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# Trade and Employment

THE CASE OF DENMARK AND SPAIN

Elena Arnal

JEL Classification: F16

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## **Abstract**

### **TRADE AND EMPLOYMENT: THE CASE OF DENMARK AND SPAIN**

*by*

Elena Arnal, OECD

Spain and Denmark are two European countries differing considerably in their development and productive structures as well as in their internationalisation process. This affects many dimensions of each economy, most notably their trade volumes, market sizes and product specialization. Spain and Denmark also differ significantly in labour market outcomes as well as in the design of labour market policies and institutions and the role they played in facilitating labour reallocation. For these reasons, it is instructive to compare them, in particular as they have demonstrated substantial labour market adjustments due to changing international economic conditions. While the results of direct comparisons cannot always be translated into policy action due to country-specific institutional settings and varying economic circumstances, comparative analysis has the potential to yield useful insights into best practices and transferrable policy lessons. With this in mind, the purpose of this paper is to consider the evolution of trade and labour market outcomes in Denmark and Spain since the early 1990s, in order to provide policy-relevant insights on the relationship between production, trade and labour markets in these countries. Special focus is given to the increased weight of some emerging economies in world trade patterns and how they have affected the trade patterns of these two European countries and their employment behaviours.

***JEL classification:*** F16 (Trade and labour market interactions)

***Keywords:*** Trade, employment, wages, inclusive growth.

## *Acknowledgements*

The OECD-led **International Collaborative Initiative on Trade and Employment (ICITE)** has brought together ten international organisations in an effort to deepen our understanding of the linkages between trade and jobs and to develop policy-relevant conclusions. ICITE is mobilising resources world-wide in an extensive programme of research, dialogue and communications. Participating organisations include: ADB, AfDB, ECLAC, IADB, ILO, OAS, OECD, UNCTAD, World Bank and WTO. The OECD is publishing this series of Trade Policy Working Papers drawing on the ICITE research programme.

The ICITE project is being implemented under the auspices of a team at OECD. Douglas Lippoldt is the project manager and Secretary to ICITE. In relation to the ICITE working papers, Ania Jankowska and Monika Sztajerowska provided analytical, editorial and other substantive inputs, and Katjusha Boffa and Jacqueline Maher provided secretarial and administrative support. The OECD ICITE team is based in the Development Division, headed by Michael Plummer, and under the direction of Raed Safadi, OECD Deputy Director for Trade and Agriculture, and Ken Ash, OECD Director for Trade and Agriculture.

The OECD ICITE team gratefully acknowledges the quality of the submissions received from the working paper authors. The papers have benefitted from comments and other support from ICITE partner organisations (especially members of the ICITE Steering Committee), the Working Party of the OECD Trade Committee and other national experts, participants at the three ICITE regional conferences held during 2011 in Africa, Asia and Latin America, and other parts of the OECD (especially the Directorate for Employment, Labour and Social Affairs). Their contributions helped the authors and the OECD to further develop these papers and other aspects of the ICITE project.

This paper has been developed as an input to the ICITE project. The views expressed are those of the author(s) and do not necessarily reflect those of the OECD, OECD member country governments or partners of the ICITE initiative.

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## Executive Summary

Spain and Denmark are two European countries differing considerably in their development and productive structures as well as in their internationalisation process. This affects many dimensions of each economy, most notably their trade volumes, market sizes and product specialization. Spain and Denmark also differ significantly in labour market outcomes as well as in the design of labour market policies and institutions and the role they played in facilitating labour reallocation. For these reasons, it is instructive to compare them, in particular as they have demonstrated substantial labour market adjustments due to changing international economic conditions.

During the past decade, labour adjustment has been characterised in Denmark by the “flexicurity” model – the combination of labour market flexibility, measured by a high level of job mobility and low level of employment protection legislation, and high levels of social protection for workers. In Spain, on the other hand, labour adjustment to declines and increases in output have mainly occurred via a reduction or growth of employment, facilitated by the generalised use of temporary contracts.

The purpose of this paper is to consider the evolution of trade and labour market outcomes in these two countries since the early 1990s, in order to provide further insights on the relationship between production, trade and labour markets in these countries. Special focus will be given to the increased weight of some emerging economies in world trade patterns and how they have affected the trade patterns of these two European countries and their employment behaviours.

There are several general trends that emerge from the study. For instance, the Danish example demonstrates that greater trade openness — including increased trade with non-EU economies — does not necessarily have adverse effects on employment. In fact, Denmark’s employment rates remain impressively high during the period under consideration here, and even such cost-minimising strategies as offshoring and outsourcing were found to have overall positive impact on Danish employment due to the off-setting productivity gains they unleashed. The necessary backdrop against which such outcomes could have been observed are, besides the productive structure, a highly educated and mobile work force, as well as effective labour market policies that combine security and flexibility.

The comparison between the two countries further demonstrates that the concept of labour market rigidities should be considered carefully. Despite generous unemployment benefits as well as high trade union density in Denmark, the work force is mobile and firms are able to adjust to economic fluctuations through their labour costs. In Spain, on the other hand, despite the fact that about 25% of all workers have been hired on temporary contracts, a percentage that is more than double the OECD average, mobility and flexibility has been lacking. It was hampered by, among others, strictness of employment protection legislation and lower level of education and training. Moreover,

the duality of the labour market, albeit unsuccessful in making the workforce more flexible as a whole, has exacerbated the fluctuations in unemployment that are already volatile due to Spain's specialisation patterns and labour force endowment. However, this situation may be evolving in response to recent policy developments.

Over the past decade, both Spain and Denmark have implemented far-reaching reforms, leading to flexibilisation of their labour- and product markets. In light of the recent crisis, it appears that there is still space for further mutual learning and exchange of best-practices in order to exploit opportunities offered by globalisation, while minimising its possible negative short-term employment effects.



## 1. Introduction<sup>1</sup>

The direct relationship between trade and employment is complex. Trade creates efficiency and dynamism in the economy, increases productivity in some sectors and adjustments or restructuring in terms of employment in others (see OCDE *et al.*, 2010, for a review). Although evidence is not conclusive on the scope of the links between trade and employment, an increase in world trade volumes and the progressive integration of emerging economies in world trade has increased global labour supply, which is not without consequence to more developed labour markets.<sup>2</sup> Increased globalisation has resulted in an increasingly interconnected global economy, in which what happens in other parts of the world may have an impact on employment, wages and working conditions of workers in individual developed countries too. This impact can be temporary (or not), can be reabsorbed in the medium to long term (or not) and can vary in intensity depending on the specific production conditions and on the institutional settings in each of the individual countries.

Spain and Denmark are two European countries differing considerably in their development and productive structures as well as in their internationalisation process. This affects many dimensions of each economy, most notably their trade volumes, market sizes and product specialization. Spain and Denmark also differ significantly in labour market outcomes as well as in the design of labour market policies and institutions and the role they played in facilitating labour reallocation.<sup>3</sup> For these reasons, it is interesting to compare them, in particular as they have demonstrated substantial labour market adjustments due to changing international economic conditions.

During the past decade, labour adjustment has been characterised in Denmark by the combination of labour market flexibility, measured by a high level of job mobility and low level of employment protection legislation, and high levels of social protection for workers. This combination of both flexibility and security has been commonly referred to as “flexicurity” model. In Spain, on the other hand, labour adjustments to declines and increases in output have mainly occurred via a reduction or growth of employment, facilitated by the generalised use of temporary contracts.<sup>4</sup>

The purpose of this paper is to consider the evolution of trade and labour market outcomes in these two countries since the early 1990s, in order to highlight the issues related to the labour market adjustment derived from the observed trends in trade. Special focus will be given to the increased weight of some emerging economies in world trade patterns and how they have affected the trade patterns of these two European countries and their employment behaviours.

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1. Dana Blumin (ELS/EAP) provided very capable statistical assistance for the preparation of this paper, which is gratefully acknowledged.
  2. Freeman (2005) estimates that the entry of China in the WTO alone has increased global labour supply by an amount equivalent to about a third of the OECD labour force.
  3. Among OECD countries, Denmark is characterised as having an extended welfare state with a well developed social safety net and a high level of tax-financed public service provisions, with labour market policies and institutions being an integral part of that welfare state.
  4. As stated by Sala and Silva (2009), the Spanish labour market is a prominent case of segmentation with flexibility at the margin, which produces a gap in separation costs between permanent and temporary contracts with the later being the main workforce adjustment device.

The paper is organised as follows: Section 1 discusses the importance of trade for each country, its composition by main trade partners, sectors of activity and product specialisation. Section 2 compares the recent evolution of the labour market in the two countries, tracing the reasons for divergent market outcomes. Section 3 outlines the main labour market policies and institutional settings that facilitate labour adjustments in both countries. Section 4 concludes.

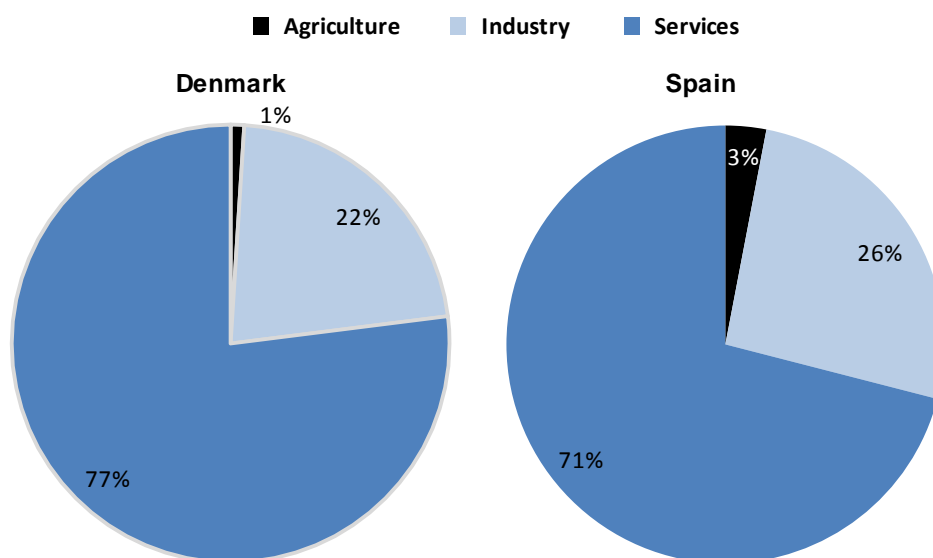
## 2. Liberalization, trade performance and specialization patterns since 1990 in Spain and Denmark

### *Trade performance and trade liberalisation*

Both Denmark and Spain are high-income OECD countries with similar economic structure (Figure 1). In 2009, while Spain's population is around eight times bigger than that of Denmark, its economy is about five times bigger and its exports only two times bigger (both expressed in current USD) (Table 1).

Denmark is a net exporter of goods and services. Spain, on the other hand, is a net importer and this process has accelerated in recent years, leading to a considerable deterioration of Spain's trade deficit in terms of GDP (Figure 2).

**Figure 1. Structure of the economy – value added (% of GDP), 2009**



Source: World Bank (2011), World Development Indicators.

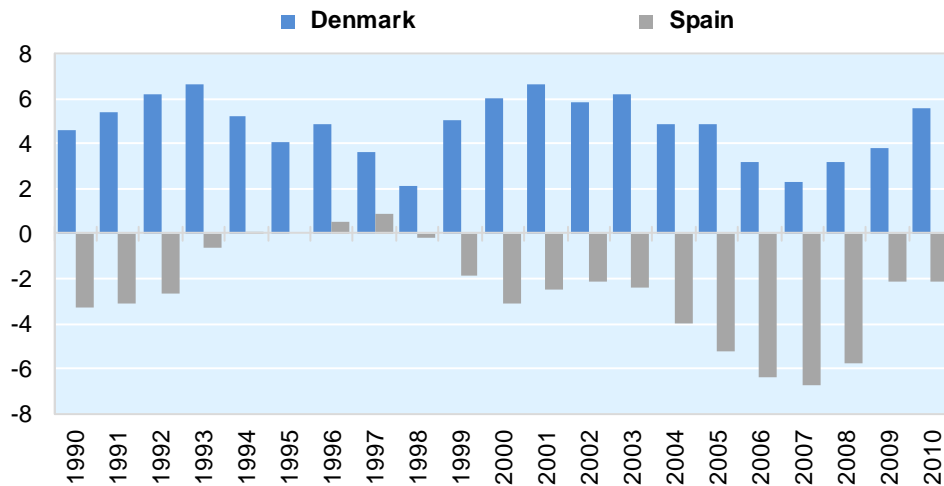
**Table 1. Comparison of the size of population, GDP (current USD) and exports of goods and services, 2009**

Indicator name	Denmark	Spain	Ratio
Population, total	5.53 mln	45.96 mln	8.3
GDP (current USD)	USD 309.6 bln	USD 1.46 tr	4.7
Exports of goods and services (current USD)	USD 147.89 bln	USD 342.25 bln	2.3

Source: World Bank (2011), *World Development Indicators*.

**Figure 2. Trade balance in Denmark and Spain, 1990-2010**

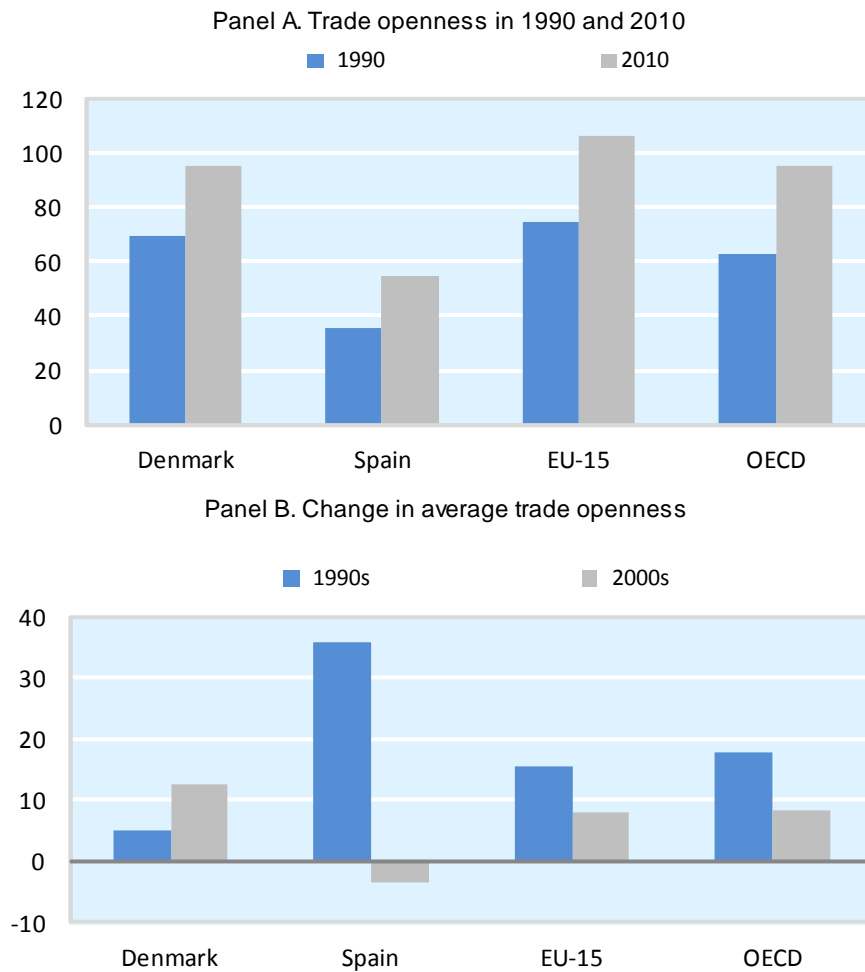
As a percentage of GDP



Source: OECD Trade Statistics.

Trade openness, as shown by the trade-to-GDP ratio in Figure 3, is higher in Denmark and represents 95% of GDP in 2010, compared to 55% in Spain. This is a significant difference in trade openness of countries with similar level of development and income.

Although trade openness in both countries was lower than the previous year due to the impact of the economic crisis, it is still markedly higher (by almost 30%) than in 1990, which reflects a general trend towards greater openness of the European economies. While trade openness has increased further throughout the 2000s in Denmark, this has not been the case in Spain. There the trade-to-GDP ratio after increasing significantly in the second half of the 1990s, compared to the first half, remained quite stable thereafter to drop considerably in 2008. The fact that during the past decade the economic activity has been fuelled to a large extent by the construction sector, a non-tradable sector, can explain that trend.

