Contact by 2013 and investigation of ways to deal more quickly with infringements.

3. *A freeze on laws that cost jobs* where proposals are rejected by the Commission if they cannot prove they do not worsen prospects for growth.
4. *Create a level playing field for SMEs* including effective implementation, enforcement and redress.
5. *New rules must be SME-proofed*, including systematic quantification of the impacts of new legislation on SMEs.
6. *Secure and vary Europe's energy supply* to ensure that business consumers have access to an affordable and secure supply of energy.
7. *Create a Digital Single Market* to make the most of the opportunities provided through e-commerce and encourage cross-border trade.
8. *Rebalance the EU budget towards growth*
 - Business is key to delivering a Single Market that works and a stronger Single Market will mean fewer barriers to British companies trading in Europe, and better outcomes for UK plc. Failure to act will further delay Europe's return to growth and could affect the UK's participation in the Single Market.

1. Before taking on the arguably greater challenge of restoring Italy's finances to health, Mario Monti wrote an important report about how to breathe new life into the Single Market. Professor Monti's report rightly identified key areas for future growth such as the digital and energy sectors but he also exposed an important contradiction: "the Single Market is today less popular than ever, while Europe needs it more than ever".
2. There is no doubt in my mind that we have come a long way. After 20 years of comparatively free movement of goods, people, capital and, to an extent, services, it is fair to say that we are all better off. Trade between EU countries has ballooned and millions of jobs have been created. It is the world's largest integrated trading bloc and the most popular destination for UK exports, with 88% of BCC members exporting to the EU; and for smaller BCC members, EU markets present the greatest opportunities for export growth. And if just under half of BCC members want a looser relationship with the EU, the vast majority of them want to remain in the Single Market.
3. And there is no doubt in my mind, and in the minds of the business community across Europe, that as the EU's only source of growth, an effective Single Market holds the key to helping Europe grow again (Eurozone problems notwithstanding).

4. Until recently, most of us would have said that the Single Market was good for us, without necessarily expressing great love for it. But as Professor Monti warned, our faith in the inexorable goodness of the Single Market is wavering. Certainly a sizeable number of BCC members feel that the benefits of the Single Market are outweighed by impact of rules imposed by Brussels, making them less competitive in the global market.
5. And a number of BCC members also find other markets such as the US and old Commonwealth countries equally accessible; where a shared language and culture is just as attractive as a level playing field when it comes to choosing export markets.
6. How has this come to pass? British business has for the past 30 years been a consistent champion of the Single Market, helping shape its evolution, and often persuading others to follow. The Single Market should be the EU's greatest achievement. But for a growing number of the business community, the Single Market is at best failing to deliver, and at worst the cause of unnecessary meddling in its affairs.

What Single Market?

7. If a recent drop in trade with the EU can be explained in part by the Eurozone crisis and its deleterious affect on confidence and orders, there are other serious structural factors that are inhibiting growth.
8. For a start, there are still gaps in the Single Market; sectors where the playing field is full of pot holes (such as in energy, which is worth 5% of GDP, or in the digital sector where failure to establish a digital single market could cost the EU 4.1% of EU GDP by 2020), or where it has only recently been levelled (such as the case of the services industry where in the UK alone, a single market in services could boost GDP by £4-6 billion per annum). If historically services have been less tradeable than goods, technological advances mean that the remaining barriers to free trade, both within and without the EU, are a result of protectionism.
9. Moreover, those Single Market rules that are in place are being flouted whether they are two years old or 20 years old. We know, for example, that some Member States are still applying ownership requirements or fixed tariffs for professional services; or worse, discriminating against service providers on the basis of nationality, which directly contravenes the terms of the Services Directive.
10. We also know that many Member States are routinely ignoring one of the founding principles of the Single Market – the principle of mutual recognition. One business member has been fighting for the past four years to gain access to EU Member States that are illegally preventing Hills licence plates from being sold in their market. With the eventual help of the European Commission he has broken into one market, but there are 23 to go. Many other businesses would have and did give up long ago.

11. And many of the rules governing the Single Market are out of date, overly complex and expensive to comply with. The European Commission has recognised the burdensome nature of many of its rules, their disproportionate impact on smaller businesses, and that bad regulation stifles economic growth. It has put in place an infrastructure that is designed to improve the operation of rules, but businesses are still being clobbered. And poor rules beget poor policy. We know, for example, that reporting requirements for Intrastat are so onerous (one shoe manufacturer has one employee spending a day a month filling in forms) that many businesses cut corners and consequently the information the European Commission collates and uses to form future policy is inaccurate.

Fiddling while Rome burns

12. My diagnosis of the ills that the Single Market is suffering from is not new or controversial. If all agree on the 'why', there is perhaps less consensus on the 'how'. Many EU and national policymakers and politicians believe that completing the Single Market is essential if Europe is to escape a downwards spiral towards mediocrity and lower standards of living for all. And there are serious plans and prescriptions afoot to reinvigorate the Single Market, whether the Single Market Act (I and II), or related initiatives such as EU 2020 and free trade agreements.
13. The scale of the task is immense and it is my serious concern that the response of both European and national government is lacking in urgency and focus. Moreover, I believe that the scale of the disconnection between the rulers and the ruled is underestimated and could hamper Europe's economic recovery.
14. Two years ago, the BCC published a series of steps it believed would make the Single Market work more effectively. Many of those steps became part of the official solution to breathe new life into the Single Market, and thereby boost growth in the UK and European economies.
15. Two years on, and most of the eight steps to make the single market work have yet to be taken. And yet this is a crucial time for British business as we look to find new sources of economic growth and rebalance our economy towards exports. A stronger Single Market will mean fewer barriers to British companies trading in Europe, and better outcomes for UK plc.
16. I believe that the following eight steps need to be taken urgently and not just by the European Commission, but by the European Parliament and **all** Member States. Failure to act will further delay Europe's return to growth and could affect the UK's participation in the Single Market

1. Spread the word

17. For many businesses, the Single Market is either taken for granted or seen as the reason for unnecessary meddling in their affairs. Moreover when businesses encounter difficulties, they often do not know where to turn.
18. We need a targeted information campaign explaining the opportunities of trading in the Single Market to businesses across the EU; we need a Single Market portal that reunites all the various Single Market related services for business under one virtual roof (ie SOLVIT, Product Contact Points, Points of Single Contact (PSCs), EEN).

2. Help business provide services across borders

19. If the Services Directive provides the right framework for a single market in services, it will only succeed in boosting trade if the Member States speed up the implementation of its provisions and abide by them.
 - Ensure fully functioning PSCs in all Member States by 2013; with zero tolerance for those Member States that fail to meet the deadline.
 - A targeted information campaign that boosts awareness of the directive and its provisions to businesses.
 - Investigate speedier ways of dealing with infringements.
 - Introduce a new notification procedure that would allow Member States to veto the introduction of restrictive practices in another Member State.

3. A freeze on laws that cost jobs

20. With many EU Member States struggling with low growth, rising unemployment and significant government debt, it is vital that Europe's labour markets are as flexible as possible. Proposals such as the draft Ergonomics Directive will squeeze public finances and impose unnecessary cost and complication on employers; they in turn will think twice about recruiting at a time when we desperately need private-sector-led employment growth.
21. All proposals must be judged by their impact on employment and rejected by the Commission if they cannot be proved to improve, not worsen, prospects for growth. The Council and the European Parliament must reject amendments to Commission proposals that will threaten jobs and growth in the EU.

4. Create a level playing field for SMEs

22. Effective implementation, and even enforcement and redress, are key to the effectiveness of the Single Market. Instances of business fighting for years to sell their wares across borders or having to comply with stricter rules than their competitors **MUST** become a thing of the past.
23. The Commission and Member States must speed up the use of the mutual evaluation and IMI systems that the Services directive has created as a means of improving enforcement.
 - The Commission should systematically publish correlation tables so that differences in implementation are exposed.
 - Complaints procedures should be handled within one year.
 - Governments should be fined for gold plating.
 - More resources for SOLVIT.

5. New rules must be SME-proofed

24. The Commission has done much to improve the quality of the rules, but businesses on the ground have yet to feel the effects. In the same way that fiscal and monetary policy adapts to the economic cycle, so should regulatory policy – lighter when unemployment is high, heavier when it is low. Specifically, we need the following:
 - Systematic and rigorous quantification of the impact of legislation on SMEs by the European Commission. Considering exemptions for micros is not enough.
 - The Impact Assessment Board to reject any impact assessment that does not include the SME test or which shows that the costs for SMEs will be disproportionate.
 - The Council and the Parliament to carry out impact assessment of their own amendments. If they fail to do so routinely, the Commission should do it for them.

6. Secure and vary Europe's energy supply

25. More urgent action by the Commission and Member States is required to ensure that business consumers have access to an affordable and secure supply of energy.
 - The EU has less than two years to create a genuine internal market in energy, without which the major investment needed to upgrade Europe's outdated networks and ensure security of supply will fail to materialise. Member states need to act urgently.
 - For consumers to really feel the benefit of greater liberalisation, an increase in the amount of electricity traded between EU countries

is required. At present, only a very small amount of electricity is traded across Europe, but if the correct infrastructure was in place the amount would greatly increase. More investment in improving electricity grid connections is imperative.

- Practical measures to encourage behaviour change and deployment of climate friendly technology are required – using Horizon 2020 and COSME to incentivise change
- The Commission must ensure that measures to improve energy efficiency are designed to create opportunities for business without creating further red tape.

7. Create a Digital Single Market

26. Though the rapid growth in e-commerce is opening important new opportunities for the internal market in both goods and services, consumers and businesses continue to encounter practical difficulties making cross-border transactions.

- Cross-border e-procurement, and indeed cross-border procurement overall, remains at a low level in Europe. The EU needs to reform the structure and perhaps even the policy incentives to encourage the use both of technology and cross-border procurement. The interoperability of e-signatures is indispensable in this respect.
- The Commission should consider making e-invoicing mandatory.
- Data protection rules must be technology neutral and limited to fundamental principles.
- Member States must take action to exceed EU targets for broadband reach and speed wherever possible.

8. Rebalance the EU budget towards growth

27. The 2007-13 budget was a bad deal for the Single Market and for jobs and growth. Moreover, the funds that were allocated to boost competitiveness have proven difficult to access.

- The 2014-21 budget should be set at not more than 1% of GDP
- There should be three major funds closely focused on achieving EU2020 targets: the growth and competitiveness fund, the convergence fund and the rural restructuring fund.
- The first fund should account for 50% of the total and include assistance for R&D (alongside a radical reform of way funds are accessed), education and training, infrastructure, and the promotion of climate-friendly, resource- and energy-efficient technologies.

- It should do away with the need for the UK rebate
28. I do not pretend that these eight actions alone will save Europe, but I do hope that they will serve to provide focus. The UK Government's own analysis shows that current trade between the UK and other Member States could be as much as 45%¹ below its potential. If we want to tap into that potential, and replicate it Europe-wide, we need to focus on those sectors where significant GDP growth can be achieved. As a matter of priority, we must focus on tearing down the remaining barriers to trade, and reviewing or removing rules that are no longer fit for purpose.
 29. I also believe **that business is key to delivering a Single Market that works**. Without explicit recognition of the invaluable role that business has to play in driving growth and creating jobs, it will be difficult to win support and engagement from the wider business community.
 30. Moreover, the determinism that has characterised much of the EU's development looks outdated in today's world. If the Eurozone moves towards closer union, it must be because all agree that shared financial institutions, for example, are necessary for the long-term success of the euro and not for their own sake. The challenge then will be to avoid the fragmentation of the Single Market as the Eurozone grows tighter; and for the UK to articulate a vision for how it will continue to shape the evolution of Single Market.