**Figure 3. Trade openness<sup>a</sup> in Denmark and Spain, 1990-2010**

a. Trade openness is defined as the ratio of trade to GDP. Change in trade openness for the 1990s is calculated by taking the change in the average of trade openness for the periods 1990-1994 and 1995-1999, and for the 2000s by taking the change in the average of trade openness between the periods 2000-2004 and 2005-2009.

Source: OECD Trade Statistics.

Looking at the requirements related to country's imports and exports as well as general level of business of friendliness and product market regulation may provide some insights for varying levels of trade openness in both countries (Table 2). While Denmark is ranked 6<sup>th</sup> top global performer in terms of business-friendliness of its trade-related regulation, Spain has 49<sup>th</sup> position (World Bank, 2010, *Doing Business Report*).

Table 2. Comparison of regulation affecting cross-border trade

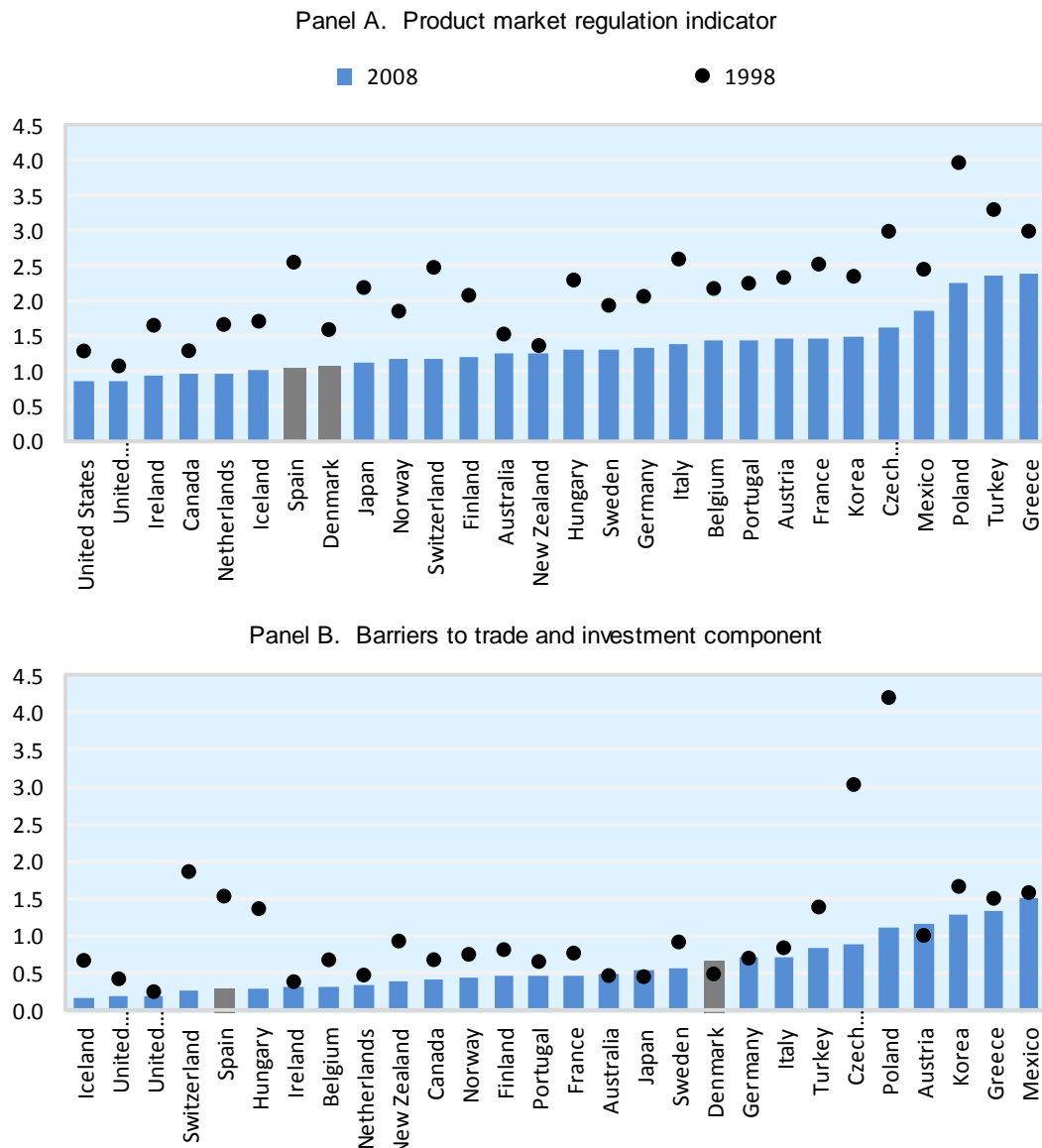
Indicator name	Denmark	Spain	OECD high income
Cost to export (USD per container)	744	1 221	1 059
Cost to import (USD per container)			1 106
Documents to export (number)	4	6	4
Documents to import (number)	3	7	5
Time to export (days)	5	9	11
Time to import (days)	5	10	11
Ease of doing business index (1=most business-friendly regulations)	6	49	-

Source: *Doing Business Report*, World Bank 2010.

All OECD countries have liberalised considerably their product markets between 1998 and 2008, as indicated by the fall of the OECD product market regulation indicators (Figure 4).<sup>5</sup> Among EU countries, Spain undertook substantial reforms, as shown by the significant drops in the percentages of both the total product market regulation indicator and the components that focus on trade barriers and investment in Figure 5.<sup>6</sup> As a result Spain, together with Denmark, is now among the top ten OECD economies in terms of making product market regulations competition-friendly. As pointed out by OECD (2010a), reforms in Spain have been widespread across the economy as demonstrated by: i) the reduction of state control in selected sectors of the economy (e.g. liberalisation of the gas, electricity and telecommunications markets in the past decade; increased competition in air and road transport, etc.); ii) the reduction of domestic barriers to entrepreneurship and the reduction of barriers to trade and foreign direct investment (e.g. lifting barriers to foreign ownership by lowering the limits to foreign acquisitions of shares in publicly-owned firms).

Therefore, despite a traditional leading position of Nordic countries in creating competition-friendly product regulations, Spain has made significant progress emerging as one of the leaders. Competition in many service sectors is, however, still hampered by the product market regulations across Europe, which explains why only a quarter of cross-border trade in the European Union is in services (OECD, 2009a). In Denmark and Spain, the shares of services in total trade are low compared to their economic weight, as presented earlier in Figure 1. In 2008, trade in services represented only one third of total trade in Denmark, even if services account for around 75% in terms of GDP and employment. In Spain, services represent one fourth of total trade and less than 70% in terms of GDP and employment.

5. The OECD Indicators of Product Market Regulation (PMR) are a comprehensive and internationally-comparable set of indicators that measure the degree to which policies promote or inhibit competition in areas of the product market where competition is viable. The indicators cover formal regulations in the following areas: state control of business enterprises; legal and administrative barriers to entrepreneurship; barriers to international trade and investment.
6. However, some caution has to be made regarding the OECD PMR indicator as it does not capture well all regulations set in place by the regions. In Spain, regional regulation can sometimes be more restrictive than what the average and aggregated picture may suggest (i.e. retail regulation).

**Figure 4. Product market regulation<sup>a</sup> and barriers to trade in OECD countries, 1998 and 2008**

a. The OECD product market regulation indicators vary between 0 and 6, with 6 being the more regulated situation.

Source: OECD Indicators of Product Market Regulation.

Many services are by definition non-tradable and this explains part of the low proportion of services' in total trade. But trade barriers play also an important role in that respect. For example, the EU Commission has estimated that for the EU-25, tariff equivalents of services barriers are generally above 20%, varying from 35% in construction to 18% in transportation services (European Commission, 2010b). Although the single market in goods has been reasonably completed, further improvements are needed to achieve a well-functioning single market in the service sector. Most EU countries have made progress in transposing the EU Services Directive (Directive 2006/123/EC of 27 December 2006), which aims to break down barriers to cross border trade in services between the EU Member States and whose deadline expired in

December 2009<sup>7</sup>, but there are several areas that could be improved further (e.g. public procurement rules).<sup>8</sup>

### *Trade by partner country*

For both Denmark and Spain, trade policy is determined at the European Union level and the European Union countries are their main trading partners, both for exports and imports. Since 1990, several structural changes – like the consolidation of the Single European Market (SEM) in the early 1990s, the introduction of the Euro in 2002 and the progressive enlargement to include Central and Eastern European countries – have had an impact on both countries trade patterns.

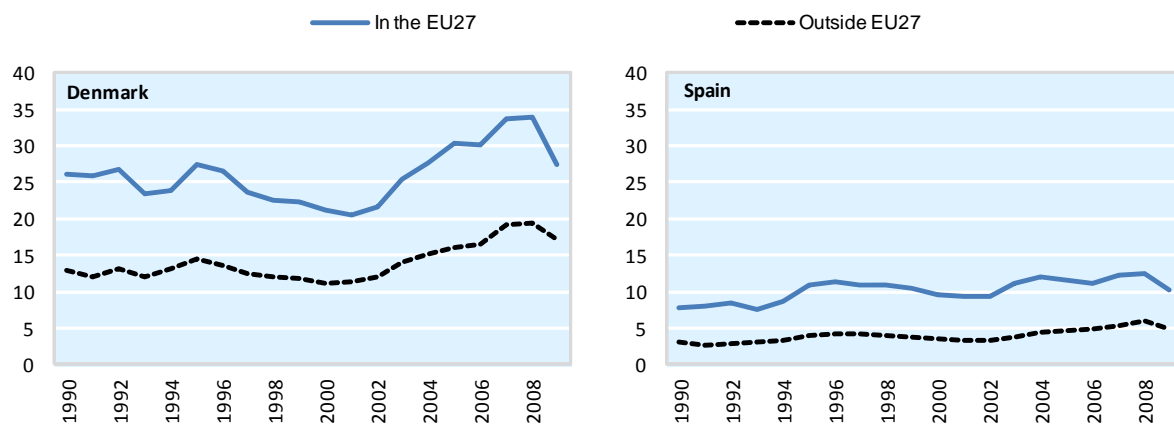
In terms of the level of trade integration with the European Union, defined as the exports of goods to the EU-27 as a percentage of GDP, Denmark is more trade integrated with the European Union than Spain (Figure 5). Moreover, it has experienced a faster integration in the past decade. The reduction of the exchange rate uncertainty due to the introduction of the Euro, more transparency and cost-price comparability as well as better access to other national markets have had a positive impact on exports in most EU countries (Cafiso, 2008).<sup>9</sup> Although, not having adopted the Euro, this has also favoured Denmark's faster trade integration with EU-27 than with the rest of the world after 2001.

When we look at all the main trade partners of Denmark and Spain (Figure 6), it can be noted that although most trade is with the European Union countries, the proportions have changed somewhat over time. For Spain the imports from EU27 fell from 68.9% in 1999 to 55.4% in 2008, while in Denmark this share decreased by a smaller amount from 75.8% in 1999 to 71.1% in 2009. Analogously, the share of Spanish exports going to EU27 fell from 75.4% in 1999 to 69.1% in 2008 and the share of Danish exports from 68.3% in 1999 to 62.6% in 2009. The share of the EU member states has decreased in the last decade in both countries and has been replaced by an increasing share of emerging economies. In particular, imports from the BRIICS (Brazil, Russian Federation, India, Indonesia, China and South Africa) have increased considerably, doubling their shares in both countries in the past decade, to reach 13% in Spain and 9% in Denmark in 2009 (Figure 6).

- 
7. Denmark and Spain are among the 20 EU countries that by 2010 had adopted horizontal legislation to transpose the Services Directive and have indicated to the Commission the completion of changes in sector-specific legislation.
  8. The full text of the Directive and further information on its implementation are available here: [ec.europa.eu/internal\\_market/services/services-dir/proposal\\_en.htm](http://ec.europa.eu/internal_market/services/services-dir/proposal_en.htm).
  9. There is some consensus that the single currency impact on trade flows has been however modest at EU level. For example, Baldwin (2006) estimates that the impact of the Euro on trade flows has been around 2% to 5%. On a sample of Danish exporting firms, Eriksson *et al.* (2009) do not find much impact of the adoption of the euro nor of the single market on exports' performance, but here are some signs of a positive impact on the number of export products and the export destination countries.

**Figure 5. Trade integration inside and outside the EU27<sup>a</sup>**

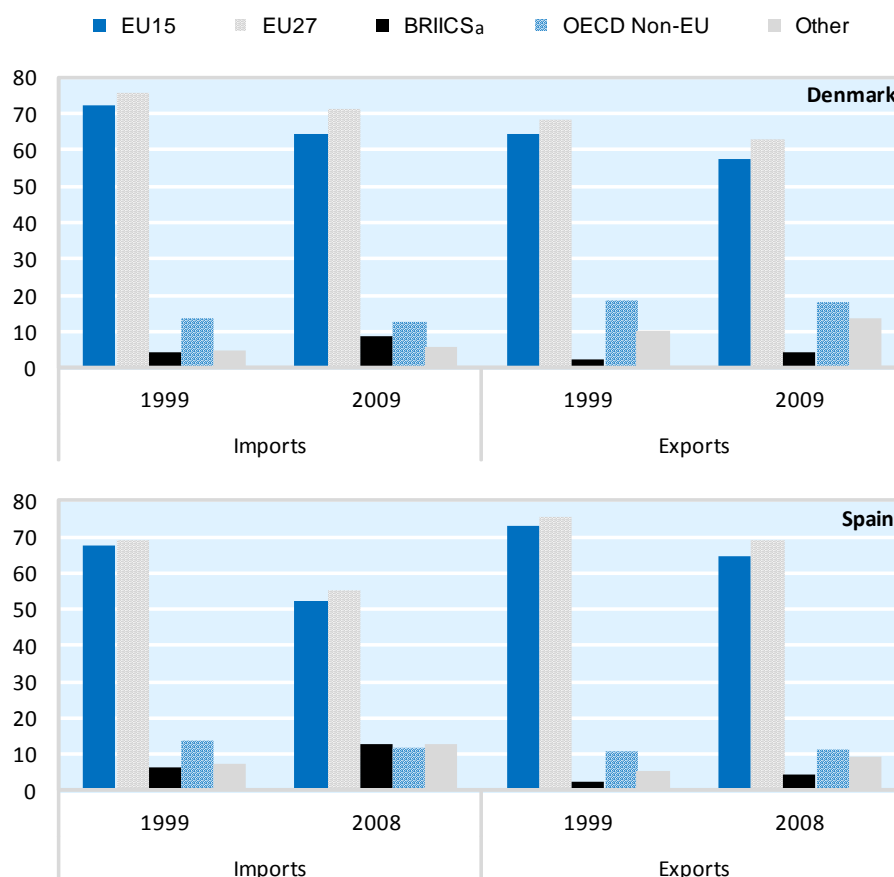
As a percentage of GDP



a. Trade integration in the EU27 is measured as the ratio of exports of goods to other EU countries as a percentage of GDP. Trade integration outside the EU27 is measured as the ratio of exports of goods to the World less the EU27, as a percentage of GDP.

Source: OECD STAN Database.

**Figure 6. Danish and Spanish trade shares by main partner groups, 1999-2009**



a. BRICS includes Brazil, China, India, Indonesia, Russian Federation and South Africa.

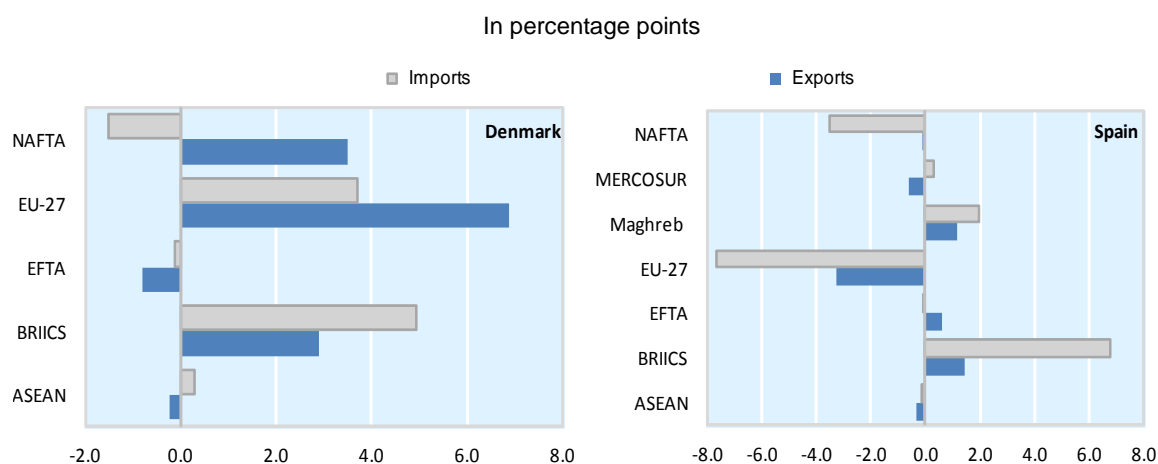
Source: OECD Trade Statistics.



Exports to BRIICS have also increased, but starting from a low level in 1999, they still remain far below the exports to other OECD non-EU countries. Since 1995, besides increasing trade with the BRIICS, Spain has also experienced a significant increase in the share of its total imports from and exports to the Maghreb region (Figure 7), largely to the detriment of the EU-27 and NAFTA countries (the figures are, however, particularly negatively affected by the economic crisis of 2008). In most OECD countries since 1980, growth in import intensity from developing countries contributed to less than a quarter of total increase in merchandise imports, although the extent of the OECD-developing world integration has been much stronger in non-EU countries.<sup>10</sup>

It is noteworthy that the country of origin of imports impacts the demand for skilled and unskilled labour in a particular country (apart from the sector of activity). For example, Rosholm *et al.* (2007), found that it is crucial to distinguish imports by country of origin, with trade from low-wage countries leading to a skill upgrading in Danish manufacturing firms, whereas import penetration from high-wage countries tend to lead to skill-downgrading. This result suggests that Danish manufacturing firms have a comparative advantage in skill-intensive production when compared to low-wage countries, but in unskilled-intensive production when compared to high wage countries.

**Figure 7. Change in the Danish and Spanish trade shares by main groups of countries, 1995-2009**



Source: UNCTAD Database.

10. UNCTAD data permit disaggregating the group of developing countries into two income levels (i.e. high-income and middle- to low-income countries) in order to see how much of the increase in imports in Denmark and Spain over this period may be attributed to trade with emerging economies by income level. As shown in Figure A.1 in the Annex, between 1995 and 2009, more than two thirds of the change in import intensity observed in Denmark and Spain is due to trade with middle- and low-income countries, a group of countries that includes China and India. In Spain, this is also the case for export propensity, but less so for Denmark.

### *Specialisation patterns*

Looking at the composition of exports and imports and their specialisation patterns, some differences can be observed between the two countries. The index of revealed comparative advantage (RCA) for the manufacturing sector (Figure 8) shows that relative to the OECD average, Denmark tends to specialise its exports in such industries as food, beverages and tobacco; textiles; manufacturing and recycling; other non-metallic minerals, and in the wood and cork industry. In the past decade it has also improved its comparative advantage in textiles and the other non-metallic industry. Spain tends to specialise also in other non-metallic minerals; food, beverages and tobacco, and textiles. Contrary to Denmark, however, Spain has a considerable comparative advantage in the transport equipment industry, although it has slightly decreased in the past decade due to delocalisation of parts of the production process to the new EU Eastern countries.

Regarding trade in services, Denmark is mainly specialised in transportation services whereas Spain is more specialised in tourism related services as well as in the construction services, fuelled in the past decade by the booming of the housing sector (Figure 8). However, in comparison to other high-income countries, Spain has also experienced a recent expansion of non-tourism service exports which have contributed to the relatively favourable market shares of Spanish exporters.<sup>11</sup>

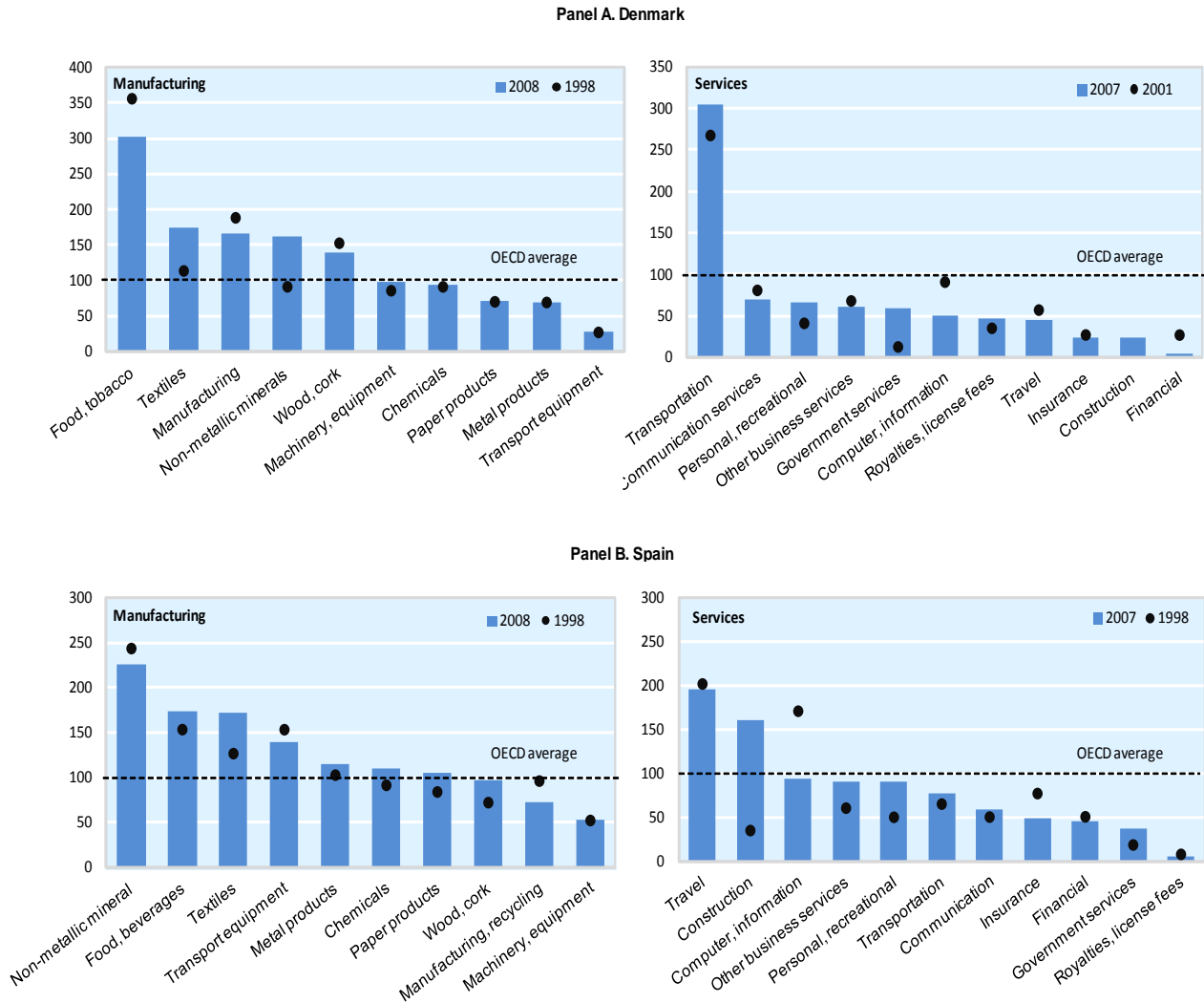
Finally, it is worth noting that improvements in export specialisation in a specific sector have not always been accompanied by an increase in labour productivity. When comparing the change in labour productivity and the change in export specialisation since 2000 in the manufacturing industry (Figure 9.), no clear pattern is observed in Denmark. Although in general an increase in export specialisation is associated with zero or positive impact on labour productivity, the textiles sector is an exception and experienced a drastic fall in labour productivity. On the contrary, in Spain, higher labour productivity has been accompanied by an increase in export specialisation only in textiles, machinery and equipment and wood sectors.

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11. As shown in OECD (2010a), the market share of exporters relates to the export performance index calculated as the ratio between export volumes and export markets for total goods and services. The calculation of export markets is based on a weighted average of import volumes in each country's markets, with weights based on trade flows in 2005.

**Figure 8. Export specialisation in the manufacturing and the service sector relative to the OECD average<sup>a</sup>**

In 1998b and latest year available



a. Export specialisation indicator (also known as the Index of revealed comparative advantage or RCA) shows a country's exports for an industry/service relative to total industries/services' exports, divided by OECD exports of the same industry/service relative to OECD total industries/services' exports. A value above 100 in a certain industry or service implies that, relative to the OECD average, the country tends to specialise in exports in that given industry/service sector.

b. Data refer to 2001 for the service sector in Denmark.

Source: OECD STAN database.

Figure 9. Labour productivity and export specialisation in the manufacturing industry, 2000-08



Source: OECD STAN Database.

### ***Responding to trade liberalisation through outsourcing***

Trade liberalization has generated a change in the structure of production, with increased trade not only in final goods, but also in intermediate goods.<sup>12</sup> Lower transportation costs and technological change, particularly ICTs developments, have made it possible to change the way work is performed increasing the “divisibility” of the production process. This has permitted firms to source, outsource or offshore some of their tasks or activities to remote regions, resulting in a profound change in the way goods are produced.<sup>13</sup>

This international division of labour is seen today not only between industries but also within each manufacturing industry, and even more, within business services. Manufacturing production is often determined by the availability and location of natural resources (exceptions can be found in Japan, Switzerland, and Singapore, among others), but this is less the case for services. Indeed, in OECD countries, data suggest that between 1995 and 2000 the growth of offshoring of business services was more widespread and grew faster than material offshoring (OECD, 2007).

Offshoring relates to the foreign content of production and can be measured using the ratio of imported intermediate goods and services to total output. Using the OECD Input-Output database, between 1995 and 2000 offshoring grew in 16 out of the 22 selected OECD countries, increasing by more than five percentage points in eight countries, among which, Denmark (Figure 10). Although the increase in Spain was less pronounced, it is also visible.

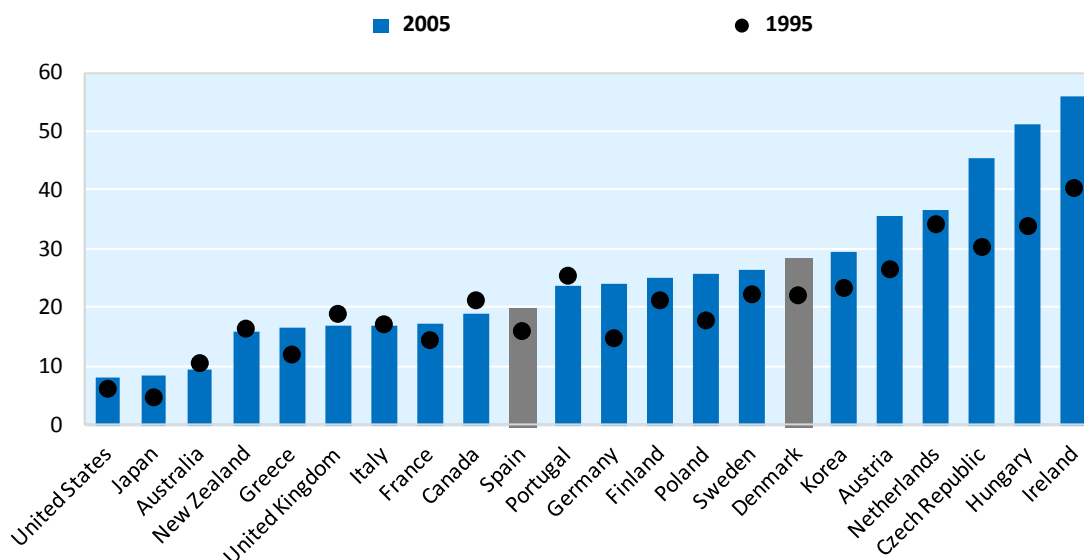
Firms take their offshoring decisions mainly to minimize costs. Grossman and Rossi-Hansberg (2008) analyse the offshoring process and show that offshoring may have a relative-price effect, but also a labour-supply effect and a productivity effect, with the later prevailing in small open economies.

Even if it may induce long-run productivity gains from costs savings and reallocation of workers to new firms and industries, in the short-term outsourcing can create individual employment losses and lower earnings. Indeed, outsourcing is often blamed for destroying jobs and increasing unemployment risk, although the empirical evidence supporting that view is mixed. For example, using a sample of 17 OECD countries including Denmark, Hijzen and Swaim (2007) found that offshoring has no effect (or a slight positive effect), on sectoral employment. Offshoring within the same industry (“intra-industry offshoring”) reduces the labour-intensity of production, but does not affect overall industry employment. By contrast, inter-industry offshoring does not affect labour-intensity, but may have a positive effect on overall industry employment. These findings suggest that the productivity gains from offshoring are sufficiently large that the jobs created by higher sales can completely offset the jobs lost by relocating certain production stages to foreign production sites.

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12. As shown in Miroudot *et al.* (2009), world trade flows are dominated by products that are not consumed but rather further used in production of other goods and services. In OECD countries, intermediate inputs represent 56% of goods trade and 73% of services trade, having grown at an annual average rate of 6% for goods and 7% for services in the past decade.
  13. Although some differences can be established between global sourcing, international outsourcing and offshoring (see Miroudot *et al.*, 2009 for a typology), in this paper these terms will be used indifferently.

**Figure 10. Share of imported intermediates to total value added in selected OECD countries, 1995-2005**

In percentage



Source: Calculations based on OECD STAN Input-Output Tables.

However, this does not necessarily mean that workers do not face adjustment difficulties. As shown in OECD (2007), intra-industry offshoring is associated with increasing skill demands suggesting that some workers that lose their job in the process may lack the necessary skills to be immediately reallocated to other jobs, and this is more pronounced for the less skilled workers.<sup>14</sup>

Using microdata on labour market transitions to follow individual workers from job-to-job or from job-to unemployment, Munch (2010) confirms that in Denmark, outsourcing is found to increase slightly unemployment risk, in particular of the low-skilled workers. This group of workers experience short-run welfare losses due to unemployment, but the quantitative impact is, however, modest. Munch (2010) also argues that the flexibility of the Danish labour market facilitates work transitions and that this will determine the outsourcing cost. The findings from Geishecker *et al.* (2007) are in the same vein. Comparing Denmark with Germany and the United Kingdom, Geishecker *et al.* (2007) found that in Denmark the impact of international outsourcing on wages is small, which is not the case in Germany and the United Kingdom. These cross-country differences are explained by the smoothing effects of the different types of labour market institutions in the three countries (in particular, the fact that in Denmark wages are quite rigid, employment protection is low and labour adjustment is done less through prices than through quantities). These results also confirm the findings from Amiti and Ekholm (2006) that institutions play an important role in explaining the extent to which employment reallocation is associated with temporary increases on unemployment.

14. Empirical evidence from the United States, the United Kingdom, and Germany suggests also that low-skilled workers are the losers from international outsourcing of production. See respectively, Feenstra and Hanson (1996), Hijzen, Gorg and Hine (2004) and Geishecker (2006).

Therefore, while offshoring is traditionally seen as a threat to employment, the case of Denmark confirms that it may have a positive effect on overall industry employment as the productivity gains are sufficiently large to offset the jobs losses due to relocation. Nevertheless the issue of labour adjustment should not be underappreciated and targeted policy interventions—in particular related to education and job matching—also play an important role, as demonstrated by the Danish case.

### 3. Labour markets in Denmark and Spain: Changes and adjustment policies

The patterns of trade globalisation in Denmark and Spain help to see through which channels trade affects domestic labour markets in these countries. The least-skilled workers are expected to be the most affected by the increased weight of emerging economies in world trade (mainly from China and India). This is because they face stronger competition from cheap labour and are less able to move into new jobs in other industries, unless the right adjustment measures are in place. The trade impact can be seen in terms of employment outcomes and wage dispersion and inequality.