1 BIS (2011), *Trade and Investment for Growth*, White Paper

6 The labour market and the EU Single Market

Bill Wells

Department for Business, Innovation and Skills

Conclusions

- The free movement of people means that EU citizens can move freely in order to live, work, study or retire in another Member State. However, there are still restrictions in place that prevent the free movement of workers, including transitional arrangements for new Member States.
- The establishment and completion of the EU Single Market adds to the employment opportunities across the EU as a whole, although participation in the labour market is a fundamental part of translating these potential opportunities into real jobs.
- Labour market outcomes are very different across Member States, particularly in the diversity of employment rates and how these have evolved. Despite progress against some structural indicators, the diversity of outcomes suggests that there is scope for improvement if the efficiency of the labour market in each individual country is to be improved.
- Across the Member States there is a diversity of national labour markets which have developed in line with each of the state's culture and traditions. The diversity of employment outcomes suggests that the reforms should not be one-size-fits-all, but rather consistent with the culture and tradition of the individual country. Both the employment performance of the UK and Germany, for example, has been relatively good given the fall in output, but there are clear differences in key elements of each country's labour market policy.
- A more effective pan-EU labour market infrastructure where, for example, qualifications are recognised and vacancies advertised across the EU will help to translate more of the employment opportunities into jobs for EU citizens.

- A single accessible source of information setting out clearly and simply what an EU citizen needs to do to work legally in another EU country would make it easier to get and take up a job and also reduce the risk of inadvertent illegal working.
- Labour market policy is a key area where subsidiarity is very important and the rules of the single market need to be carefully integrated with the culture and tradition of each country.

Introduction

1. The Single Market of the European Union seeks to guarantee the free movement of goods, services, capital and people – the EU's 'four freedoms' within the 27 Member States.
2. The free movement of people means that EU citizens can move freely in order to live, work, study or retire in another Member State. The objective for workers is that they have the right to move to a different Member State, to look for work and to be employed under the same conditions as nationals of that state. There are restrictions on the free movement of workers, including transitional arrangements for new Member States.
3. The establishment and completion of the EU Single Market adds to the employment opportunities across the EU as a whole. Free movement of goods, services and capital provide greater opportunities for trade within the EU and the free movement of labour enables EU citizens – both native to the Member State and from other Member States - to take up the employment opportunities that result.
4. However, across the Member States there is a diversity of national labour markets which have developed in line with each of the state's culture and traditions. Therefore, labour market policy is a key area where subsidiarity is very important and the rules of the single market need to be carefully integrated with the culture and tradition of each country. A key area where this is necessary will be the preparation and the delivery of the ending of the temporary transitional arrangements associated with the introduction into the EU of new Member States. In addition, given the diversity of labour market frameworks across the European Union, there is a premium on the availability of universal information. Information about the differing labour market rules in each country; whether information about the individual is comparable – in areas such as qualifications, etc; and where the vacancies and other employment opportunities are.
5. In addition, given the diversity of labour market frameworks across the European Union, there is a premium on the availability of universal

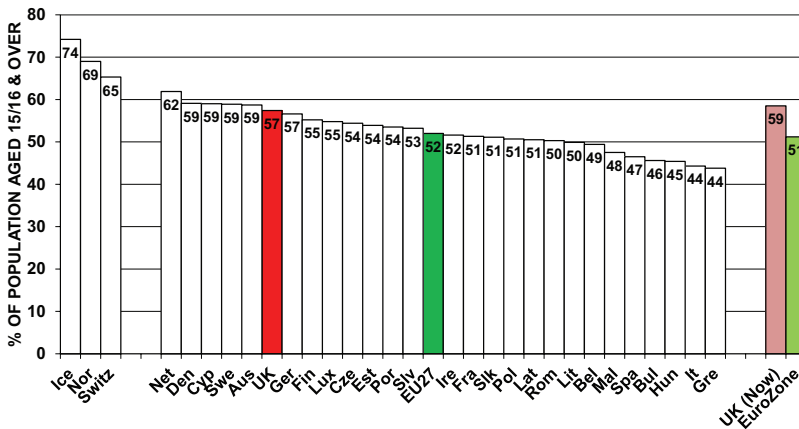
information. Information about the differing labour market rules in each country; whether information about the individual is comparable – in areas such as qualifications, etc; and where the vacancies and other employment opportunities are.

6. Consequently, in order to deliver more employment opportunities for all of the EU citizens in all of the Member States there will need to continue to be structural reform across a wide range of policy areas. Not only is structural reform necessary in all Member States to improve employment opportunities for their citizens, there is also the need to incorporate these reforms into the changes necessary to deliver the free movement of workers in a way which is consistent with the culture and traditions of each country.
7. It will also be necessary to see whether there is a pan-EU role – for example, through the structural funds allocations – to help the countries most in need of assistance to press ahead with these reforms.

Diversity of employment outcomes

8. Despite the fact that there is an EU Single Market and the Member States all face the same global problems, the labour market outcomes are very different across the Member States. The employment rates for all people above the minimum school leaving age ranged from 62% in the Netherlands to 44% in Greece and Italy¹.

Figure 1 Employment rates 2011, aged 15/16 and over

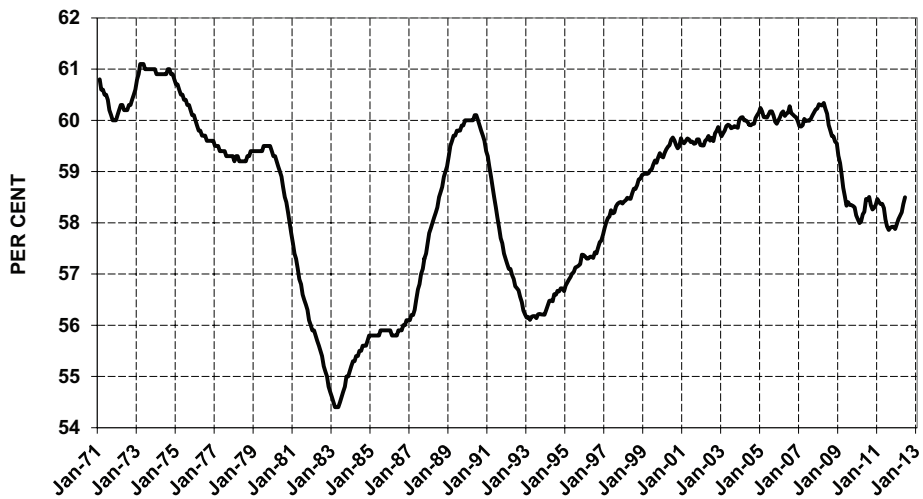


1 All non-UK data in this note is taken from the Eurostat database. UK data is sometimes taken from national sources. Also, for some countries, it has been necessary to change the start or end dates.

Source: EUROSTAT.

9. For example, the UK has one of the highest employment rates in the world – and so one of the highest in the EU. However, the rate is 3 percentage points lower than in the Netherlands (around 1½ million more people in employment in UK terms) and fully 10 points lower than Norway (5 million people in UK terms), one of the few non-EU European countries with high rates. Conversely, if UK had Italy's or Greece's employment rate then its employment would be around 7–7½ million lower.

Figure 2 UK employment rate, 16 and over



10. The improvement in the UK's employment rate has been a long-term process and has been hampered by the lack of macroeconomic stability. In the post-war period, peak-to-peak and trough-to-trough comparisons deteriorated until 1983 and have improved since then.
11. The improvement between the employment rate trough of 1983 and the trough of the recent recession is equivalent to 2-2 ½ million with today's population. Both the 1994 OECD Jobs Study² and the OECD 2006 Review³ commended the structural reform in both labour market policy and elsewhere with the Review describing the UK as a '*successful employment performer*'. It is likely that the structural reforms associated with the Single Market will have contributed to this.
12. The UK's employment loss in the recession was also proportionately less than in most other EU countries – only Luxembourg, Germany, Belgium

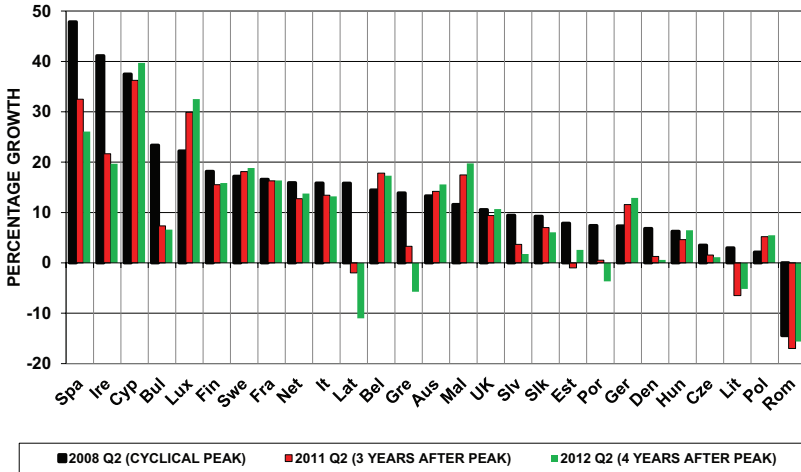
² OECD Jobs Strategy: 1994: Paris.

³ OECD Jobs Strategy Reassessment: 2006: Paris.

and Austria fared better (and Poland did not suffer a recession)⁴. And over the last year employment has grown by nearly half a million and the employment rate has also increased.

13. And it is not just the UK in the EU that has seen employment growth. In the decade before the pre-recessionary peak, all of the 27 EU states except Romania saw employment growth.

Figure 3 Cumulative employment growth since Q2 1998, %

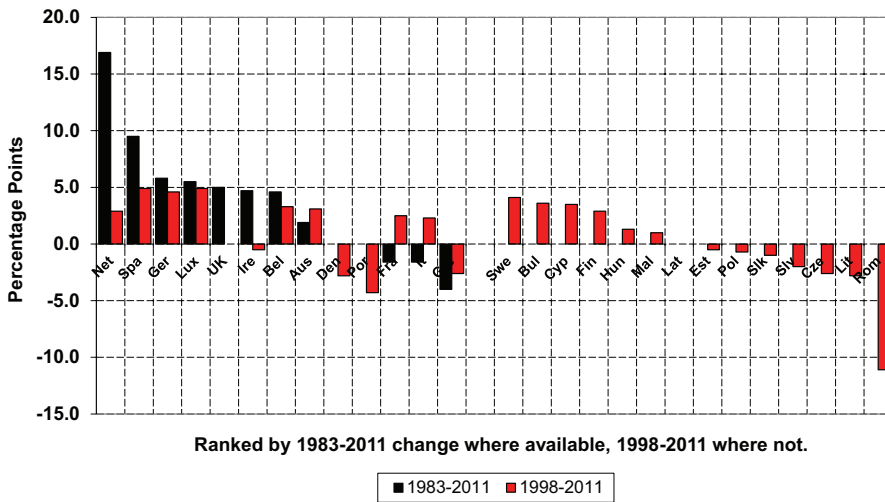


Source: EUROSTAT

14. Not only that, during the recession itself, the employment loss was less than the percentage fall in output in every EU state except Spain and Portugal. So, in the vast majority of cases the job losses during the recession and its aftermath were not sufficient to offset the previous decade of employment growth.
15. More recently, in around half of the EU countries employment has grown over the past year and ten countries, including Germany, Poland, Hungary, Malta and Austria, now have employment at or higher than the 2008 peak.
16. In general therefore, although substantial problems remain, most EU countries have seen employment growth. However, because of population growth, employment growth does not necessarily mean that the employment rate – the proportion of the population in work – has risen.