Governments can help workers adapt to increased globalisation. Rather than seeing globalisation as a threat, governments can improve labour regulations and social protection systems to facilitate adaptation to changing job markets. This section explores the recent evolution in the labour market in the two countries and discusses briefly the main changes that have favoured that adaptation. This involves looking at the evolution of employment structure, unemployment and wage inequality, and pointing, whenever possible, to their links with trade, but also to the labour market policies and institutions in place in each country that can facilitate (or not) employment adjustments.

#### *Main labour market outcomes: employment, unemployment and wages*

Labour markets in Denmark and Spain are quite different from each other and have responded differently to external shocks in the past decades (OECD, 2010b). The Danish labour market is one of the most flexible in Europe, being praised in recent years for its combination of flexibility and security. The labour market in Spain, on the other hand, is characterised by a high structural unemployment level, with a very volatile reaction to the economic cycle and institutional rigidities that have favoured a growing segmentation of the labour market and the frequent use of temporary contracts. Compared to Spain, the Danish model has allowed companies to adjust employment according to market demands more easily, while at the same time ensuring that workers are quickly retrained and do not remain unemployed for long.

Between 1990 and 2007, Spain experienced a prolonged period of impressive employment growth - the highest in the euro area, accompanied by a large and continuous inflow of immigrants.<sup>15</sup> As a result, unemployment rate dropped significantly from its highest level of 25% in the early 1990s to 8% in 2007. In this period, structural unemployment in Denmark also fell and labour force participation rose slightly. However, while labour utilisation and hours worked have been growing in Denmark,

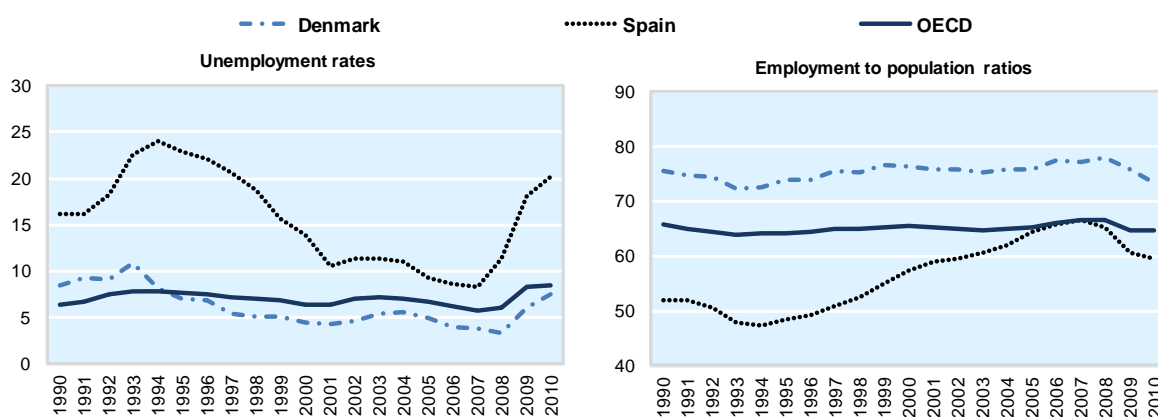
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15. According to data from the OECD *International Migration Outlook 2010*, the inflows of migrants accelerated from 0.5 per 1 000 inhabitants in 1995 to 20.5 in 2007, to decrease in 2008 to 15.2 mainly as a consequence of the crisis. As a result, the stock of the foreign-born population jumped from levels below 5% of the total population in the early 1990s to 14.5% in 2008.

hours worked still remain relatively low, which has contributed to slowing productivity growth in the most recent years (OECD, 2009b).

Even after the recent slight drop in the employment rate as a consequence of the crisis, Danish employment rate is amongst the highest in the OECD (only below Iceland, the Netherlands, Norway and Switzerland). In 2010, Danish employment-to-population ratio was 73.4%, fourteen percentage points higher than in Spain, even after the considerable progress made by Spain since the mid-90s that permitted it to bring the ratio up to the OECD average in 2007 (Figure 11). In addition, the difference between the two countries is still even more pronounced in the case of employment for women than for men. Namely, while male employment in Denmark is 10 percentage points higher than in Spain (76% in Denmark compared to 66% in Spain in 2010), it is 18 percentage points higher for female employment (71% in Denmark compared to 53% in Spain 2010).<sup>16</sup>

**Figure 11. Employment to population ratios and unemployment rates in Denmark and Spain, 1990-2010**



Source: OECD Labour Force Statistics Database.

Regarding unemployment rates and the incidence of long-term unemployment, Denmark also is among the best performers in OECD countries. Even though the unemployment rate has more than doubled in Denmark from the level observed in 2008 to reach 7.6% in 2010, it remains well below the OECD average of 8.5%. Moreover, in 2010, one out of five of the total unemployed were long-term unemployed –defined as those unemployed for more than 12 months- compared to one third for the OECD average. This is the result of the activation policies and the labour market reforms implemented in Denmark since the mid-1990s, when long-term unemployment oscillated around 33%.

On the contrary, in Spain the unemployment rate and the incidence of long-term unemployment have always been above the OECD average. Even if it remains below the levels reached in the mid-1990s, the Spanish unemployment rate has soared rapidly under the current crisis and is expected to remain high even when the economy and trade start recovering (Box 1).

16. These rates are employment population ratios, i.e. employment 15-64/population 15-64.



### Box 1. Employment impact of the crisis in Spain

Employment responsiveness to the output decline has been much larger in Spain than in most other OECD countries (OECD, 2010a and 2010b). While GDP fell in real terms by 4.5 percentage points from its highest level (in the first quarter 2008) to its lowest level (in the third quarter 2009), below the OECD average fall of 5.8 percentage points, employment dropped by 8.6 percentage points over the same period, compared to an average fall of 1.6 percentage points across OECD countries. As a result, since the end of 2007 more than 2.5 million workers have joined the ranks of the unemployed in Spain, out of a total of 4.6 million dismissed workers in the Euro area as a whole, implying that more than 50% of the new unemployed in the Euro area during the crisis are Spanish. As a result, the unemployment rate registered the highest increase amongst OECD countries (11.1 percentage points) to reach 20% at the end of 2010.

In contrast to what has happened in some OECD countries (i.e. Germany, Korea, Norway, Australia and the Slovak Republic), the Spanish labour market has mainly adjusted to the decline in output via a reduction of employment rather than via a combination of employment shedding and hours reductions. As such, average hours per worker and wages did not adjust so as to mitigate the employment impact of the recession. Actually, average hours rose slightly during the recession and real hourly wages continued to rise regardless of the large build-up in unemployment.

Indeed, workers holding temporary contracts have borne the brunt of job losses, as firms have adjusted to the sudden decline in demand by simply not renewing these contracts. With 30% of the workforce on temporary contracts before the crisis, temporary employment has been the primary – if not the only – adjustment margin for employers. As a result, temporary employment has dropped by 8% in 2008 and by 18.4% in 2009, affecting mainly immigrants and the youth.

The effect of the crisis on employment has been spread across sectors, although construction and some manufacturing sectors have been hit the most. The significant loss of employment in the construction sector and in related financial and real estate services reflects the strong reversal of the trend fuelled in the past decade by the housing sector boom. In that respect, a high correlation is observed between regional differences in employment losses and the specialization of regions in construction and other housing related services. Employment losses in the construction sector have hit disproportionately immigrant workers whose overrepresentation in this sector (as in retail trade, hotels and restaurants) reflects both the low-skilled profile of these jobs and the extensive use of temporary contracts in these industries.

Unemployment has also hit disproportionately the youth (mainly the low-skilled aged between 15-24), whose unemployment rate has more than doubled since the end of 2007 to more than 40%, over twice the OECD average. In addition, long-term unemployment has also jumped very rapidly, with one in four unemployed workers being jobless for more than one year, which represents a large pool of hard-to-place people at growing risk of losing contact with the labour market.

Apart from the characteristics concerning labour market institutions and policies, the productive structure of both economies also affects their ability to react to market fluctuations and, thus, impacts employment outcomes.

For instance, the relatively large number of small and medium-sized enterprises (SMEs) gives Danish trade and industry high flexibility and the ability to adapt quickly to new or altered market conditions. While Spanish SMEs constitute an equally large proportion of the total number of firms in the economy (Table 3), important differences emerge. Firstly, the significantly lower levels of administrative burden placed on start-ups in Denmark allow the Danish SMEs a higher degree of flexibility, depending on market conditions (Figure 12). Secondly, the total employment concentrated in micro firms in Spain is nearly two times higher than in Denmark (19.7% in Denmark compared to 38.3% in Spain). This may have implications for the average productivity of Spanish SMEs as well as their ability to respond swiftly to changes in demand. This is because of their lower ability to reap benefits of specialisation as well as greater inflexibility in shedding labour to cut costs in the times of recession.

Finally, Danish SMEs are involved in internationalisation to a larger extent than their EU counterparts, inclined more to engage in exports, compared to imports and foreign investment (European Commission, 2009). According to the Ministry of Foreign Affairs,<sup>17</sup> SMEs make up more than half of the total turnover of Danish enterprises and almost 40% of Danish exports.<sup>18</sup> It is noteworthy that exporting firms can have a comparative advantage in human capital and tend to employ more highly-skilled workers than non-exporting firms, with the export wage premium often linked to the education premium of the firms' workforce. To test this hypothesis and explore the relationship between export performance, the firms' educational level and the wages of its workers, Munch and Skaksen (2008) use a worker-firm longitudinal dataset for Denmark with information on firms' export behaviour for the period 1995-2002.<sup>19</sup> They find a positive correlation between the firm's share of skilled labour and the wages of the workers. When controlling for observed workers and firm's heterogeneity, they find that firms with higher export intensities pay higher wages. However, when controlling for unobserved variables, export variables have no significant effects on wages. They also find that firm-level skill intensity has a spill-over effect in the sense that the interaction of high skilled workers may lead to increased productivity and wages for other workers of the firm.

Therefore, the productive structure is an additional factor responsible for varying abilities of both countries to respond swiftly to market fluctuations. Whereas low administrative burden and relatively bigger size of Danish SMEs allows them a higher degree of flexibility, Spanish SMEs may face higher barriers to adjustment. In addition, the higher than average exports orientation of Danish SMEs may not only have impact on wages, according to the theory of self-selection of the most productive firms present in the literature, but also favour Denmark's comparative advantage in high-skilled labour that tends to be affected less by trade-related labour market adjustments.

In addition, Spain's structure of production and its labour market institutions and policies that have favoured high shares of temporary employment during the past decade, also lead to the strong employment vulnerability to the economic cycle. As a result, the adjustments to changes in levels of output have been mainly done through increases and declines in this sector of employment.

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17. See [www.um.dk/en/menu/TradeAndInvestment/Services/SmallAndMediumSized](http://www.um.dk/en/menu/TradeAndInvestment/Services/SmallAndMediumSized).

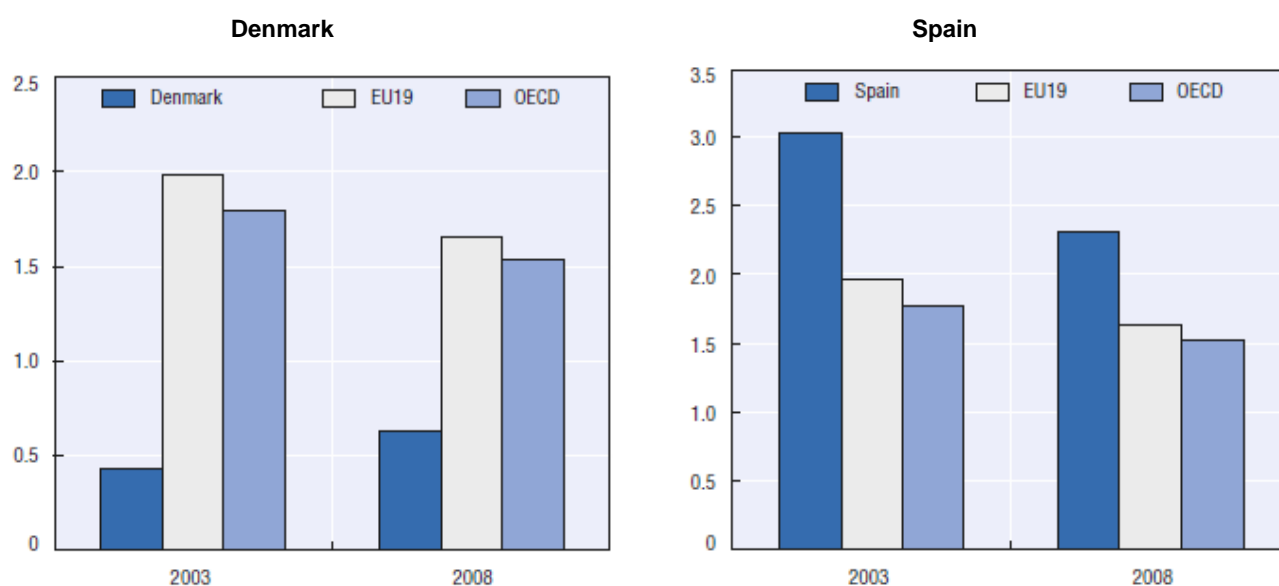
18. In the past decade, however, the number of firms involved in international trade in Denmark has decreased, while the number of transactions and their average value has grown significantly. Ibsen *et al.* (2009) find that between 1993 and 2003, the number of importing firms fell in Denmark by 3% and exporting ones by 9.6%, whereas the number of import transactions increased by 19% and those of export by 53%. The average value of imports transactions rose by 38% and those of exports by 10.7% in that period. Similar trends are found in Eriksson (2009).

19. Munch and Skaksen (2008) consider only manufacturing firms with more than 50 employees from the Danish FIDA Database (based on administrative registers). Of this subsample, the proportion of firms that export has increased from 73% in 1995 to 80% in 2002.

**Table 3. Structural indicators on enterprise population, 2007**

Number of enterprises						Total employment						Value added		
	Industry		Services		Total	Industry		Services		Total	%			
	Number of firms	%	Number of firms	%	%	Number of firms	%	Number of firms	%	%	Industry	Services	Total	
Denmark														
Micro	48 191	83.3	136 365	88.4	87.0	103 805	16.1	254 212	21.7	19.7	14.5	27.6	22.7	
Small	7 808	13.5	15 015	9.7	10.8	156 419	24.3	293 755	25.0	24.8	19.8	23.0	21.8	
Medium	1 581	2.7	2 446	1.6	1.9	153 330	23.8	232 142	19.8	21.2	22.7	18.4	20.0	
SMEs	57 580	99.5	153 826	99.7	99.7	413 554	64.2	780 109	66.5	65.6	57.0	69.0	64.5	
Large	303	0.5	420	0.3	0.3	230 931	35.8	393 802	33.5	34.4	43.0	31.0	35.5	
Spain														
Micro	587 972	85.8	1 923 591	94.9	92.6	1 636 784	29.5	3 819 307	43.8	38.3	18.9	34.6	27.5	
Small	84 145	12.3	91 376	4.5	6.5	1 795 950	32.4	1 699 824	19.5	24.5	25.8	20.3	22.7	
Medium	11 662	1.7	10 346	0.5	0.8	1 108 508	20.0	1 007 237	11.5	14.8	21.4	14.8	17.7	
SMEs	683 779	99.8	2 025 313	99.9	99.9	4 541 242	82.0	6 526 368	74.8	77.6	66.1	69.6	68.0	
Large	1 449	0.2	1 856	0.1	0.1	997 967	18.0	2 195 153	25.2	22.4	33.9	30.4	32.0	

Source: OECD Structural and Demographic Business Statistics.

**Figure 12. Administrative burdens on start-ups**

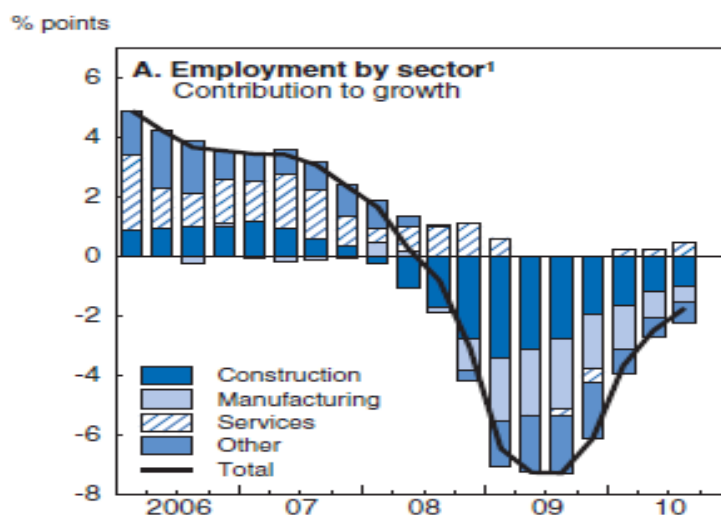
Source: OECD Product Market Regulation Database.

During the past decade, the easy access to credit and the increasing demand for housing favoured a significant development of the construction sector, being the sector that in relative terms experienced the highest growth in terms of production and employment. Employment in the construction sector represented 10% of total employment in 1990 to reach 13% in 2007, having experienced an annual average growth of 3.1% until 2008 (one point above the average growth for total employment).<sup>20</sup> As

20. The immigration phenomena facilitated also the creation of employment in other labour-intensive service sectors (mainly tourism and domestic services). Employment in those ancillary sectors has been, however, less hit by the recent economic downturn. After that period, the construction sector started destructing jobs. Between 2007 and 2008, more than 300 000 jobs were destructed in the

indicated by Figure 13, while construction sector contributed significantly to the economic growth, it has also exacerbated the contraction after 2008.<sup>21</sup> Admittedly, the construction sector created employment for low-skilled workers, often with temporary contracts, absorbing an important part of the growing flows of immigrants that came into Spain since the early 1990s. With the economic downturn, this unskilled labour was shed at a quick rate, fuelling one of biggest increases in unemployment among the EU economies.

**Figure 13. Sectoral structure in Spain<sup>a</sup>**



a. Contributions to year-on-year percentage growth of total employment. Break in series in the first quarter of 2009 due to a change in activity classification.

Source: INE (2010), INEbase (database), Instituto Nacional de Estadística, November.

Whereas among the most labour-intensive sectors, the construction sector is a predominantly local activity and, thus, is not very tradable, the tourism sector appears to be one of the sectors that in the past decade has helped offset the growing Spanish trade deficit, pushed by the rapid growth of imports due to rapid internal demand expansion. Indeed, representing around 11% of GDP and 13% of employment during the past decade, the tourism sector consolidated in 2008 its position as the second-largest destination among OECD countries, both in terms of tourist arrivals and receipts (OECD, 2010e).

The fact that the growth process experienced by Spain until the current crisis has, to a large extent, been driven by labour-intensive sectors has not favoured significant improvements in productivity. In particular, labour productivity has fallen slightly in most sectors of the manufacturing industry that is the most exposed to trade, with the exceptions of textiles, transport equipment and machinery sectors (Figure 14).

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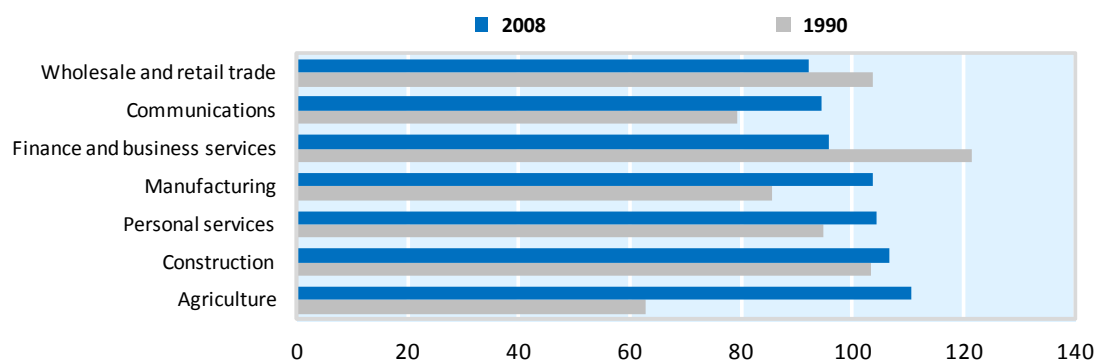
sector, being the sector most hit by the economic downturn, and the situation worsened additionally in 2009.

21. For example, the wholesale and retail trade sector still created 120 000 employments in 2008, before starting to decline slightly.

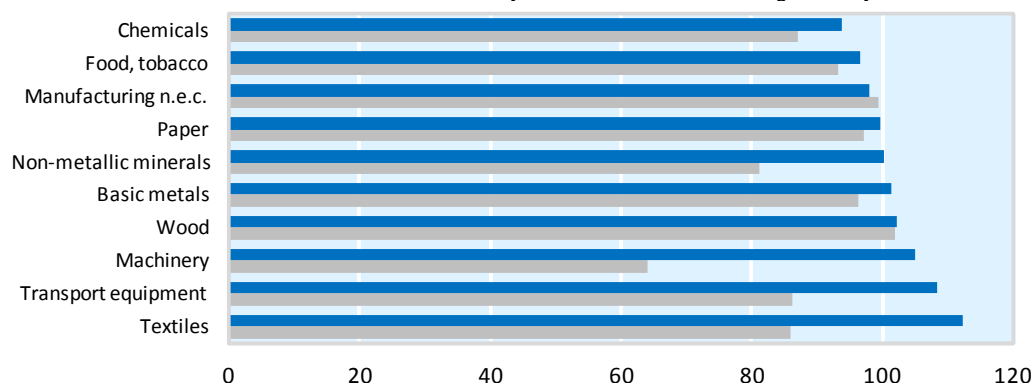
**Figure 14. Labour productivity index by sectors of activity in Spain, 1990-2008**

Year 2000 = 100

Panel A. Productivity index in main sectors



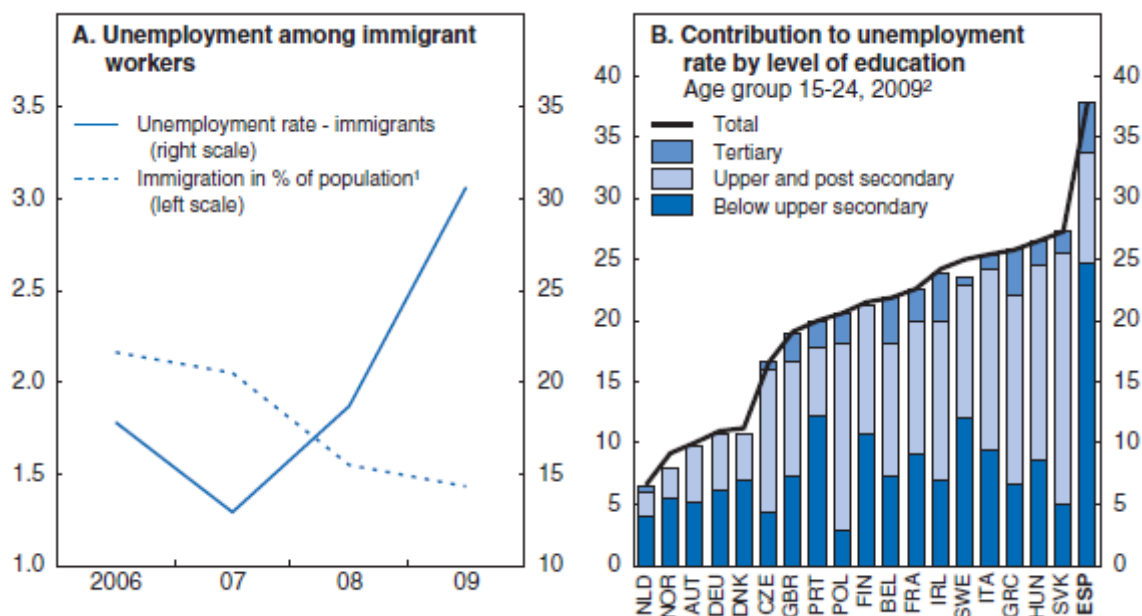
Panel B. Productivity index in the manufacturing industry



a. Labour productivity is calculated as the ratio of value added volumes to total employment. Although hours worked would be preferable as a measure of labour input, consistent hours worked data at the industry level are not always available.

Source: OECD STAN Database.

Therefore, this production structure that has favoured low-skilled labour-intensive sectors combined with the duality of the labour market between temporary and indefinite work contracts has exacerbated the recent volatility of the Spanish labour market. This mainly explains the high unemployment rates observed after the economic crisis in 2008, having affected most the unskilled workers (and especially youth) and those with immigrant background (Figure 15).

Figure 15. Unemployment among youth and immigrant workers<sup>a</sup>

a. Working age population (15-64). Age group 16-24 for Spain.

Source: INE (2010), "Encuesta de migraciones", INEbase (database), Instituto Nacional de Estadística, September and Eurostat (2010), "Population and Social Conditions", Eurostat Database, June.

This evolution of the Spanish economy has brought to the public debate the need to rebalance the economy towards more productive sectors. To change the production model and increase productivity, the government has responded with different initiatives that range from fiscal consolidation, measures to strengthening the financial system (i.e. saving banks) as well as significant steps to address the existing short-comings in the labour market and a comprehensive package of regulations oriented towards a more sustainable economy.

Indeed, the government approved in March 2010 the Bill for a Sustainable Economy which represents a new step to modernize the Spanish economy and steer economic activity towards sectors with long-term growth. The Bill has been the cornerstone of the government strategy to define the new growth model for the Spanish economy (based on innovation, technology, globalization of business and free competition, increased efficiency of Public Administrations) in order to enable economic, social and environmental sustainability in the long term (Box 2).

**Box 2. Towards changing the production model: the bill for a sustainable economy**

The Bill sets up a program of reforms aimed at fostering sectors with a high growth potential in the long term and high value-added, in order to create sustainable jobs in Spain. The Bill focuses on three main subject areas: improving the economic environment, fostering competitiveness and developing new sectors to promote environmental sustainability and fighting climate change.

The measures are directed both to national and foreign companies and economic agents and a Sustainability Fund (of up to 20,000 million euros for the 2010 and 2011 fiscal years, 50% co-financed by financial institutions) is created to finance: a) private sector investment projects that make a contribution to innovation and technological development; b) expand ICTs and the knowledge economy; c) internationalise companies; d) promote energy efficiency and savings; e) develop social-health services.

To foster investments in R&D and innovation in Spanish firms, the Bill increases the deductions in Company Taxes for innovative activities (from 8% to 12%). It also promotes the creation of technology based innovative companies, and a series of measures backing innovation to foster the renewal of traditional sectors to increase their competitiveness. A series of incentives will be given to sectors linked to renewable energies in order to positioning Spain as an important international player in that sector. Also, to improve product market regulation, the Bill reduces time and costs to create small companies and removes local licenses for innocuous activities. An Action Plan to reduce overall administrative burden on all new and incumbent businesses by 30% in 2010 (the EU objective is 25%) is being developed. Finally, regarding the housing sector, since January 2011, subsidies for the purchasing of social housing will disappear. Except for low income families, the Bill phases out tax deductibility of mortgage and rent payments

Finally, looking at the correlation between employment and trade with non-EU countries, no clear pattern emerges in Denmark and Spain when focusing on different sectors of the manufacturing industry (Figure 16). In Spain, the expected signs are found both for extra-EU exports and extra-EU imports: an increase in extra-EU imports on average causes a reduction in employment, while an increase in extra-EU exports increases it. This is not the case in Denmark, where contrary to what was expected, increases in extra-EU imports seem to be associated with increases in employment in most sectors. Overall, however, the correlation between extra-EU exports and employment (as well as extra-EU imports and employment) is not very significant (as indicated by low R-squared measurement in Figure 16), suggesting that variables other than trade play a more important role in determining recent employment changes in both countries.

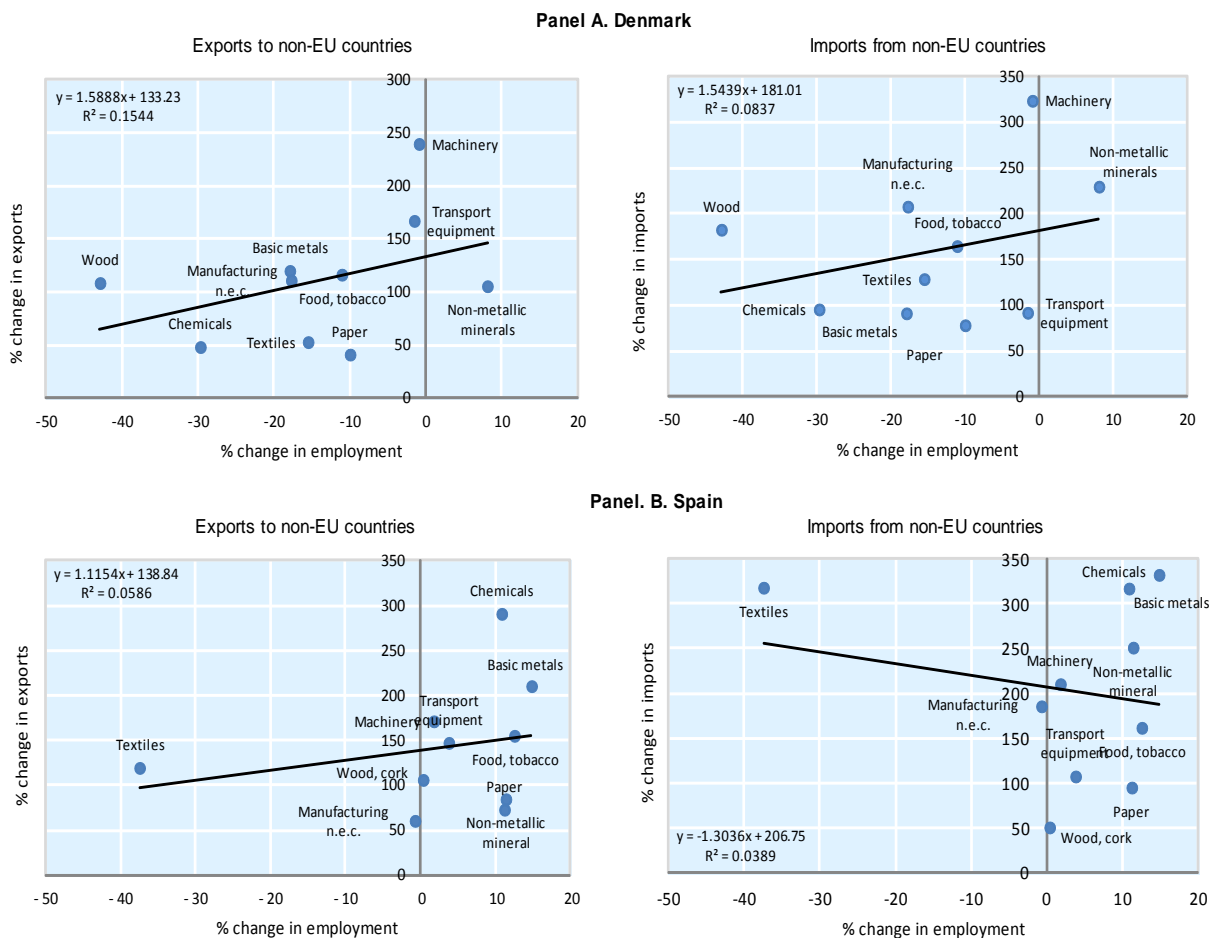
Increased globalisation has often been blamed for being responsible for increasing income inequalities. Focusing on *within countries* inequality across OECD countries, recent OECD work has found that the effect of trade has been moderate. The rapid growth of imports from mid- and low-income countries has been the main channel through which trade has affected rising wage inequality in OECD countries.<sup>22</sup> This effect, however, weakens when other aspects -such as technological change- are considered, and even disappears when labour market institutions are controlled for. Although it cannot be excluded that increased trade with emerging economies may have had a sector-specific impact on wage inequality, the analysis suggests that skill premia are not higher in sectors more exposed to trade integration.

Indeed, when looking at wage dispersion between low- and high-skilled workers in all sectors of the economy, no systematic increase of wage inequality is evident in Denmark

22. For a review of increased inequalities in OECD countries see OECD (2008). A further assessment on this topic is slated for release by OECD in 4Q2011.