⁴ Employment in Europe 2010: Chapter 1: Chart 12a: Brussels.

Figure 4 Change in employment rates, 15/16 and over



Source: EUROSTAT

17. Yet, even after population growth is considered it still remains that many countries have seen a structural improvement in employment rates over time. As well as the UK, the Netherlands, Spain, Germany and Luxembourg have seen large improvements since 1983. In addition, Sweden and Finland and a number of the new Member States have improved since 1998.
18. Spain has improved over this period despite suffering the greatest proportionate fall in employment in the recession. And the substantial improvement in employment rates since both 1983 and 1998 has occurred despite currently having one of the very highest unemployment rates in the EU. This apparent contradiction is due to the fact that a much greater proportion of the population are now in the labour force – economic inactivity has fallen substantially.
19. Amongst the countries that have seen employment rates fall there are likely to have been a number of reasons for these falls. For example, restructuring after a Communist past, they have been disproportionately affected by the recession and/or the subsequent fiscal retrenchment.
20. However, whatever the reason for arriving at the current position, the diversity of employment outcomes – both across countries and over time – suggests that there is scope for improvement in the efficiency of the labour market in each individual country.
21. The diversity of employment outcomes also suggests that the reforms should not be one-size-fits-all, but rather consistent with the culture and tradition of the individual country. For example, the employment performance of both Germany and the UK has been relatively good given

the fall in output. However, key elements of labour market policy were different in the two countries. Germany's social partnership approach partly aimed at maintaining jobs of 'insiders' (although they have also reformed their welfare-to-work policies). In the UK, the focus was more on trying to ensure that 'outsiders' are brought into the labour market and they, and other unemployed, are helped into work as quickly as possible.

Nationals and non-nationals in the labour market

22. Generally, the employment rates of non-nationals are higher than for nationals. This is even true in Poland and Ireland, countries which have a reputation for hard work and also for migrating to other countries.

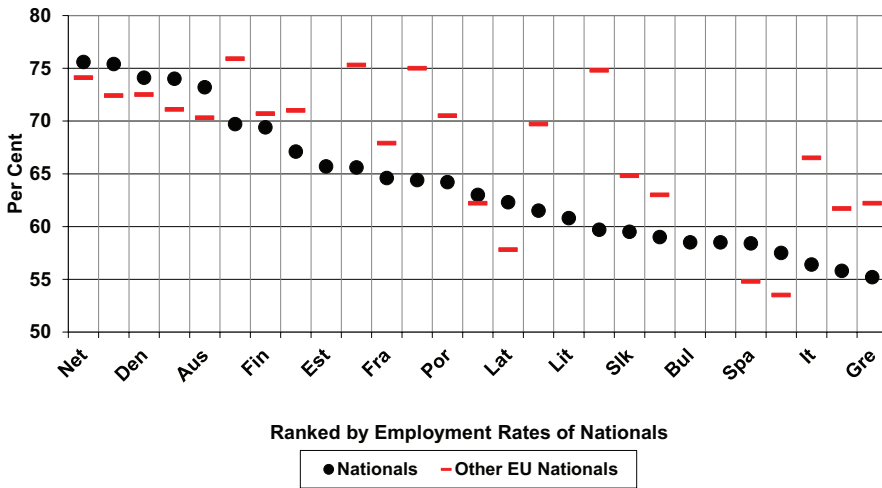
Figure 5 Employment rates of nationals and non-nationals, 15/16 and over



Source: EUROSTAT

23. Part of the reason is because most migrants are of working age. However, for EU nationals working in other EU countries, employment rates are still higher than for nationals. Despite this (although the fit is not exact), it generally seems that countries which have lower employment rates for nationals also have lower employer rates for other EU nationals.
24. This might suggest that there may be room to improve the efficiency of the labour market overall so that it benefits both nationals and non-nationals.

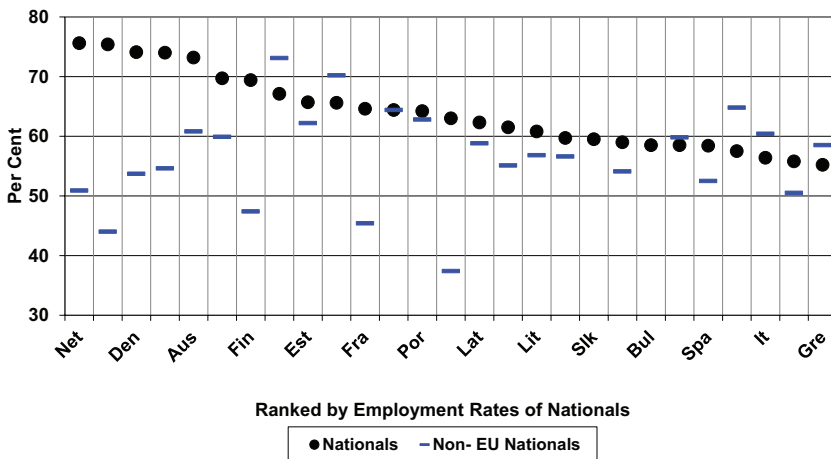
Figure 6 Employment rates of nationals and other EU nationals, aged 15/16 to 64



Source: EUROSTAT

25. For non-EU nationals – even amongst those of working age – the employment rates tend to be low in virtually all EU countries, whether the country as a whole is a high or low-employment country.
26. Part of the low employment rates for non-EU nationals will be due to deliberate Government policy – the migrants are not allowed to work. However, for many migrants from outside the EU, even though they can legally live and work in the host country, they find it difficult to find work.
27. Again this suggests that there may be room to improve the efficiency of the labour market overall so that it benefits both nationals and non-nationals.

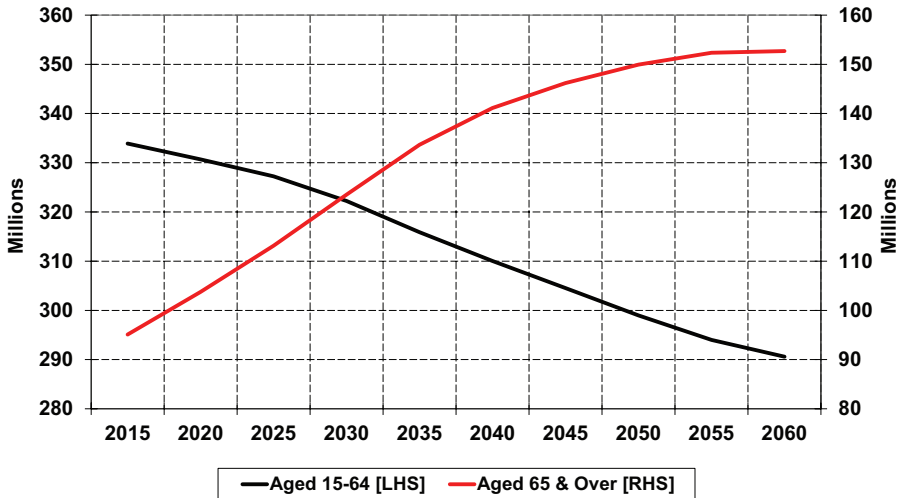
Figure 7 Employment rates of nationals and non-EU nationals, aged 15/16 to 64



Source: EUROSTAT

The future, labour market reform and the Single Market

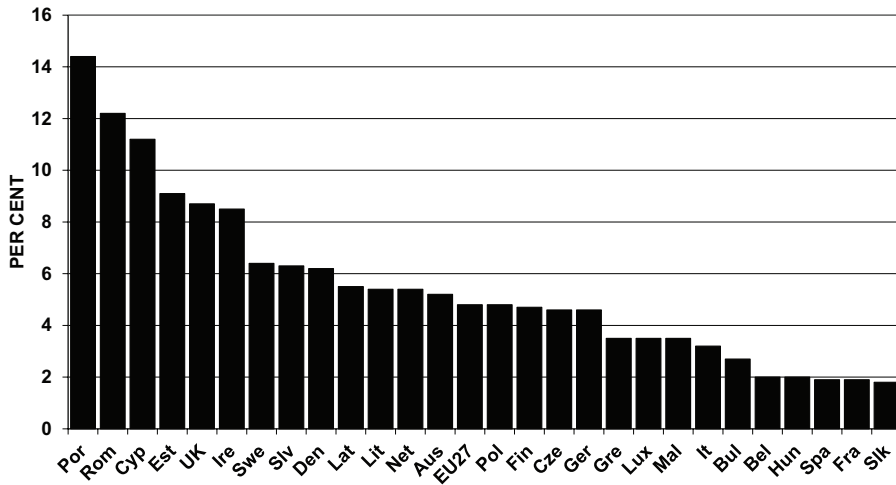
Figure 8 Population projections, EU27



Source: EUROSTAT

28. Currently the preoccupation is, rightly, over a shortage of jobs. However, in the period up to the recession there was increasing attention being paid to a shortage of labour because of the ageing population. Not only was (what had previously been called) the population of working age (ages 16 to 64) declining, but also the population aged 65 and over was increasing.
29. This affected different countries to a greater or lesser extent, but the effect was general. And although there is some variation across countries in the employment rates of people aged 65 and over, in none of the countries did more than 1 in 7 people work.

Figure 9 Employment rates, aged 65 and over



Source: EUROSTAT

30. In some senses, the labour market effects of the ageing population increase the importance of structural reform in all of the EU countries. If more of the demand can be translated into jobs at the moment, then this will ease the current shortage of jobs. If more of the demand can be translated into jobs in the future, then it may ease a shortage of labour and prevent growth and the creation of prosperity being impeded.
31. The completion of the single market in goods, services and capital combined with a free and open trade regime with the rest of the world will provide more opportunities to trade.
32. And more opportunities to trade provide more opportunities to employ more people. But more opportunities to employ more people are only of use if those opportunities can be translated into real jobs.
33. But translating growth into jobs requires that people are in the labour market and looking for work (i.e. they are participating), but also that the jobs are being advertised in ways that suit the workers and that workers have the information and the ability to respond to the adverts and get the jobs.
34. Here, the advent of the ageing population provides both a challenge and an opportunity. A challenge because more of the population will be amongst groups who have not traditionally participated in the labour market. An opportunity because many of the groups that are not in the labour market tend to be disadvantaged. So, if the structural reforms are successful in getting people into the labour market and then into jobs, this might have beneficial social as well as economic consequences.

35. Structural reform in the labour market is difficult. And it is made more difficult because what works in one country does not necessarily work in another. As the OECD Job Study Review concluded in 2006, *'there is no single golden road to better labour market performance'*.
36. However, the conclusions of the OECD Job Study and the Job Study Review were that it was possible to make a difference. And the performance of some of the EU countries over the past 15-30 years set out here confirms this. For example, it now seems that Germany should be added to the list of *'successful employment performers'*. Spain has also made great strides – admittedly from a low base and their labour market did not prove resilient during the recession so there is lost ground to make up.
37. The diversity of employment outcomes and also of the different culture, traditions and institutions underpinning the various labour markets mean that reforms must be developed in line with *'what works'* in the individual countries.
38. It also means that transnational reforms, such as completing the Single Market through the delivery of the free movement of workers, also need to be sympathetic to the labour market, cultural and institutional situation in each country and how the implementation of these reforms will work.
39. However, establishing a more effective pan-EU labour market infrastructure where, for example, qualifications are recognised and vacancies advertised across the EU will help to translate more of the employment opportunities into jobs for EU citizens.
40. Finally, given that there is diversity in the rules and requirements associated with working in each of the individual states, there may be a role for the centre in making it easy for EU citizens to comply with the national rules. A single accessible source of information setting out clearly and simply what an EU citizen needs to do to work legally in another EU country would make it easier to get and take up a job and also reduce the risk of inadvertent illegal working.

7 Service sector productivity

Peter Goodridge, Jonathan Haskel and Gavin Wallis
Imperial College London

Conclusions

- The service sector now constitutes the majority of the UK and EU economy. This chapter examines the implications of this for the Single Market and EU productivity.
- The EU-US productivity gap is much commented upon, but rather than being caused by the size of the EU service sector, much of it can be explained by the differing productivity performance of US and EU service industries. In particular, the differential between EU and US productivity is largest in the distributive trades and financial and business services
- In terms of the proximate sources of growth, poorer EU growth relative to the US can be explained with a smaller contribution from the “knowledge economy”, that is, with smaller contribution from labour skills, ICT and innovation, with the latter proxied by Total Factor Productivity (TFP).
- Consistent with this picture is the observation that investment in intangible assets, including R&D, product and process development, software and workforce training among others, constitute a smaller proportion of final output in the EU compared to the US.
- Potential reasons for the poorer productivity performance of EU services, relative to the US, include the degree of labour and product market regulation in the EU having harmful effects on incentives to innovate and competition. The degree of regulation in the distributive trades in the UK and EU is noted in particular, with that industry being responsible for a significant proportion of the US-EU productivity gap.
- In developing policy to improve future EU productivity performance, the Lisbon Agenda focused on the importance of R&D. But the service sector actually performs very little R&D, instead it invests in other forms of innovative property and knowledge capital, such as software, product design, business process improvement, workforce training and reputation. If some of these assets generate social returns over and above the private

returns appropriated by the original investor, then that is another reason for policy to consider such investments explicitly.

- The ability of firms to finance innovative activity is a well-documented barrier in the EU, and is another feature that sits in contrast to the US.

1. Introduction

1. The service sector represented a small fraction of both the UK and EU economy when the original single market programme¹ was floated in 1957 and represented 45% of total hours worked in the EU15 in 1970. By 2007 that employment share had risen to 71%². Over the same period, manufacturing hours as a share of the total have fallen from 29% to 16%. What are the consequences of this for the Single Market as it was designed then and in the future?
2. The starting point in answering this question is the famous Baumol “unbalanced growth” model (1967). Baumol reasoned that the technology for a string quartet to play Mozart was unchanged since the 1780s. He used this observation to argue that the service sector exhibited naturally less productivity growth than manufacturing and hence economies with growing service sectors would inevitably experience a productivity growth slowdown. Thus we must start by reviewing what we know about productivity growth in services and manufacturing and seeing if this is true or not.
3. This then leads us into a number of issues. First, what do we know about service sector productivity in the US relative to the EU? In particular, does the evidence suggest that further work on liberalising trade in services would lead to productivity gains? Second, and related, recent US work suggests that much of the US post-computer productivity miracle in services was in retailing. So what do we know about US and EU retailing productivity and does that shed any light on policy?
4. Finally, we come to the question of R&D. R&D lies uppermost on the European policymakers’ agenda. The Lisbon Agenda targets for a 3% R&D spend of EU GDP for example. But the service sector is the stand-out area of the economy where firms do no R&D (aside from suppliers of R&D classified to business services of course) as traditionally defined. Citibank,

1 The term Single Market Programme, sometimes referred to as the Internal Market programme (European Commission, 2007), refers broadly to the integration of EU markets via the removal of tariff and non-tariff barriers. This broad programme has numerous dimensions which include the 1986 Single European Act, Single Market Act II (October 2012), Services Directive 2007 and Digital Agenda for Europe (2010).

2 Estimated using the EU KLEMS EU-15 dataset. Comparable figures for value-added are 54% in 1970 and 71% in 2007.

one of the world's largest banks, has done precisely zero R&D for the last ten years in its submitted accounts. Tesco does no R&D, nor does Virgin or EasyJet. So what is it that drives innovation in these sectors if it is not R&D, and what are the policy implications?

2. Industrial composition and productivity

5. Since the observations of Baumol (1967), commentators and policymakers have concerned themselves with questions of industrial composition and the degree of sectoral “balance” in the economy, and how this may affect the ultimate driver of real living standards, productivity growth. The concern has been that, in line with the Baumol stagnation hypothesis, shifts in industrial composition away from manufacturing and toward the provision of services, inevitably reduce the potential for growth in productivity due to the labour-intensive nature of service provision. Such concerns have received added emphasis in recent times, with questions about the role of financial services and its contribution to growth as compared to say manufacturing.
6. To examine this argument, let us first re-consider Baumol’s theory. The classic example given is that the productivity of a string quartet (and other service producers) is constant and does not grow over time. Is this true? First, in the strict case where the sole final output is live viewing of a string quartet the observation is correct. But technical progress has expanded the output of a string quartet since Mozart’s time: via the ability to record, broadcast, or even playback via an iPod. Indeed, if the output of the quartet is recorded and distributed on some platform, then the productivity of the quartet not only increases, but does so exponentially. Even if that part of production is taken up by another industry, the performers receive an income that represents the increase in their output or productivity due to innovation in the means of distribution.
7. Second, as pointed out in Oulton (2001), many services are in fact intermediate inputs used in the generation of other final output. Consider for instance the wide range of financial and business services as classified in the Standard Industrial Classification (SIC). Provided productivity growth in the provision of that intermediate is above zero, then that service will make a positive contribution to aggregate productivity growth. So if, for example, outsourcing of service intermediates raises their productivity, via for example increased specialisation and division of labour in both the purchasing and supplying industry, this can have a beneficial impact on total productivity.

8. Third, shifts in industrial composition towards the provision of services may have a positive impact on productivity where externalities are present. Just as a telecommunications network is orders of magnitude more useful with many connections compared to one with just a few connections, a larger service sector may also generate agglomeration externalities due to the presence of highly skilled and mobile labour moving between industries, resulting in the dispersion of knowledge. After all, most services, particularly business services, are based on the application of knowledge and the delivery of solutions to the purchasing downstream firm. If such effects do exist, the focus ought to be on skills and mobility without worrying about the appropriate destination of such workers or the size of particular industrial sectors.
9. There are therefore many reasons to dispute Baumol's assertion on the basis of theory, but are the data supportive of this view?

3. Service sector productivity in the EU and US

10. In terms of economic performance, the primary concern for EU policy makers is the persistent productivity slowdown that has occurred in the region over the past decade or so. This slowdown has occurred during a time when service sector activity has expanded rapidly leading some to make a connection with the Baumol hypothesis discussed above. However, note that in contrast, since the mid-1990s there have also been dramatic improvements in US productivity, that have been viewed with much envy from across the Atlantic. But the US has experienced a similar shift in industrial composition to that experienced in the EU, suggesting that first, it is wrong to make a connection between aggregate productivity growth in the EU, and the increasing share of the service sector in overall value-added, and that second, something else lies behind the differing productivity performances of the US and EU in recent years.
11. Before examining the possible reasons for differences, it is worth considering how different productivity performance in each region has been. Timmer *et al* (2011) present a comprehensive analysis of EU and US productivity, see Table 1. Between the periods 1973-95 and 1995-2007, US whole economy productivity, measured in terms of GDP per hour worked, accelerated from 1.3% p.a. in the earlier period to 2.1% p.a. in the later period. In contrast, the EU experienced a decline from 2.7% p.a. to 1.5% p.a.³ Therefore after a period of catch-up and convergence in the post-war

³ Data for the period 2007 to 2009 are also available but are not included here due to noise in the data as a result of the financial crisis and recession, thus affecting comparisons across countries and over time.

period, EU and US productivity performance has diverged markedly in the past twenty or so years.

Table 1 Average annual growth rates of GDP, GDP per capita, and GDP per hour worked, EU-15 and United States, 1950-2007 (%)

	Growth in GDP	Growth in GDP per capita	Growth in GDP per hour worked
1950-1973			
EU15	4.9	4.2	4.9
United States	3.9	2.5	2.6
1973-1995			
EU15	2.2	1.9	2.7
United States	2.9	1.8	1.3
1995-2007			
EU15	2.4	2	1.5
United States	3.2	2.1	2.1

Source: Timmer *et al* (2011), *Productivity and Economic growth in Europe: A Comparative Industry Perspective*. Calculations based on the Conference Board and Groningen Growth and Development Centre, Total Economy Database, January 2011, at <http://www.conference-board.org/data/economydatabase/>. Growth rates estimated as changes in natural logs.

12. The same study goes a long way towards explaining the reasons for this contrast in performance. Using the EU KLEMS database in a growth-accounting analysis, Timmer *et al* (2011) show that the European slowdown can be broadly explained in terms of a smaller contribution from the “knowledge economy” in the EU as compared to the US. From Table 2, again taken directly from Timmer *et al* (2011), it can be seen that only part of the EUs poor performance can be explained by a much smaller acceleration in the contribution of ICT capital deepening in the EU compared to the US. Similarly the contribution of labour composition, which broadly accounts for changes in the skill level of the workforce, fell slightly in the EU but rose in the US. The contribution where the divergence is largest however is that of the TFP residual.
13. The TFP residual can be thought of as capturing, among other things: technical advance; the contribution of knowledge including uncapitalised intangible investments such as R&D, design activity and business process improvement; and the efficiency of combining inputs in the generation of final output. Broadly speaking the TFP residual can be interpreted as an indicator of innovation. The implication therefore is a lower degree of innovative activity and less gains in productive efficiency in the EU, perhaps in part driven by less investments by firms in knowledge and improvements in business processes compared to firms the US. These data are consistent with the relatively low ratio of intangible investment to GDP reported for the US and EU-15 in Corrado *et al* (2012) at 10.6% and 6.6% respectively (1995-2009).