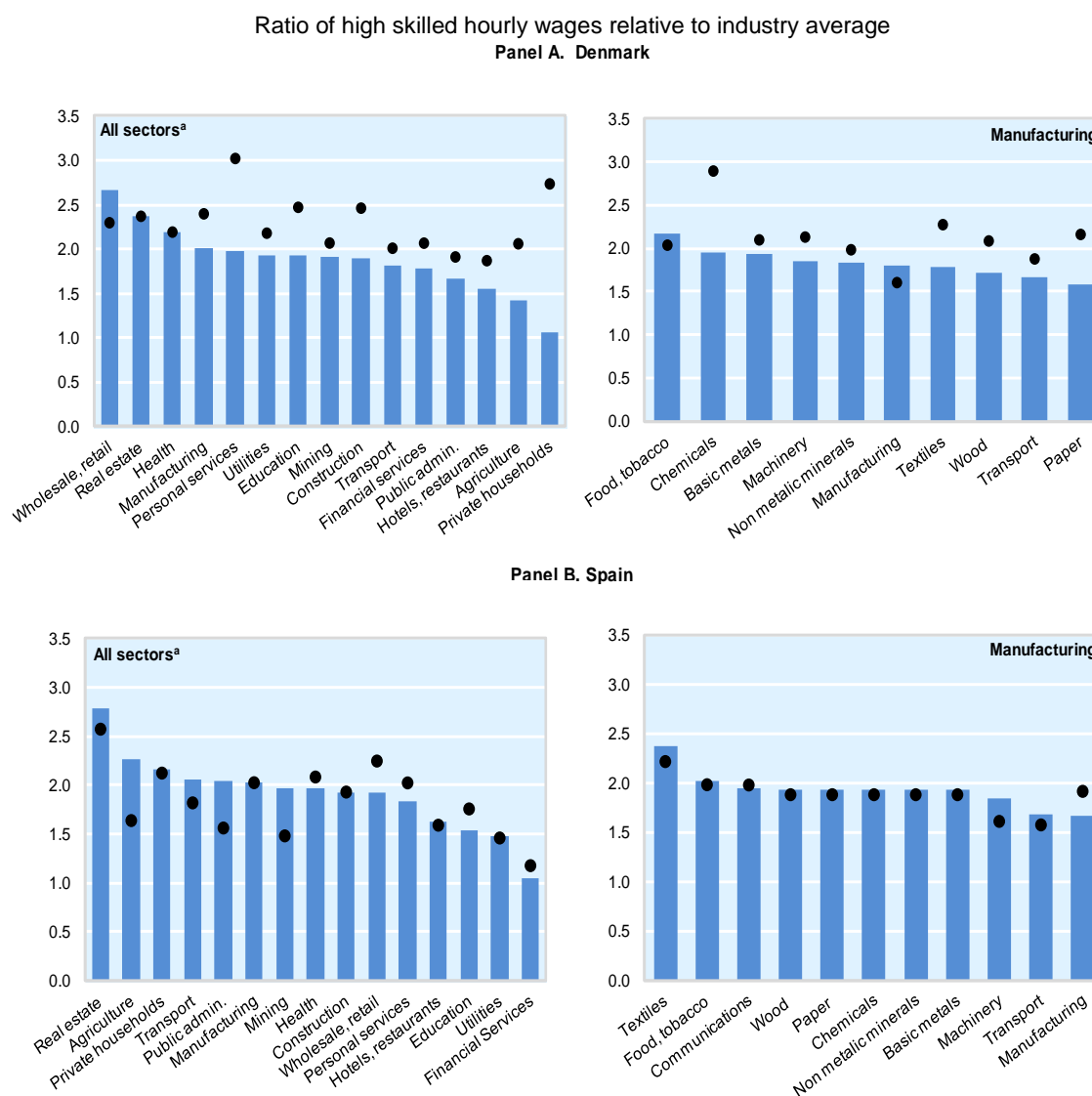
and Spain (Figure 17). Between 1990 and 2005, in Denmark the wage gap has increased only in the wholesale and retail sector, whereas in Spain wage dispersion is larger in agriculture, mining and the transport sectors. It is also higher in real estate and public administration, although these sectors have not been very much affected by changes in trade. Indeed, in Spain real estate has been more affected by increased demand due to the boom in the housing sector and public administration by the rapid growth of the regional administrations. When considering the manufacturing industry only, the wage gap between high and low-skilled workers relative to the industry average has been reduced in all sectors in Denmark, remaining quite stable in Spain.

**Figure 16. Labour elasticity to extra-EU trade in the manufacturing industry, 2000-2008**



Source: OECD STAN Database.



**Figure 17. Gap between the wages of high and low skilled workers in Denmark and Spain, 1990-2005**

a. Sectors are classified according to the ISIC Rev.3 nomenclature.  
Source: EU-KLEMS.

Overall, Spain and Denmark experienced rather different paths in the evolution of their labour markets. While Denmark has kept its unemployment rates at impressively low levels and significantly reduced its long-term unemployment, Spain still suffers from large levels of structural unemployment, in particular affecting women and youth. This is exacerbated by increasingly prolonged duration of unemployment with its negative spillover effects. Encouragingly from the policy perspective, the analysis suggests that trade has not been the main driver neither of the negative employment changes nor of the increasing wage inequality in neither of the countries. This is in line with the wider body of work that suggests that international trade, rather than being a threat, provides opportunities for further growth, if backed by supporting domestic policies (OECD *et al.*, 2010).

#### 4. Strategies and policies facilitating adjustment

The previous section traced different evolution paths in the labour market of Spain and Denmark and suggested that trade seems not to have been the principal driver of employment changes. This section considers strategies and supplementary policies to facilitate adjustment in the case of labour market fluctuations. Educational attainment and increased job mobility as well as unemployment benefits and training emerge as important factors in the analysis.

##### *Educational attainment and job mobility facilitate adjustments*

The productivity of the labour force in each sector matters for competitiveness. Productivity varies depending on the educational attainment of the workforce and its job satisfaction, among other factors. For example, working conditions (i.e. working-time, jobs turnover, unions' representation, etc.) also influence the economic dynamism of each sector and its productivity.

On average, Denmark has a highly skilled and well-educated workforce that has contributed to the high productivity of the Danish industry in past decades. When looking at the educational attainment of the workforce, a commonly used proxy for the stock of human capital, Denmark has had the advantage of having a larger pool of highly educated individuals over years than the OECD average. This first-mover advantage has likely influenced the development of high-technology and high-skills industries compared to other OECD countries, where the stock of a lower skilled workforce has been higher. At the same time, there may be further steps that could be taken in Denmark to boost educational performance with respect to educational attainment for some segments of the population. As of 2009, only 70.1% of the 20-24 year old population in Denmark had completed at least upper secondary education, which is below the EU average of 78.6%.<sup>23</sup>

Spain has been slower in developing its talent pool, even if significant improvements have been observed in the past decade.<sup>24</sup> Indeed, the percentage of the population aged 25-64 years having below upper-secondary education has significantly decreased in Spain from 67% in 1998 to 49% in 2008, but still remains above the EU19 and OCDE averages (Figure 18). Simultaneously, the percentage of the workforce having tertiary education has increased from 20% to 29% in the same period, showing a significant catching-up process to OECD average.

The demand for skills in production has also evolved in the past decades with a progressive reduction of manual labour and basic cognitive tasks, which can now be computerised. The demand for tasks requiring complex communication and involving interaction among individuals and groups to obtain, persuade and process information has increased, as has the demand for advanced analytical skills outside “rule-based”

23. European Commission (2011), *Improving the quality and efficiency of education and training*, Chapter 2, [ec.europa.eu/education/lifelong-learning-policy/doc/report10/chapter2\\_en.pdf](http://ec.europa.eu/education/lifelong-learning-policy/doc/report10/chapter2_en.pdf).

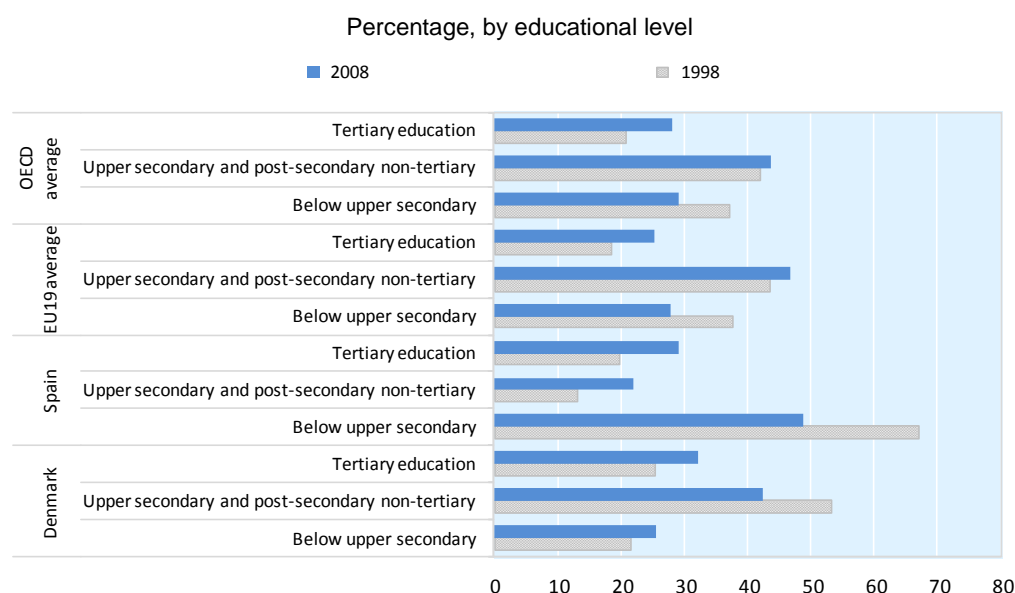
24. Recent steps undertaken to improve vocational training and education at secondary level include: flexibility to use of company facilities to train students, steps in favour of mobility between different types of studies (including tertiary education), engagement of social partners in defining course programmes to ensure they address real market needs, use of online training, enhancement of professional counselling, and recognition of skills gained at work for academic credit if further training was involved (OECD Secretariat correspondence with representatives of the Government of Spain, October 2011).

structures (OECD, 2010c). Moreover, skill-biased technological change has increased the demand for a better educated workforce in all sectors of activity. Starting from a lower level than Denmark in the mid 90s, in Spain this evolution has been more pronounced, as shown by the reduction of the working force with low education registered in all sectors of the manufacturing industry. However, in the sectors where Spain has a comparative advantage in terms of trade (i.e. other non-metallic minerals, textiles and transport equipment) the share of the workforce with low education ranges between 40% and 60%, showing that they are still rather low-skilled labour intensive (Figure 19).

Another characteristic of the Danish labour market is its high degree of mobility, measured both in terms of the number of workers that commute to work as in terms of job turnover. It has been estimated that on average 30% of the workforce change jobs every year (Hendeliowitz and Bastlund, 2005).<sup>25</sup> Indeed, the average job tenure of Denmark, the lowest in OECD countries, reflects also this high mobility (Figure 20).

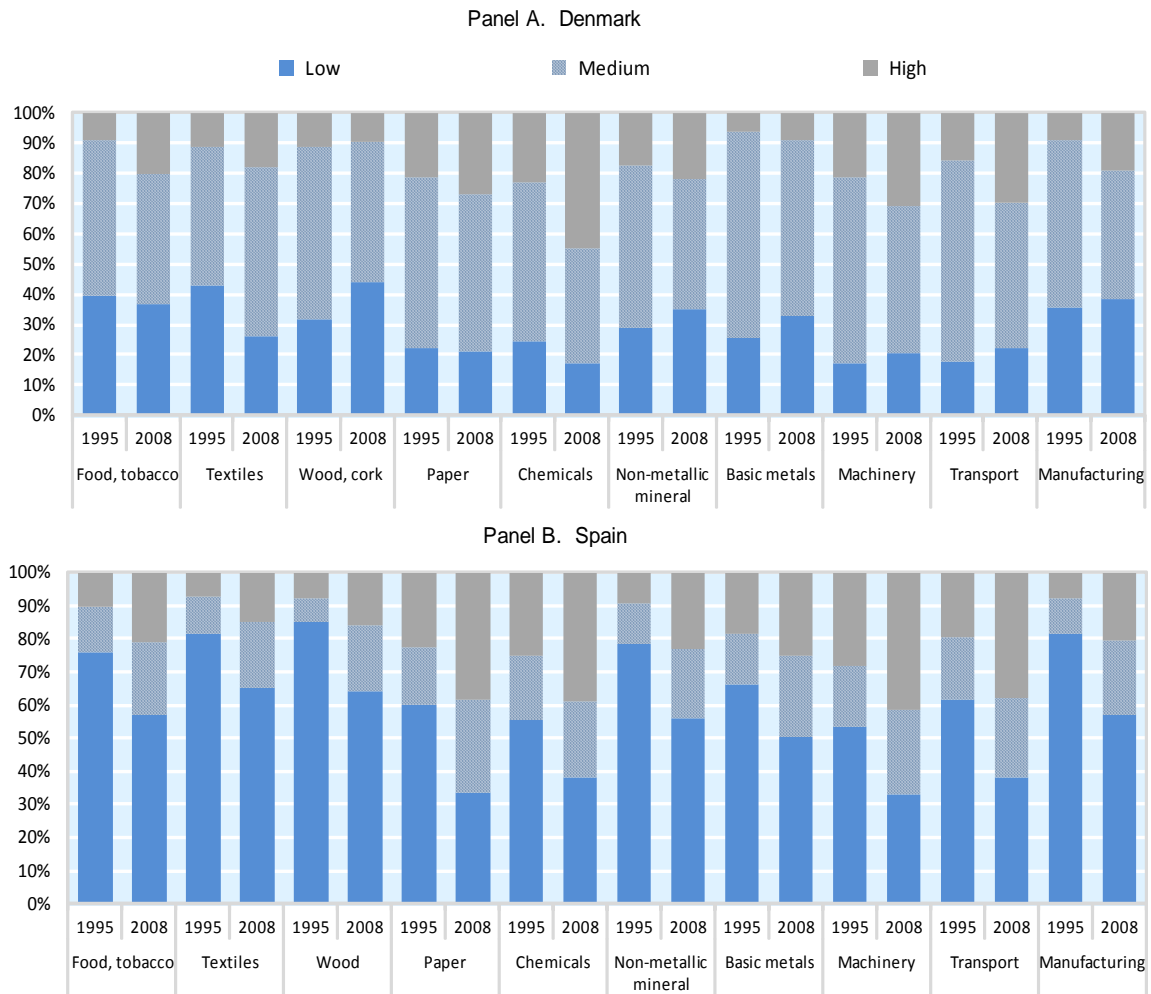
In Spain, job tenure is slightly above ten years, close to the OECD average, although this conceals huge differences between workers with regular and temporary contracts, the later being characterised by a high job turnover. In addition, the Spanish labour market is characterised by a lack of geographical mobility of workers between regions that hampers labour market adjustment overall.

**Figure 18. Educational attainment of the 25-64 year-old population in Denmark and Spain, 1998 and 2008**



Source: OECD (2010), *Education at a Glance*.

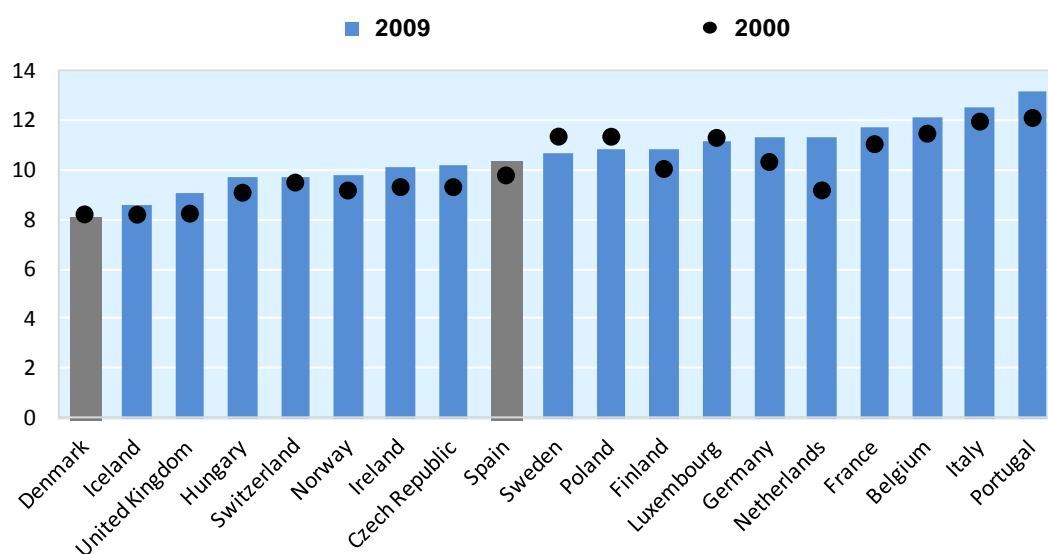
25. Many Danish employees believe that it is good for people to change job every few years. Moreover, they are among the most satisfied workers in Europe on average (Voll, 2010).