Table 2 Contributions to real output growth in the market economy, European Union and the United States, 1980-2007 (annual average growth rates, in percentage points)

<i>Growth of:</i>		European Union*		United States**	
		1980-1995	1995-2007	1980-1995	1995-2007
1	Market economy output	2.1	2.5	3.3	3.5
2	Hours worked	-0.5	0.8	1.3	0.9
3	Labour productivity	2.5	1.6	2	2.6
<i>Contributions from:</i>					
4	Labour composition	0.3	0.2	0.2	0.3
5	Capital services per hour	1.2	0.9	1	1.2
6	ICT capital per hour	0.4	0.5	0.7	0.9
7	Non-ICT capital per hour	0.8	0.4	0.3	0.3
8	Multifactor productivity	1.1	0.6	0.7	1.2
Contribution of the knowledge economy to labour productivity (4)+(6)+(8)		1.8	1.3	1.7	2.4

Source: Timmer *et al* (2011), EU KLEMS EU KLEMS database, November 2009; see O'Mahony and Timmer (2009). Union refers to ten countries: Austria, Belgium, Denmark, Finland, France, Germany, Italy, the Netherlands, Spain, and the United Kingdom. ** based on USA old standard industrial classification. 'ICT' is information and communications technology.

14. So the data suggest that it is the pace of innovation in each region that is behind the divergence in productivity performance, and not the predominance of the service sector in industrial composition. Among the reasons put forward in van Ark, O'Mahony and Timmer (2008), is the degree of labour and product market regulation in the EU. Crafts (2006), based on evidence from OECD countries, also argues that regulation can harm incentives to invest in, and undertake, innovative activity, thus inhibiting competition, innovation, the rate of technical progress and therefore productivity growth. Crafts discusses a number of channels through which over-regulation could have such an effect. First, resources must be channelled to compliance rather than productive activity. Second, by reducing the potential returns to innovate activity, thus harming technical progress. Third, by introducing barriers to entry in product markets and harming competition. Competition is considered an important factor in productivity performance, and a lack of competition can also of course further inhibit incentives to innovate.
15. Table 3 below, taken from Timmer *et al* (2011), compares the contributions of major industrial sectors to aggregate productivity growth in the US and the EU.

Table 3 Major sector contributions to labour productivity growth in the market economy, EU economies and the United States, 1995-2007 (annual average growth rates, in percentage points)

	Market economy 1=2+3+4+5	ICT production 2	Contributions from		Reallocation* 5
			Goods production 3	Market services 4	
European Union**	1.6	0.4	0.7	0.6	-0.2
United States***	2.6	0.8	0.3	1.8	-0.2
United Kingdom	2.6	0.5	0.7	1.6	-0.2

Source: Timmer *et al* (2011). Calculations based on EU KLEMS database, November 2009; see O'Mahony and Timmer (2009).

Notes: The reallocation effect in the last column refers to labour productivity effects of reallocations of labour between sectors. The European Union aggregate refers to the ten countries in the table. Information and communications technology production includes manufacturing of electrical machinery and post and telecommunications services. Goods production includes agriculture, mining, manufacturing (excluding electrical machinery), construction, and utilities. Market services include distribution services; financial and business services, excluding real estate; and personal services. Numbers may not sum exactly due to rounding. ** Data for the European Union exclude 5 member states of EU-15: Greece, Ireland, Luxembourg, Portugal. Numbers may not sum exactly due to rounding. *** based on old U.S. standard industrial classification

16. Consider the first two rows of Table 3. Although there is some difference in the contributions of goods production and ICT production, the contribution of market services is much greater in the US. In the case of ICT goods production, the differential is explained by this innovative sector making up a much larger share of the US economy. However, in the case of market services, the difference is not explained by the share of market services in overall economic activity. That is similar in the two regions. Instead it is explained by markedly different sectoral productivity. In the EU, despite market services making up a much larger share of final output than goods production, the latter still makes a larger contribution to aggregate labour productivity.
17. The final row of data shows that the situation is different for the UK. There market services also make a much stronger contribution to productivity growth than in the EU as a whole (1.6% of 2.6% in the UK, compared to 0.6% of 1.6% in the EU), and is similar to the contribution for the US.
18. Digging deeper into the industry detail, van Ark, O'Mahony and Timmer (2008) show that the largest productivity differential between US and EU market services exists in the distributive trades and financial and business services. Basu *et al* (2003) and Crafts (2006) also point to the distributive trades as a predominant factor in explaining the divergence in UK and US productivity performance. Likewise Haskel and Sadun (2012) present evidence of a decline in retail productivity in the UK.

4. Explaining the EU-US gap

19. It is the performance of the service sector acting as a drag on EU productivity performance, not the nominal size of the service sector within aggregate GDP. In Van Ark, O'Mahony and Timmer (2008), the divergence between EU and US performance in market services is again largely explained by differences in TFP performance and therefore innovation and technical change, with differences in factor intensity being quite small. Divergence between UK and EU performance can also be explained in terms of the contribution of the knowledge economy, with labour composition, ICT capital deepening and TFP all making stronger contributions in the UK compared to the EU as a whole.
20. Before discussing economic explanations of the EU-US productivity gap it is worth mentioning the potential for measurement error when comparing EU and US productivity performance. It is well acknowledged that measurement of quantities and prices in the services sector is somewhat more difficult than the manufacturing sector, particularly for industries such as financial services, and different countries often have quite different approaches to measurement. One notable difference between the US and the EU is the use of hedonic quality adjustment of deflators. Hedonically adjusted deflators are used extensively in the US but not in most EU countries. However, analysis by Lawless (2006) suggests that differences in the measurement methodologies of the high-tech sectors cannot account for the widening productivity growth differential between the EU-15 and US.
21. One potential economic explanation for the EU-US gap, offered by Van Ark, O'Mahony and Timmer (2008), is that innovation through imitation is more difficult in the case of market services, due to their highly customised and individual nature making it more difficult for the EU to close the productivity gap. Another explanation can be found in Bloom and Van Reenen (2007) who show significant differences in corporate management practice between the US and EU. On average, US firms benefit from superior management compared to those in Europe.
22. Van Ark, O'Mahony and Timmer (2008), Crafts (2006) and Haskel and Sadun (2009) also all consider the role of regulation as a potential explanation. Specific to the distributive trades, it is suggested in Crafts (2006) that European regulatory constraints, such as those on opening hours, labour, and planning (particularly in the UK), have inhibited retail sector TFP in Europe compared to the US. Haskel and Sadun (2009) also present evidence that planning regulation has had a negative impact on productivity performance in UK retail distribution, via reduced store sizes and scale economies, and a negative impact on TFP.

23. Financial constraints are another well documented barrier to growth, especially for new innovation based markets. As noted by Veugelers (2012), the venture capital market is the best way to fund projects that are highly innovative with high levels of technical and commercial uncertainty. The EU venture capital market is underdeveloped, especially compared to the United States, with long-term venture capital investments in the EU around a quarter of the level of the US.⁴ Europe is already providing a large range of financial instruments to improve access to finance for SMEs. However surveys continue to show limited access to finance for many SMEs and it is unclear if this is entirely due to the current climate. It is worth noting from the UK context that the UK venture capital market is judged as more developed than that in the rest of the EU, and considered second only to the US in terms of early stage venture capital investment as a percentage of GDP (BIS, 2011).

5. Beyond R&D

24. Much of the focus of innovation policy in the EU has been on R&D. As a matter of data, in all countries in the EU, manufacturing undertakes the vast majority of R&D. If the problems are in the service sector, which does little R&D, one might reasonably ask what drives innovation and productivity in the service sector as opposed to manufacturing?
25. Rightly the Lisbon Agenda considered innovation and skills as key in improving the EU's productivity performance along with R&D. However, other forms of intangible investment are more prevalent in services, including for instance investments in design, reputational capital, training of the workforce, business process improvement and other activities that fall within a broader definition of knowledge capital than the traditionally narrowly defined variety of scientific R&D. For instance, Corrado *et al* (2012) show that as a percentage of GDP, investment in new product development in financial services is much higher in the US than in EU countries. Similarly for intangibles as a whole, as mentioned above. The same paper also shows that the contribution of intangible capital deepening to growth in labour productivity is far higher in the US than most European countries.
26. Goodridge, Haskel and Wallis (2012a) show that financial services, business services and distributive trade & communications are all heavy investors in intangible assets. Financial services was investing as much as 21% of its value-added in intangibles, mostly in software, in 2001. Those authors also show that the heaviest investors in intangibles are the distributive trades,

⁴ See SEC (2011). "An action plan to improve access to finance for SMEs", Commission Staff Working Paper.

manufacturing and business services, who respectively invest 25%, 23% and 20% of total intangible investment. Categories of intangible investment in which services are highly intensive include software, branding training and business process improvement. For instance, 81% of total software; 76% of total branding; 74% of firm-specific training and 71% of business process improvement takes place in market services. Since they are sector-specific, 100% of investment in artistic originals and financial product development takes place in the service sector.

27. Financial services and business services, along with manufacturing, are also found to be the most innovative industries in the UK, with innovation defined using the shares of growth explained by intangible capital, labour composition and TFP. The contributions of innovative activity in financial and business services to aggregate UK productivity are estimated at 25% and 15% of the total, with their employment shares being 20% and 5%. In contrast, although distribution & communications contributes 29% of the total, it has an employment share of 36%.
28. All this suggests that a relatively low EU investment rate in intangibles might help account for relatively low productivity growth in the service sector and low TFP via two mechanisms. First, one of the components of measured TFP is the contribution of forms of intangible or knowledge capital not officially treated as assets in current national accounting convention but as intermediates. Second, low intangible investment might spillover into low TFP growth if there are external effects from intangible spend e.g. via R&D being adopted by those not investing in it.
29. Consistent international industry-level data for intangible contributions to growth are not available, but for the market sector, Corrado *et al* (2012) report that intangible capital deepening contributed 0.5%pa and 0.9%pa to labour productivity growth (1995-2007) in the 14 EU countries for which they had data and the US respectively. So the relatively low EU investment rate in intangibles has reduced relative labour productivity growth by 0.4 percentage points per annum.⁵ That paper also documents a relation between lower contributions of intangibles and lower TFP growth, suggesting a fall in contribution of 0.4pppa would be associated with lower TFP growth of around 0.5%pa.
30. This explanation of the differing productivity performance in the US and EU based on the EU employing a lower volume of intangible capital than the US, fits with another explanation offered by Bloom and Van Reenen (2010). They find that poorer management practice, or in other words,

⁵ These productivity data are not fully comparable with the Timmer *et al* (2011) data presented above. The reason is that once intangibles are treated as capital goods, they must also be counted in the measurement of final output and therefore labour productivity. Therefore although these numbers are indicative, the two sets of data cannot be combined in an attempt to decompose the TFP residual presented above.

less effective organisational capital, is associated with lower productivity growth, and also survival rates. A potential route for policy, offered by those authors is the removal of regulations that restrict management practice and impose informational barriers that harm European firms ability to build organisational capital effectively. Improvement of survival rates could also be beneficial for productivity via increased competition.

6. Policy

31. All this leads to a consistent picture of both lower investment in innovation and lower innovation in the EU relative to the US, with the service sector being the dominant locus of these relative differences. What are the policy implications of this?
32. First, it could be that knowledge gained through R&D activity, predominantly undertaken in manufacturing, disperses throughout the rest of the economy, including the service sector, with a beneficial impact on productivity. In a recent paper, Goodridge, Haskel and Wallis (2012b) present some evidence for spillover effects from R&D and also other forms of intangible capital. If this is the case, there is an argument for a renewed policy focus on R&D with a particular focus on basic research as opposed to more applied development activity.
33. Second, *sui generis* policies could also be helpful in improving service sector productivity performance, for instance planning policy in the case of telecommunications services and distributive trades.
34. Third, extension of the single market to better cover services ought to be another focus of policy. A truly single market would be expected to benefit service sector productivity through the achievement of scale economies and also increased intensity of competition. Currently significant barriers to trade still exist in services product markets across countries and scope also exists to further increase labour mobility. For instance, in retail, restrictive regulations include those on store opening hours, planning and use of land and labour market regulation, all of which may be preventing EU retailers from benefitting from the economies of scale and growth enjoyed by larger retail formats in the US.
35. Increased openness in service markets, following adoption of the 2006 Services Directive also has the potential to improve European productivity growth. Whilst some progress has been made, the degree varies considerably between countries. Regulations on labour and recognition of qualifications in particular can vary drastically, as can other factors such as the ability to obtain insurance and differences in consumer protection

(European Commission, 2012). As a result, trade in services between EU countries remains limited and the European Commission has resolved to eliminate non-compliance with the Directive.

36. If innovation is to be encouraged in an economy where the majority of output is in services, policy ought to encourage a much wider form of knowledge acquisition than just R&D. If it is considered therefore that credits or subsidies are the best way to encourage R&D, then it is also necessary to consider other forms of intangible capital in such policies.

7. The future of the service sector

37. It is worth making a final definitional point on just what is meant in the discussions of service and production sector output. This has two elements. The first is that the nature of manufacturing output is changing and includes many of the intangible assets discussed above. Therefore, it could be argued that many manufacturing outputs are actually what have traditionally been regarded as service outputs, including design, R&D activity, training, reputational capital etc. Second, with the outsourcing of core production processes overseas, it is worth considering what is the appropriate industry classification for the processes that remain? For example, consider Dyson or some pharmaceutical firms. If the basic manufacture of products is outsourced, is what remains manufacturing or service activity. Furthermore, note that manufacturing firms also provide a range of service outputs that may or may not be bundled with the manufactured goods they sell, consider for example the services offered by Rolls-Royce and IBM.

8. Conclusions

38. The concern that service sector productivity is naturally lower than manufacturing productivity appears to lead policy-makers to ask themselves the wrong question. If anything, the puzzle is why European services have not had as good a productivity growth record as those in the US. The jury is still out on whether this is due to unmeasured organisational co-investment during an IT boom, regulation or inconsistent measurement, or all of these potential reasons.
39. There are several policy implications that in particular apply to the EU service sector. First, the potential for supply-side reforms to reduce labour and product market regulations that cover services, with some focus on the distributive trades, following the 2006 Services Directive. Second, and

related, the further extension of the single market for services is needed, which could have beneficial effects for productivity through increased competition, economies of scale, as well as consistent, but reduced, regulation. Third, improving the climate for hi-tech enterprise, high skilled labour and more broadly innovation, as proposed in the Lisbon Agenda. An important part of this will be ensuring that the wide range of European access to finance measures are having the desired impact.

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8 Completing Single Market II

Yvan Decreux

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Conclusions

- Members of the European Union came together and created a Single Market for goods and services in 1992. Twenty years on, significant economic benefits has been achieved, however much remains to be done.
- This evaluation is based on an economic model of the European Union in the world, using a range of scenarios which model different reductions in trade costs, including full liberalisation. The paper assumes equal reduction in trade costs across all sectors.
- The larger the integration efforts, the greater the increase in GDP gains for the European Union. When non-trade barriers are reduced by 25% compared to the base scenario, Europe's GDP would gain US\$440 billion (in 2007 prices). At full liberalisation, this increases to US\$2,721 billion (in 2007 prices).
- EU exports to the EU could expand by more than US\$6.9 trillion (in 2007 prices) in 2025, as compared to the baseline, while total exports from the EU to the world could increase by almost US\$5.3 trillion (in 2007 prices), net of trade diversion.
- At a sectoral level, the modelling suggests that the impact on services exports has become smaller and sometimes negative when the world market is considered. This phenomenon is due to the low level of services trade as compared to trade of goods and a shift of financial resources towards the production of goods.
- This should not lead to the conclusion that services sectors may suffer from further integration in the EU or that effort is best placed in tackling remaining barriers in other sectors. Overall, value-added in services sectors is still expected to progress significantly as a consequence of further liberalisation. Furthermore, modelling does not capture the benefits from reducing non-trade barriers which could help companies establish local subsidiaries for services delivery.

- Individual Member States may experience wide-ranging impacts across sectors, depending on their industrial make-up. For instance, the UK's income gains from liberalisation are lower in comparison to the larger EU countries due to the UK having a smaller proportion of trade with the rest of the EU relative to other Member States (the ratio of trade-to-GDP being smaller in relatively large economies like the UK); and obstacles to trade in services are already lower in the UK than in other EU countries.
- The UK is likely to gain substantially more in its services sectors from full liberalisation than suggested for the EU as a whole. This is because the UK has a fairly developed services sector and is likely to gain more from liberalisation of the services sector than some of the other Member States.

Motivation

1. Trade liberalisation between Member States has been part of the European project from its early origins. In 1992, members of the European Union decided to raise the ambition on this respect and create a single market for goods and services within its perimeter. Such an ambition goes much beyond the sheer suppression of tariffs between countries and the creation of a customs union. It implies that selling a product (whether a good or a service) in any European country should be as easy for a producer as selling it in its own country. It requires much more than the absence of tariffs levied on the movement of goods. Administrative procedures have to be significantly simplified, controls at the customs should not be an obstacle, and tackling these barriers was probably the easy part. Also, standards, such as product regulations or professional qualifications, need to be harmonised (or at least operate under a framework of mutual recognition); similar financial operations across countries also help to remove remaining barriers. Twenty years later, progress has been made but there is still scope for improvement. The existence of country borders is manifest for services, but it can also be clearly revealed by the analysis of trade in goods statistics combined with production data (see the abundant literature on borders effects).
2. The difficulties faced by companies willing to export to another European country as compared to selling to their own markets have potentially significant economic implications. They mean that companies may choose not to export, thus reducing the extent of competition between economic actors, but more importantly, they also mean that companies which manage to overcome those barriers still have to bear an additional cost when they export, potentially undermining their own competitive position in the new market. Exporting countries generally have a better performance

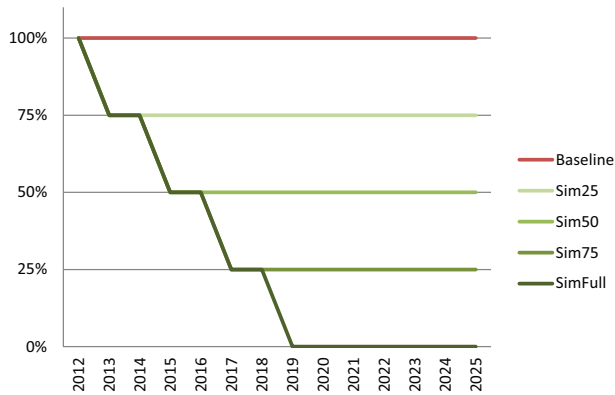
than others so that they can overcome the obstacles that they face, but they will have to charge a higher price to compensate for this.

3. Twenty years after the initiation of the European Single Market, much remains to be done. By contrast, a market like the US still appears much more integrated than the European Union.
4. The purpose of this paper is not to list the many steps that are still needed to achieve the goal of completing the Single Market, nor to focus on the practical aspects of a possible deepening of European integration for some specific sectors. It is rather to evaluate the global benefit that such completion can bring to Europe and its members. This evaluation is based on an economic model of the European Union in the world. To better capture the effect of sector reallocation between European members, it was useful to rely on a model that can distinguish between several economic sectors, and at the same time can measure the global benefit of policy changes. We chose to use a computable general equilibrium model of the world economy, namely *Mirage*, build at CEPII and used by a number of institutions worldwide. The Appendix to this paper provides greater detail on the modelling strategy, data sources, and the breakdown of components in the model.

Simulations

5. We first compute a baseline scenario assuming that no further integration of the European market occurs between now and 2025. Other scenarios will then be compared year by year to this baseline.
6. Four scenarios have been simulated. All trade costs are progressively reduced by stages of 25% every second year, as illustrated in Figure 1. The first point on the top left hand corner represents non-trade barriers as they are today. Therefore this is the baseline upon which the simulations were created. The first scenario stops after the first stage, the second one continues until the second stage, and finally the fourth scenario achieves a full completion of the single market objective.
7. The last scenario (full liberalisation) is very ambitious. It would imply that the EU becomes as integrated as the US. Considering the language diversity in Europe, the current existence of various standards for electricity, cars, the coexistence of different currencies within the EU, such an objective is very challenging and should be considered as an upper bound more than a realistic assumption.

Figure 1 Time sequence of simulated reductions in non-tariff barriers (NTBs)



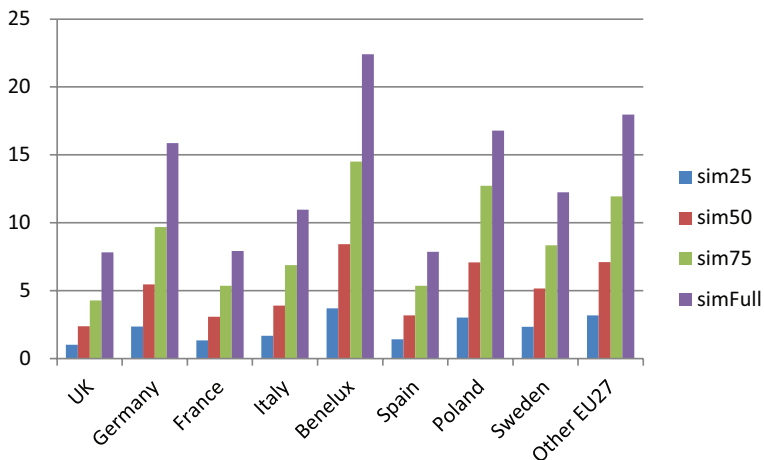
Simulation results

- We commence by presenting global results of the larger EU countries, rest of the EU27, and other regions and trading blocks in terms of real income, GDP and trade.

Income gains

- Figure 2 depicts the percentage impact on incomes compared to the baseline, in the larger EU countries, Benelux and the remaining EU27 (excluding UK, Germany, France, Benelux, Spain, Poland and Sweden, i.e. the ten largest EU countries). The figure displays the four different scenarios – simulated reductions in non-trade barriers by 25%, 50%, 75% and 100% - and their resultant effect on the income of the countries considered.

Figure 2 Income impacts of all scenarios on EU members, 2025, in percentage



10. As Figure 2 clearly displays, Benelux (Belgium, the Netherland and Luxemburg) have the most to gain in liberalising the Single Market further. This is true whether we look at reducing trade barriers by 25%, 50%, 75% or 100%. Poland, Sweden and other EU27 also gain considerably. The potential gains for other Member States, such as the UK and Spain, appear to be more modest in comparision.