**Figure 19. Educational attainment<sup>a</sup> of the workforce in the manufacturing sector, 1995-2008**

a. Low refers to less than upper secondary education; medium refers to upper secondary education and high to tertiary education.

Source: OECD STAN Database.

Figure 20. Average job tenure in selected OECD countries, 2000 and 2009



Source: OECD Job Tenure Database.

The level of job mobility is in part related to the regime of employment protection applicable in each country, with strict employment protection legislation reducing employment flows and restraining job creation.<sup>26</sup> Analysing the impact of employment protection in job flows, Bassanini *et al.* (2010) found that employment protection for regular workers (including additional restrictions on collective dismissals) significantly depresses gross worker flows, and its cross-country variation can explain up to 30% of the cross-country variation in total flows. The effect of employment protection is essentially limited to job-to-job flows. By contrast, generous unemployment benefits promote labour reallocation, although their effects vary greatly across ages.

As shown in Figure 21, the strictness of employment protection legislation in Denmark is among the lowest in OECD countries. In Spain, provisions in the employment protection legislation have led to a *de facto* high severance payment for workers on permanent contracts, favouring the already mentioned duality of the labour market and having adverse effects on unemployment and productivity (OECD, 2010a). This prompted the Spanish government to approve in 2010-11 a series of labour market reforms that, among other objectives, intends to reduce the duality between temporary and regular contracts and improve flexibility of labour market regulations (Box 3).<sup>27</sup> Implementation of these positive reforms is underway, though it is still too early to know the full effects.

26. According to Andersen and Svarer (2007), job mobility measured by a low job tenure can partly be explained in Denmark by an industry structure with relatively many small firms and a relatively low average retirement age. Nicoletti *et al.* (2001) show that job mobility has been facilitated by Danish labour market characteristics, and in particular, by weak employment protection.

27. For a more comprehensive evaluation of the reforms as of 2010, please see Chapter 3 in OECD (2010a).

**Figure 21. Strictness of employment protection legislation in Denmark and Spain, 2008**

a. The EPL indicator ranges from 0-6 from least to most restrictive.

Source: OECD Employment Protection Legislation Database.

Also, to enable greater flexibility for employers and better match working-time schedules with production requirements in the globalised context, Denmark and Spain, as most OECD countries, have promoted since the mid-1990s, flexible working-time arrangements and part-time work. In Denmark, in 2009 almost one in five jobs was part-time, slightly more than in early 1990s. The share of part-time employment in total employment has almost doubled in Spain in that period, even if it still remains below the OECD average (Annex Figure A.6). Efforts to ensure greater choice for workers regarding work schedules has helped promote labour force participation of certain groups, notably women with young children. However, as stated in OECD (2006), more work is required to better understand the determinants of hours worked, why they differ across countries and the effects of greater flexibility on job quality.

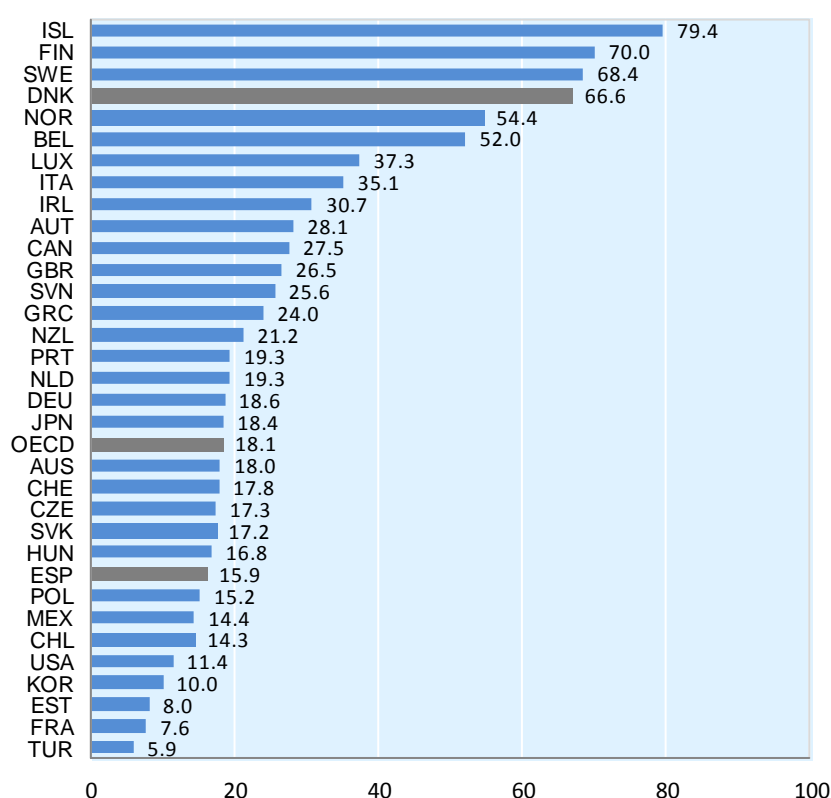
Finally, the existing industrial relations and collective bargaining system influences sectoral labour market adjustment processes and outcomes. In Spain and Denmark, the social partners play an important role in the labour market decision process. In Denmark, industrial relations are highly organised and there is a longer historical tradition for consensus decisions than in Spain. As such, Denmark has one of the highest union membership and union density rates in OECD countries, although the latter has fallen slightly in recent years<sup>28</sup> (Figure 22). The decline in trade union density often goes along

28. Trade union membership in Denmark, as in the other Nordic countries, is often attributed to the way in which unemployment insurance is organised: that is, as a voluntary scheme which is administered by trade union-linked funds (the so-called Ghent system). The recent decline in union membership is to some extent related to a similar fall in the membership of unemployment insurance funds, traditionally administered by the unions (the membership of these funds has fallen from 2.26 million in 2007 to 2.06 million in 2009). Although it is possible to be a member of an unemployment insurance fund without being a member of a union, for most people the two things are part of the same package (see: [www.worker-participation.eu](http://www.worker-participation.eu)).

with a decrease in membership, with both being identified as signs of a weakening of the role of trade unions and industrial relations. The emergence of forms of concession bargaining and the decline in collective bargaining coverage also indicate a wider trend of weakening trade unions in European countries (Eurofund, 2010). In Spain, union membership has recently increased, accompanied by a decline in union density. This may indicate problems in the capacity of unions to organise workers in labour market segments where job creation has recently taken place (i.e. mainly in construction, a sector with a large share of immigrant workers that are more difficult to organise) while maintaining and extending membership in other sectors that have traditionally had stronger union representation (i.e. manufacturing sectors).

**Figure 22. Trade union density, 2010**

In percentage



Source: OECD Trade Union Density Database.

### Box 3. The Spanish 2010-11 labour market reforms

The Spanish Parliament approved in September 2010 an initial labour reform proposed by the government, though not without controversy and strong trade union opposition. The aim of the initial reform was fourfold: reduce the duality of the labour market; increase the internal flexibility of firms by making it easier for employers to use working hours and wages as an adjustment tool in case of business difficulties; foster employment opportunities for the unemployed (especially the youth); and improve labour market intermediation.

To reduce the duality of the labour market between temporary and permanent contracts, the reform centred on reducing the upper range of dismissal costs for permanent contracts and smoothing the difference in these costs between temporary and permanent contracts. For that purpose, four main measures were introduced. First, the law intended to clarify the grounds for “justified” dismissals for all existing contracts, making it easier for the courts to accept them. This was intended to reduce severance pay to 20 days’ wages from the current practice of 45 days’ wages. Second, the reform package widened the types of workers eligible to be hired on permanent contracts with reduced dismissal pay (33 days of wages for unjustified dismissal instead of 45 days). This applies for persons with disabilities, unemployed for at least three months (six months previously), unemployed on temporary contracts (or in permanent contracts but in other companies) during the last two years. Third, the law foresees the replacement of part of accrued dismissal pay entitlements by mandatory contributions of businesses into blocked accounts for newly signed contracts from 2012 onwards (the so-called “Austrian-model-type” part of the reform<sup>a</sup>). This capitalization fund can be used by workers for cases of dismissal, geographic mobility, training and retirement and it is expected it will encourage workers mobility since these accounts – and thus the rights acquired while working – will be transferable from one employer to another. Fourth, for temporary contracts, the compensation paid to workers in case of dismissal is progressively increased from 8 to 12 days’ wages, although to avoid hindering employment growth in the current recovery, this will not be effective before 2015. There are early indications that these changes have resulted in an increase in the share of dismissals due to economic reasons (OECD-ILO, 2011).

Regarding labour intermediation, the reform has opened the door to private agencies operating in collaboration with, and under the control of, the Public Employment Services (PES). This should in principle improve the low PES placement rates, but it will be important to set strong incentives for such agencies to support the reintegration into employment also of the long-term unemployed and other hard-to-place jobseekers. In addition, in February 2011 the Government adopted exceptional measures under an “Action Plan” to improve incentives for hiring on a part-time basis as a step towards stable employment and to provide retraining for those exhausting their unemployment benefits, as well as to provide training and counselling to youth, long-term unemployed and low skilled unemployed (OECD-ILO, 2011). These are positive steps. It may be that further steps could be undertaken to help the large pool of jobseekers to return to employment and avoid that the long-term unemployed lose contact with the labour market. For example, re-employment assistance to job-seekers could be reinforced through better effective coordination at the regional level, whereby some efforts are already underway. Also, training measures oriented towards firm’s needs and access to better training for youth (with the development of specific plans for vocational training), might be strengthened further. A further pillar of reform, approved in June 2011, aims to reduce the complexity of the collective bargaining system (eliminating the provincial, intermediate level of bargaining), promote plant level bargaining, permit adaptation of on-going agreements as needs arise, and increase flexibility of firms to respond to changing economic conditions.

In the Spanish context of high unemployment, strong labour market duality and large regional imbalances, the labour reforms were ultimately warmly welcomed, being viewed by many as going in the right direction. Some aspects of implementation will require additional time to become fully operational (e.g. details for the worker capital fund remain to be finalised). More broadly, the intended effects of reform will entail changes in employers’ and workers’ behaviour, which may take also some time to become manifest.

a. Austrian workers have individual savings accounts -- instead of traditional severance pay schemes -- that move with them as they move jobs. If they lose their job, they can choose to withdraw funds from the account or save the entitlements built up towards a future pension.

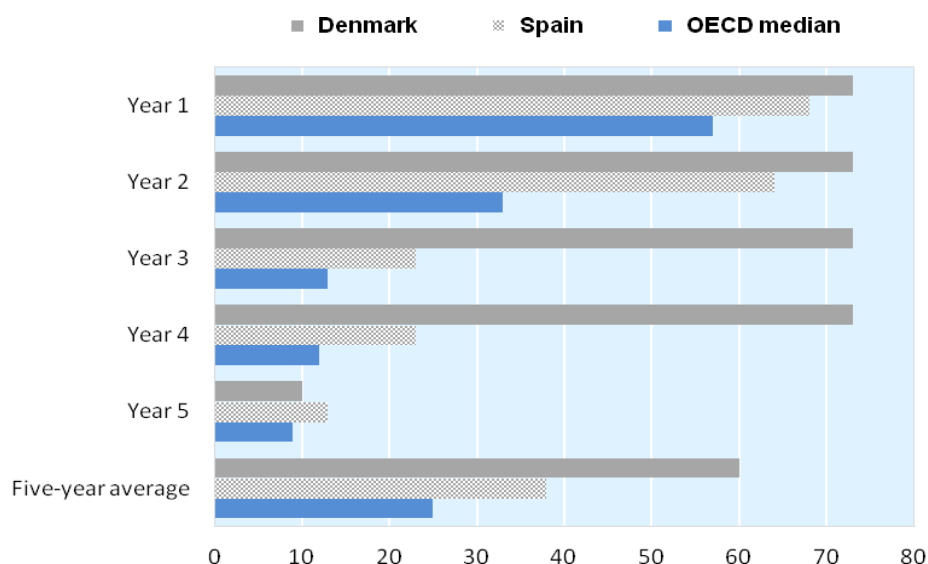


### *Unemployment benefits and training also play an important role*

As already mentioned, Denmark is seen as the reference point for the “flexicurity” model, defined as the balance between the flexibility needed for firms in adjusting their labour input and the quest for security for workers.<sup>29</sup> The “flexicurity” approach facilitates hiring and firing decisions while also providing efficient re-employment services, such as intensified job-search assistance, and income support to workers in the event of lay-off. Indeed, Denmark stands out as having a relatively generous unemployment insurance scheme. Among OECD countries in 2007, the five-year average net replacement rate of the unemployment benefit was above the Danish level only in Norway, Belgium and Austria. Interestingly, Spain has similarly generous unemployment benefits (Figure 23), standing above the OECD median, though they drop significantly below the level of Danish support after the third year of unemployment and, as shown earlier, have very different impact on the labour market.

**Figure 23. Generosity of unemployment benefits**

Net replacement rates at different points during an unemployment spell, 2009<sup>a</sup>



a. Calculations consider cash incomes (excluding, for instance, employer contributions to health or pension insurance for workers and in-kind transfers for the unemployed) as well as income taxes and mandatory social security contributions paid by employees. To focus on the role of unemployment benefits, they assume that no social assistance or housing-related benefits are available as income top-ups for low-income families. Any entitlements to severance payments are also not accounted for. Net replacement rates are evaluated for a prime-age worker (aged 40) with a “long” and uninterrupted employment record. They are averages over 12 months, four different stylised family types (single and one-earner couple, with and without children) and two earnings levels (67% and 100% of average full-time wages). Due to benefit ceilings, net replacement rates are lower for individuals with above-average earnings.

Source: OECD Tax-benefit Database.

29. Job and employment security are however different. Whereas the former refers to protecting and maintaining a given job, the latter relates to remaining employed but possibly in a different job (firm, function, location, etc.). A “flexicurity” system is more oriented to ensure employment security.

The third pillar of the Danish model rests on the priority given to “active labour market policies”.<sup>30</sup> Reforms initiated in the mid-1990s, changed the Danish system from a passive focus on income maintenance to a more active one, whose priority is that the unemployed seek jobs and gain the qualifications needed to fill new positions rather quickly. The main ingredients of the policy changes were: i) a shortening of the benefit period (although at four years it remains among the highest in OECD countries); ii) eligibility for benefits can no longer be re-gained by participation in activation measures; and iii) implementation of activation requirements (so-called workfare<sup>31</sup>) in the unemployment insurance scheme (as in the social assistance scheme).

As a result, public expenditures in “passive” labour market measures dropped from 3.5% of GDP in 1997 to 1.2% in 2008 in Denmark. This is just below the 1.35% devoted to active measures, which is among the highest in OECD countries (after Finland, France and Germany). Expenditures in active measures represent in Spain less than 1% of GDP, even if this ratio has increased slightly in recent years (Table 4).

Training is a key component of active labour market policies. In Denmark the participation in training is high, with participants stocks as a percentage of the labour force being among the highest in OECD countries (2.2% in 2009 compared to 1.3% in Spain and 1.4% for the OECD average). Moreover, training is important regardless of the employment status and plays a very important role in Danish society. As a result, participation in lifelong learning is also very high. With 30% of the population aged 25-64 years participating in education and training in 2008, according to Eurostat data, amongst EU countries this share was only higher in Sweden. In Spain, 10.4% of the population was involved in lifelong learning activity (compared to 4.7% in 2003), slightly above the EU-25 average of 9.6%. In Spain, however the lack of on-the job training, mainly among temporary workers, is seen as one of the elements creating significant productivity gaps compared to other EU countries (Sala and Silva, 2009).