11. Although this may come as a surprise at first glance, the lower potential economic benefits for the UK compared to other European countries can be explained by a combination of factors:
 - The UK has a smaller proportion of its trade with the rest of the EU than other Member States. The UK's intra-EU trade as a proportion of its total trade is close to 50%, in comparision to a much higher proportion in countries such as Belgium, France or Italy.
 - The ratio of trade-to-GDP is smaller in relatively large economies like the UK. It means that the liberalisation of trade will have relatively more economic impact in the latter.
 - Obstacles to trade in services are already lower in the UK than in other EU countries, with the notable exception of the construction sector. Trade liberalisation creates most benefits for the countries which have yet to reduce or remove barriers to trade. The UK is already relatively open to trade and hence the potential for further gains may be limited.

12. Whilst Figure 2 depicts the percentage income impact on EU countries, Table 1 below highlights the potential GDP gains in billions of US dollars for the EU as a whole over the four different scenarios. Variations in world welfare, which was used to compute income of EU countries and 'other EU27' in Figure 2, are slightly smaller than the impacts on world GDP. This is due to the fact that welfare corresponds to purchasing power, while GDP is a production indicator, which includes transport costs. More trade implies more transport, and thus a larger GDP.

Table 1 Overall GDP gains for the EU, 2025, US\$ billions (in 2007 prices)

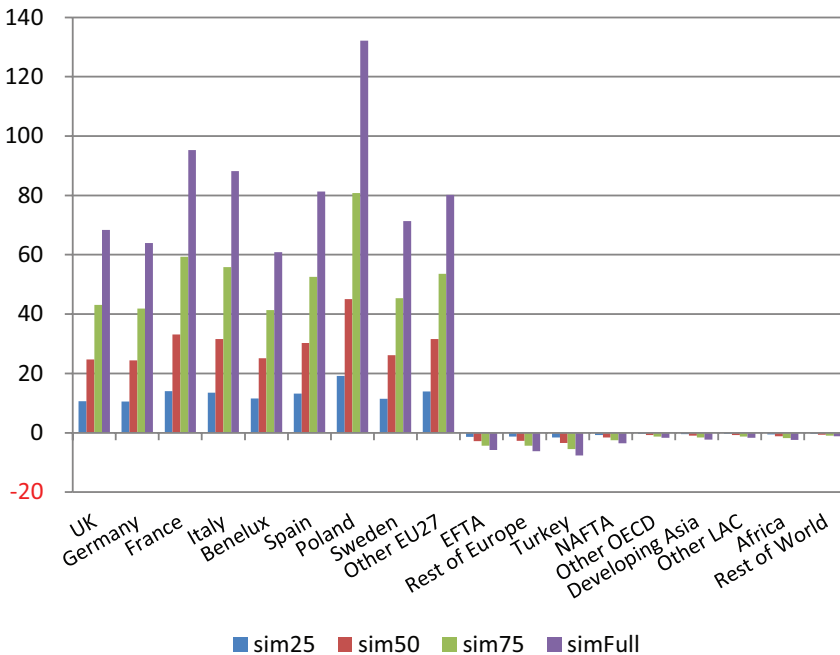
	Sim25	Sim50	Sim75	Full
European Union	440	1,006	1,744	2,721

13. Unsurprisingly, the larger the ambition of integration efforts, the larger the impacts in terms of income, as both Figure 2 and Table 1 display. However, we can observe that this effect is not linear: income and GDP effects are more than proportional to the magnitude of the cut in ad valorem equivalents of non-trade barriers. This phenomenon is due to the fact that the magnitude of shocks is very significant. However, there is a clear relationship between the size of the shock and the magnitude of impacts on all variables.

Trade impacts

14. The main channel through which the EU economy is affected by further effort on economic integration efforts is through intra-EU trade.
15. Figure 3 presents the potential impact across the scenarios on total exports in 2025 in percentage terms, as compared to the baseline. All EU countries and regions increase their export volumes significantly. The modelling suggests that Poland in particular has considerably more to gain in terms of total exports compared to the largest EU countries or other EU27, with potential gains of 132.2% under full liberalisation. The next highest beneficiaries from further liberalisation are found to be France, Italy, Spain and other EU27. Impacts vary across countries, but the overarching conclusion is that countries for whom exports are more oriented towards the EU experience higher increases in exports in comparison to those that have a more diversified trading relationship. In the context of impacts on other regions or countries, close neighbours like EFTA, Turkey and Rest of Europe face stronger diversion effects than other regions.

Figure 3 Total exports as compared to the baseline, % difference, 2025

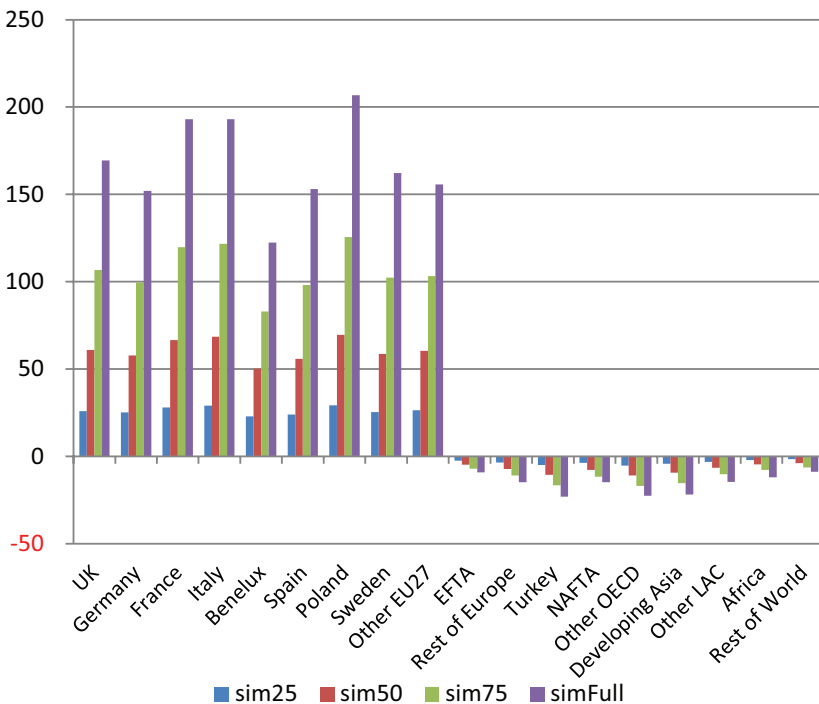


16. Exports to the EU vary even more in percentage terms, as shown in Figure 4 below. Exports to the EU when non-trade barriers are reduced by 25% from the baseline scenario increase the least in Spain at 24.0% and Germany at 25.2%, whilst at full liberalisation total exports increase the least for

Benelux at 122.4% and Germany at 152.0%. The greatest gains at full liberalisation are achieved by Poland at 206.7%, although France and Italy are not far behind. Under the 25% further liberalisation scenario, Poland also gains the most at 29.4% followed by Italy (29.2%) and France (28.1%)

17. Even though the shock is the same for all EU countries, the impacts on exports to the EU market still differ across countries in percentage terms. While sector specialisation explains part of these differences, the very high initial level of exports from Benelux also implies that this region will experience production capacity constraints that limit trade impacts in relative terms.
18. Overall, EU exports to the EU could expand by more than US\$6.9 trillion (in 2007 prices) in 2025, as compared to the baseline, while total exports from the EU to the world would increase by almost US\$5.8 trillion (in 2007 prices). As a consequence of trade diversion, total world trade expansion would be limited to US\$5.3 trillion (in 2007 prices).

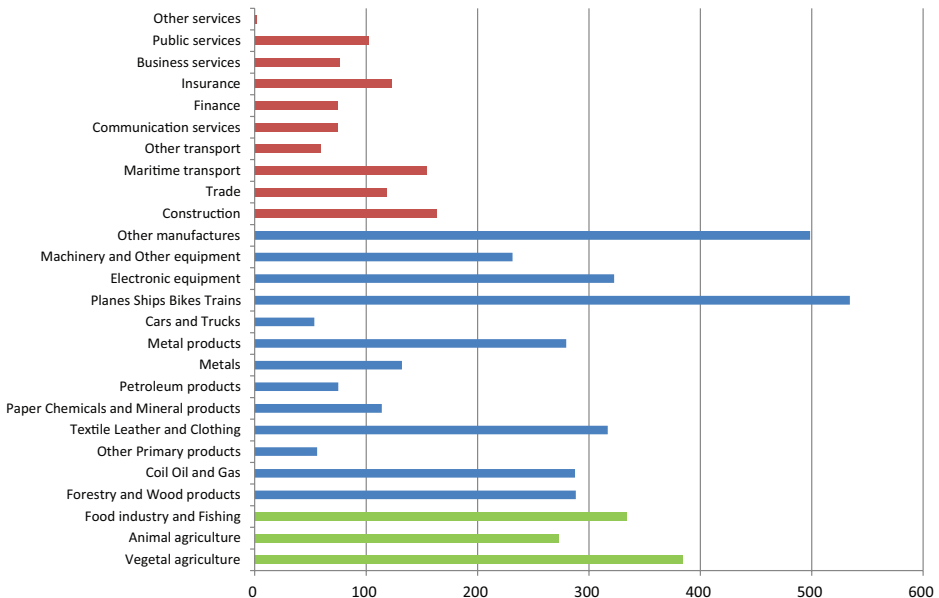
Figure 4 Total exports to the EU as compared to the baseline, % difference, 2025



Sectoral impacts

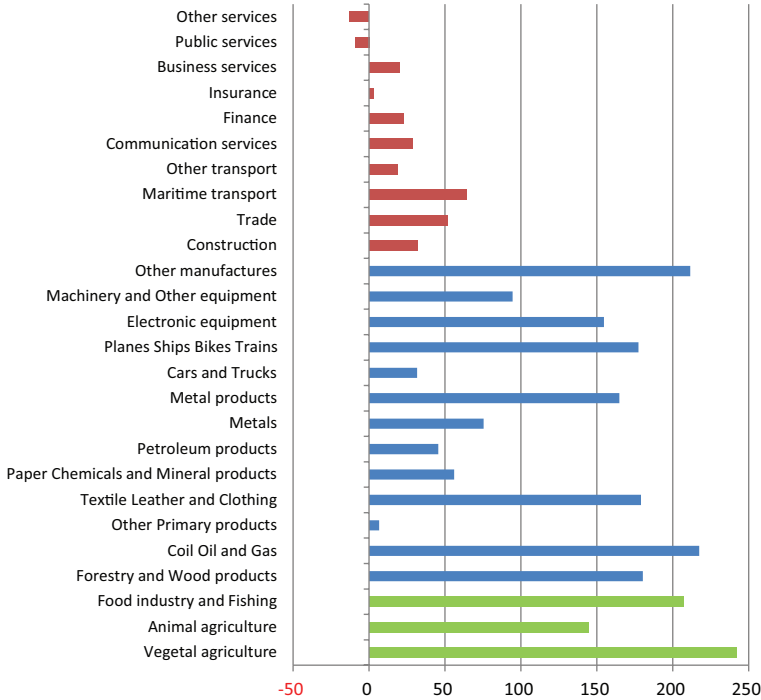
19. In order to understand the impact of the elimination of trade barriers within the EU better, we first examine impacts on intra-EU trade. They are presented in Figure 5. The very small impact on “Other services” (water, electricity and gas distribution; tourism and other activities) is due to the absence of data relative to trade costs for that sector. As explained above, the full liberalisation scenario should be considered as a potential upper bound rather than a realistic potential outcome. The figures below, therefore, should be considered in that context.
20. The potential impact under the full liberalisation scenario on intra-EU trade in different sectors is expected to be lowest in Cars and Trucks, Other Primary Products and Other transport. The greatest increase is experienced by the Planes, Ships, Bikes, Trains and Other Manufactures sector groupings.
21. At first sight, the relatively low impact on trade in services may be surprising, given that trade barriers are still significant in those sectors and the importance of services sectors in the industrial make-up of most EU Member States. However, there are some characteristics that are specific to services that drive this result, discussed further below.

Figure 5 Intra-EU trade as compared to the baseline, % difference, 2025, full liberalisation



22. To understand the underlying mechanism better, the impacts on exports to all markets is presented in Figure 6 under the full liberalisation scenario.

Figure 6 Total EU exports as compared to the baseline, % difference, 2025, full liberalisation



23. The main observation from this table is that impact on services exports has become smaller and sometimes negative when the world market is considered. This phenomenon is due to the low level of services trade as compared to trade of goods. In part this is driven by the fact that some service sectors activities do not lend themselves to cross-border trade. For example, public services (education, administration, health care) are often designed and delivered entirely at a local level. As such, as shown in Figure 6 above, the impact of further liberalisation on trade in these sectors is likely to be limited.

24. Further, services can be delivered across borders through mechanisms other than cross-border trade – for example, given that services provision may be more ‘local’ in nature (e.g. targeting advertising campaigns to suit local demand preferences), companies may choose to establish subsidiaries in the markets that they are interested in rather than export from their home nation.

25. Further, as goods have, to date, been granted a much easier access to other European countries, they attract financial resources (investment) and factors. While services exports grow to the rest of the EU as compared to the same year in the baseline, the modelling suggests that this may displace investment towards other sectors which reduces exports to the rest of the world. In the case of public services, this displacement is strong enough to let public services exports become negative overall. In the long run, lack of investment explains also why exports of services to the EU also increase less than exports in goods.
26. This should not lead to the conclusion that services sectors may suffer from further integration in the EU or that effort is best placed in tackling remaining barriers in other sectors. Further liberalisation through a reduction in trade costs is still expected to yield positive results – for example, value added in services still increases by 13% in 2025 as compared to the same year in the baseline in the most ambitious scenario. Furthermore, trade barriers in the “Other services” sector (water, electricity and gas distribution; tourism and other activities) were not considered but they do exist. Given that these services cover a number of key network industries, further liberalisation here may have a positive knock-on effect across other sectors.
27. It is also important to highlight that, while the charts above present the picture for the EU as a whole, individual Member States will experience wide-ranging impacts across sectors, depending on their industrial make-up. Some Member States may gain from one sector or group of sectors more than other Member States. For instance, the UK is expected to gain more in its services sectors than the EU as a whole in relative terms. This is because the UK services sector is already relatively advanced and can take full advantage of any further liberalisation. In particular, UK exports of Communications services will increase by 54.8% compared to the baseline under the full liberalisation scenario, while the increase will only be 28.9% for the whole EU. Exports of Finance and Business services will also expand more in the UK than for the whole EU in relative terms.

Conclusion

28. While tariffs have been removed within the EU and some harmonisation of standards has already taken place, there are still significant barriers to trade that prevent the region from being fully integrated. While some barriers related to numerous languages and cultural differences are difficult to overcome, the modelling suggests that further liberalisation through the reduction of trade costs between Member States could still lead to some improvements. The aim of this study was to estimate the potential benefit

of a series of scenario with different levels of ambition. While the potential benefits under the 'full liberalisation' scenario may be more of an ambition than a realistic outcome, lower levels of NTB reduction could still yield considerable benefits. For example, even the intermediate scenario, where barriers are reduced by 50%, could lead to an increase in EU GDP in 2025 of US\$1 trillion (in 2007 prices) in 2025, which corresponds to around 4.7% of EU GDP.

29. A detailed analysis shows that trade in goods would benefit more from further trade integration than trade in services. This is not to say that services will not benefit from further integration. There are considerable potential gains from liberalising the service sector as trade in services in the EU is currently relatively limited. Trade and value-added in services sectors would increase from further liberalisation.

Appendix

Modelling Strategy

30. The detailed specifications of the Mirage model have been described by Decreux and Valin (2007). We summarise some elements of the model below.
31. Mirage is a dynamic model of the world economy, specifically suited for the study of trade issues. The world economy is divided into regions and sectors; the aggregation of countries and activities is flexible within the limits of the main database used to calibrate the model: the GTAP 8 database (year 2007). Production functions describe how each sector makes use of factors and intermediate consumption to come up with a final good or service. Five factors are distinguished by the model: skilled and unskilled labour, capital, land, and natural resources. Markets for these factors have different behaviour. Capital is attached to its sector, but investment tends to favour sectors with the best return, so that accumulation and depreciation actually allow for some dynamic mobility of capital. Land can also be used for different economic activities, but it may be more adapted to some, so that mobility is characterized by some rigidity. Natural resources are entirely specific to a given sector: forests can be used to produce wood while an oil field will be used by the energy sector.
32. Finally, both labour categories are supposed perfectly mobile across sectors. This assumption may seem surprising as a specialist in one sector will probably be much less useful if employed in a different one. Actually, this choice is based on the fact that the labour force is renewed

regularly through entrance and exit in and out of the labour market, as a consequence of ageing. More than 2% of the labour force is replaced every year, while sector reallocations of labour due to policy changes are of significantly smaller magnitude. It does not mean that this allocation is perfect, but policy scenarios will not be the cause of possible difficulties in the matching process.

33. Dynamics is modelled as a succession of static equilibriums, based on the evolution of economic and demographic variables. Total population and labour force projections come from ILO, while capital is accumulated endogenously as a consequence of projected evolution of saving rates computed by Fouré, Bénassy-Quéré and Fontagné (2012) at country level. Production efficiency evolves in order to match with GDP projections computed by the same authors in their “baseline 2.1” database, accessible from the CEPII website.
34. The world is divided into 18 regions, comprising 9 countries or regions within the EU, and 26 sectors.
35. The numeraire of the model is the world GDP deflator. In other words, we assume that there is no inflation at world level, but real exchange rate variations may lead to some relative price changes between regions. In simulation analysis, all results will be presented either in percentages or in US\$ billions of 2007.

Trade costs

36. Trade costs are a key element in these simulations. Ad valorem equivalent of trade costs come from different sources. Kee, Nicita and Olarreaga (2009) have computed ad valorem equivalents of non-tariff barriers at product level for 78 countries and a large number of products at the HS6 level. However, the partner dimension is absent from this estimation. Assuming that European countries exporting to other European countries face the same difficulties as external countries would not reflect the progress that has been achieved in twenty years. To differentiate between exporting countries that are part of the EU from other exporters, we rely on borders effects estimates by de Sousa, Mayer and Zignago (2012). We assume that Kee, Nicita and Olarreaga estimates correspond to the aggregate level of protection of European countries, but protection is actually higher for external countries and lower within the EU.
37. Barriers to trade in services ad valorem equivalents come from Fontagné, Guillin and Mitaritonna (2011). Note that no data is available for “Other services” (gas, electricity and water distribution; tourism and other leisure activities).

38. In the model, trade costs are represented as an iceberg cost that comes in addition to transport cost.

Sources

Social accounting matrices, elasticities

39. GTAP 8 Data Base Final Release Candidate 2 (February 2012) provides with detailed social accounting matrices for the world in 2007. This database also contains tariff and trade substitution elasticity data.
40. Final demand revenue and substitution elasticities are based on USITC estimates and Mirage authors' computation.

Dynamic data

41. Total population and active population projections come from ILO. GDP projections come from the CEPII Baseline database (2012).

Non-tariff barriers (NTBs) ad valorem equivalents

Goods

42. Kee H., Nicita A. and Olarreaga M. (2009), Estimating Trade Restrictiveness Indices, *Economic Journal*, 119 (534), pp. 172-199.
43. They provide with ad valorem equivalents of obstacles to trade at the HS6 level.
44. In the case of the EU, we used border effects estimates by de Sousa J., Mayer T. and Zignago S. (2012), *Regional Science and Urban Economics* (to be published) to differentiate between intra-EU and extra-EU NTBs applied by EU markets. This is important as some convergence in norms and regulation within the EU has already occurred.

Services

45. Fontagné L., Guillin A. and Mitaritonna C. (2011), Estimations of Tariff Equivalents for the Services Sector, CEPII Working Paper 2011-24.

Aggregation

Regions

r01 UK		EU27
r02 Germany		
r03 France		
r04 Italy		
r05 Benelux		
r06 Spain		
r07 Poland		
r08 Sweden		
r09 Other EU27		
r10 EFTA		Other OECD
r12 Turkey		
r13 NAFTA		
r14 Other OECD		
r11 Rest of Europe		Developing
r15 Developing Asia	Includes Taiwan	
r16 Other LAC	Latin America and Caribbean (except Mexico)	
r17 Africa	Includes North Africa	
r18 Rest of World	Includes Middle East, Russian Federation, Western and Central Asia	

Sectors

s01 Vegetal agriculture		Agro-food
s02 Animal agriculture		
s03 Food industry and Fishing		
s05 Coil Oil and Gas		Primary
s06 Other Primary products	Minerals not elsewhere classified	
s04 Forestry and Wood products		Industry
s07 Textile Leather and Clothing		
s08 Paper Chemicals and Mineral products		
s09 Petroleum products		
s10 Metals		
s11 Metal products		
s12 Cars and Trucks		
s13 Planes Ships Bikes Trains		
s14 Electronic equipment		
s15 Machinery and Other equipment		
s16 Other manufactures		
s17 Construction		Services
s18 Trade		
s19 Maritime transport		
s20 Other transport		
s21 Communication services		
s22 Finance		
s23 Insurance		
s24 Business services		
s25 Public services		
s26 Other services		

The Single European Market is now twenty years old and has evolved to become the most economically integrated trading bloc in the world. It provides UK and European businesses with access to a market of around 500 million people, worth around £11 trillion in 2011. Considerable progress has been made in reducing barriers to cross-border trade, however, barriers remain and there is some way to go reduce to fully complete the single market.

This eBook draws together available evidence from HM Government and independent experts about the impact of the Single Market to date. And it identifies the areas for focus going forward. The first of the papers looks at the achievements of the Single Market over its first twenty years; the second examines those barriers to trade that remain between Member States and the potential for further gains from removing them. In doing so it suggests the areas of focus for further action. The rest of the papers examine a range of particular issues in depth - the role of the Internet Economy in the Single Market; the role of the labour market with the Single Market; and an examination of productivity in the services sector of the European Union with a view to where progress might be possible. One of the papers provides a perspective from business on what is required to make the Single Market work better for businesses. The final paper presents results from recent modelling work on the potential benefits from completing the Single Market.

This collection of papers is intended to highlight some of the benefits that have been achieved over the last twenty years and, more importantly, highlight where there is still work to be done and where effort should be focussed over the coming years.