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30. Active labour market policies (ALMPs) characterize the Scandinavian countries of the post-war period. The aim – the achievement of full employment in times of economic restructuring – has made this policy a key indicator in classifications of welfare states. ALMPs involve both universal and selective instruments, such as general economic policy and actions aimed at specific regions, industries, and groups of people. Educational programmes, training and other competence-building activities have been the main strategies for labour force adjustment. Even the so-called “passive” part of labour market policies, income maintenance schemes, promotes the goal of full employment insofar as recipients of unemployment benefits are required to actively seek work. It is precisely this linking of social security systems with labour market services that underlies the ‘activity approach’ in Scandinavian welfare policy. (ILO, 2001)
31. Literally, the term “workfare” means “work-for-your-welfare,” sometimes formulated as “welfare-for-work.” Workfare programmes oblige able-bodied recipients to work in return for their benefits, often on terms inferior to comparative work in the labour market, and they are essentially linked to the lowest tier of public income maintenance systems. It is noteworthy that the “duty” and “activity” elements sometimes mislead observers into equating workfare with ALMPs. However, a duty to work at inferior conditions exclusively set by the last resort assistance system can be clearly distinguished from measures aimed at participation in the regular labour market (ILO, 2001).

**Table 4. Public expenditure and participant stocks in labour market programmes in 2009**

Programme categories and sub-categories	Denmark		Spain <sup>a</sup>		OECD unweighted average <sup>b</sup>	
	Public expenditure as a percentage of GDP	Participant stocks as a percentage of the labour force	Public expenditure as a percentage of GDP	Participant stocks as a percentage of the labour force <sup>c</sup>	Public expenditure as a percentage of GDP	Participant stocks as a percentage of the labour force
<b>1. PES and administration</b>	<b>0.45</b>		<b>0.16</b>		<b>0.16</b>	
<b>2. Training</b>	<b>0.30</b>	<b>2.20</b>	<b>0.19</b>	<b>1.28</b>	<b>0.18</b>	<b>1.37</b>
2.1. Institutional training	0.27	1.89	0.10	0.90	0.12	0.93
2.2. Workplace training	-	-	0.02	..	0.02	0.20
2.3. Alternate training	-	-	0.06	0.21	0.01	0.08
2.4. Special support for apprenticeship	0.03	0.31	0.01	-	0.02	0.30
<b>4. Employment incentives</b>	<b>0.19</b>	<b>1.05</b>	<b>0.27</b>	<b>9.88</b>	<b>0.10</b>	<b>1.42</b>
4.1. Recruitment incentives	0.19	1.04	0.17	6.45	0.08	1.05
4.2. Employment maintenance incentives	-	-	0.09	3.03	0.02	0.21
<b>5. Supported employment and rehabilitation</b>	<b>0.68</b>	<b>2.25</b>	<b>0.03</b>	<b>0.24</b>	<b>0.09</b>	<b>0.59</b>
5.1 Supported employment	0.53	1.92	0.03	0.23	0.07	0.43
5.2 Rehabilitation	0.16	0.33	-	-	0.02	0.12
<b>6. Direct job creation</b>	<b>-</b>	<b>-</b>	<b>0.10</b>	<b>..</b>	<b>0.07</b>	<b>0.43</b>
<b>7. Start-up incentives</b>	<b>-</b>	<b>-</b>	<b>0.10</b>	<b>1.74</b>	<b>0.02</b>	<b>0.22</b>
<b>8. Out-of-work income maintenance and support</b>	<b>1.29</b>	<b>4.27</b>	<b>2.92</b>	<b>11.64</b>	<b>0.95</b>	<b>6.40</b>
8.1. Full unemployment benefits	1.22	..	2.81	11.58	0.85	5.53
of which: Unemployment insurance	0.88	..	2.26	7.00	0.66	3.57
8.2, 8.3. Partial and part-time	-	-	0.05	0.06	0.06	0.86
8.4, 8.5. Redundancy and bankruptcy	0.07	-	0.06	-	0.04	0.01
<b>9. Early retirement</b>	<b>0.44</b>	<b>1.61</b>	<b>0.04</b>	<b>..</b>	<b>0.09</b>	<b>0.60</b>
<b>TOTAL (1-9)</b>	<b>3.35</b>	<b>-</b>	<b>3.82</b>	<b>-</b>	<b>1.67</b>	<b>-</b>
Active measures (1-7)	1.62	-	0.86	-	0.62	-
of which: Categories 2-7 only	1.17	5.50	0.69	13.16	0.46	3.82
Passive measures (8-9)	1.73	5.89	2.96	11.64	1.04	6.95

a. Categories 1 to 7 include expenditure by the autonomous communities and municipalities (additional to data published by Eurostat).

b. Estimates. For some years and countries, expenditure by sub-categories is estimated by applying the shares in the corresponding category calculated for countries with non-missing data. The coverage of sub-categories Placement and related services (1.1) and Benefit administration (1.2) is erratic hence only non-missing data are taken into account. Participant data are average values for countries with non-missing data for the particular sub-category, category or total.

c. Participant stock data do not include participants in municipal programmes.

Source: OECD ALMP database.

The degree of development of lifelong learning in each country also contributes to improved labour prospects. Indeed, there is strong evidence that trained workers have better employment prospects than those who have not received training (OECD, 2006). Training also facilitates transitions from temporary work arrangements into stable employment. However, access to training is unevenly distributed over the adult workforce, with those with lower education and skills participating much less in training.

Concerning labour market policy responses to the recent economic downturn in each country, Denmark has mainly focused its interventions on measures helping the unemployed find work and extending training. Apart from launching the 2010 labour market reform to create better jobs in the medium-term, Spain has also responded to the crisis with a broad range of short-term measures, ranging from increased training opportunities to measures oriented toward increasing labour demand and supporting income for job losers and low-income earners (Table 5).

Regarding special measures for the re-employment of trade-displaced workers, most OECD countries have not developed specific measures for that purpose, preferring to use

their universal programmes for the unemployed.<sup>32</sup> However, at the European Union level, a Globalisation Fund (EGF) was created in 2007 to help workers hit by the employment restructuring process derived from globalisation and increased competition from non-EU countries (Box 4).

**Table 5. Changes in labour market policy in response to the current economic downturn in Denmark and Spain**

Type of measure		Denmark	Spain
Labour demand	Job subsidies, recruitment incentives and public sector job creation		New funding for job creation in 2009 for public work jobs carried out by local authorities and improvement of incentives for hiring part-time (less than one third of full-time hours) so that they are proportionally superior to those for full-contracts.
	Reduction in non-wage labour costs targeted at new hires		Reduction in employer social contributions for first two years of employment for new hires in 2009 and 2010 of unemployed people with children in full-time permanent contracts. Reduction in social contributions for youth or disabled workers who start up a business or are self-employed.
	Short-time work schemes	Temporary introduction of greater flexibility into the work shaping scheme for one year.	Extension of subsidies for hiring part-time workers to those on short-time work arrangements.
Measures to help unemployed to find work	Job search assistance and matching	Right-and-duty to participate in ALMP (principal of mutual obligations) after 3 months of unemployment for those under 30 years of age (instead of 6 months until now). Automatic increase in funding for ALMPs as unemployment rise.	Increase in funding for PES for job search assistance and administrative reforms to increase effectiveness of PES.
	Job finding and business start-up incentives		Increase in payment for unemployed who use unemployment benefits to start-up a new business as self-employed and specially targeted programmes for older workers (+45 years of age) to start-up business as self-employed.
	Training programmes	Training measures will be targeted at less-skilled and directed towards areas with labour shortages. Unemployed will receive financial support for training during start-up in a new job to increase willingness of employers to hire workers who are not qualified at day one.	Increase in funding for PES for training programmes and vocational education.
Income support for job losers and low-income earners	Generosity of coverage of unemployment benefits		Temporary measures whereby short periods of time spent on reduced working hours or suspension of work contract will not reduce eligibility for unemployment benefits. Removal of waiting period for accessing unemployment benefits.
	Other payments or in-kind support		Postponement of mortgage payments for job losers.
	Fiscal measures for low earners		One-off reduction in tax burden and flexibility/postponement of taxes for workers in difficulties and small companies.
Other training measures	Training for existing workers		Unification of the systems of training for employees and unemployed and improvement in the quality of training.
	Apprenticeship schemes	Political agreement on increasing the number of apprentices in initial vocational training by improving economic incentives for companies to establish training placements and by allocating funds to information and campaign activities targeting companies at national and local level.	
		Political agreement on establishing adult vocational training centres by January 2010, providing stronger infrastructure for the local/regional provision of adult vocational training, targeting needs of low-skilled and skilled labour and improving coordination with providers of general adult education.	

Source: "Addressing the Labour Market Challenges of the Economic Downturn: Summary of Country Responses to the OECD-EC questionnaire", Background paper for Chapter 1, OECD (2010), *Employment Outlook 2010*.

32 See OECD (2005) for a review.

#### Box 4. Denmark and Spain's use of the European Globalisation Adjustment Fund

The European Globalisation Adjustment Fund (EGF) was set up in 2006 to provide support to redundant workers in the EU affected by major structural changes in world trade patterns. EGF was designed to reconcile the overall long-term benefits of open trade in terms of growth and employment with the short-term adverse adjustment to globalisation, particularly, for the most vulnerable and less skilled workers. The rules of the Fund were amended in June 2009 to respond more effectively to the global financial and economic crisis.

Member states can apply for the EGF when: a) over a period of four months at least 500 workers are made redundant in an enterprise including those in suppliers or downstream producers; b) in a period of nine months, particularly in SMEs, 500 workers are redundant in a region or two contiguous regions at Nomenclature of Units for Territorial Statistics II (NUTS II) level; c) when the previous two requisites are not met but exceptional circumstances are in place and redundancies have a serious impact on employment and the local economy.

Since 2007, EGF received 63 applications to help near 70 000 workers (10 679 in 2007, 5 435 in 2008, 28 909 in 2009 and 23 520 until June 2010). Of those, 16% came from Spain (targeting more than 9 000 workers) and 6% from Denmark (targeting around 3 000 workers), most of them in 2009 and 2010. One third of the total applications were related to the automotive and the textile sectors (accounting for 17.5% and 15.9% of total applications covering 14 000 and 11 000 workers respectively), followed by the printing industry sector and the mechanical and electronic sectors.

The requested amounts to the EGF per worker varied considerably among EU countries (from EUR 16 335 in France to 511 in the Czech Republic). Denmark requested an average amount per worker around EUR 7 500, the double than Spain.

However, of the total applications made by Member States, by mid-2010, only one third have received the payment from the Fund, whose total payments amount to EUR 131.7 million. Of those, Spain has received EUR 16.5 million mainly from applications made in 2007. In Denmark, as most applications were done after mid-2009, no payment has been received yet from the Fund. This shows that, unless the process accelerates, this instrument remains marginal and not very effective for the firms and the displaced workers concerned.

Source: European Commission (2010a), Statistical Portrait of the EGF 2007-2010.

## 5. Conclusion

Globalisation and greater integration of emerging economies into the world economy have increased trade volumes and reshaped trade flows in most OECD countries. Spain and Denmark are no exception. Although the vast majority of their trade is predominantly conducted within the European Union, the EU share has decreased in the last decade, being replaced in part by the increasing share going to emerging economies. Since the mid-1990s, more than two thirds of the change in import intensity observed in Denmark and Spain has been associated with increased trade with middle- and low-income developing countries, a group of countries that includes China and India.

Although as members of the European Union, Spain and Denmark share the same trade policy, their experience with trade and labour market outcomes have been very different. In terms of trade, these differences affect many dimensions, but most notably their trade volumes, market sizes and product specialization, as well as the internationalisation process of their respective firms. The difference in the size of the two economies, as well as their historical development and contrasting productive structures also contribute to varying outcomes. While taking into account such differences, it is nonetheless instructive to compare the two in order to gain insights into which strategies work best at this level of development and which supplementary policies allow countries to make the most of trade openness, while mitigating potential adverse effects of labour market adjustment.

Inside the European Union, Spain and Denmark represent two different approaches regarding their institutional settings and labour market policies, resulting in divergent employment outcomes and labour adjustment processes. Whereas in Denmark labour adjustments have been facilitated during the past decade by the combination of labour market flexibility and high levels of protection for workers (the “flexicurity” model), this has been less the case in Spain. In Denmark, a well-educated workforce, a high degree of job mobility and flexibility for firms regarding their hiring and firing decisions, combined with relatively generous unemployment schemes and effective activation and training policies, have favoured rather quick labour market adjustments.

By contrast, the labour market reaction to the economic cycle has been more volatile in Spain than in any other EU country (both in expansion and in contraction periods) and structural unemployment levels have also been higher on average. In addition, the structure of the Spanish economy (until now very dependent on tourism and the construction sector), combined with institutional labour market rigidities, has favoured an extensive use of temporary contracts in the past decade and a progressive segmentation of the labour market between permanent and temporary employment. The spreading use of the latter (often directed to low-skilled workers with a high proportion of immigrants and youth) has favoured that this segment of the society is bearing the brunt of the recent labour adjustments due to the economic crisis. This is perceived as a considerable challenge for human capital accumulation and productivity growth. The labour market reforms approved by the Spanish government during 2010-11 aim to change this pattern. The reforms intend to reduce labour market duality between permanent and temporary contracts as well as increase and improve labour market flexibility. The results will depend on the quality of implementation, whereby there are some positive signs, though more work remains to be done. Also, in the long-run, some observers note that it may be more effective if the temporary and permanent contracts converge further, for instance, by introducing a single permanent contract for new hires with severance pay that is low initially, but increases gradually with seniority (OECD, 2010a).

Labour market institutional settings matter when it comes to facilitating labour adjustment and employment reallocation. However, the existing structure and productivity outcomes in the economy are also crucial for adapting to changes. The emergence of new countries as major players in international trade and increased globalisation may require greater flexibility and innovation from countries such as Denmark and Spain, if they are to adapt in a positive manner. To face these challenges and reduce the adjustment costs, a regulatory environment that emphasises competition can help the shift of resources from struggling industries into more profitable ones. Other key factors appear to include well-developed capital markets, product and labour market flexibility coupled with continuous training of the workforce. Better education and training of the workforce as part of activation measures, combined with supportive welfare policies, facilitate the redeployment of workers into new jobs and thereby help to smooth labour market transitions and reduce the adjustment costs.

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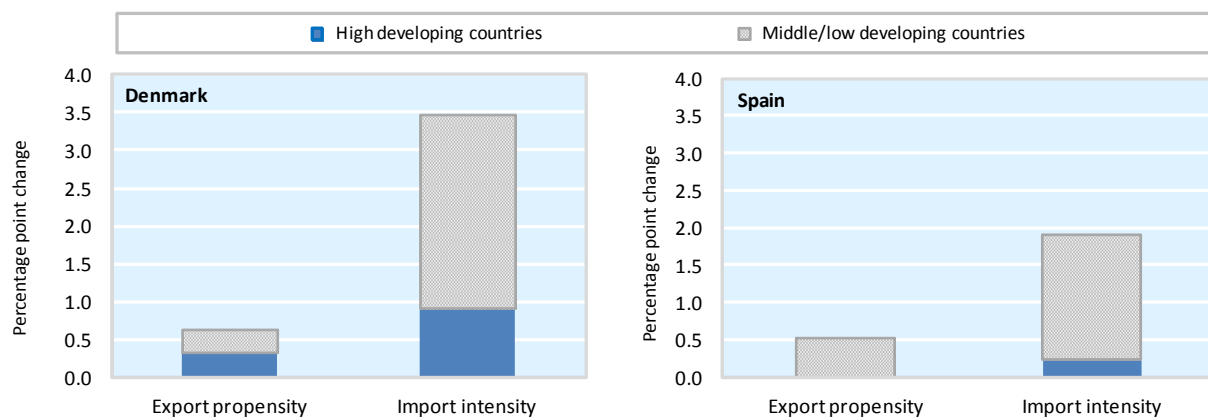
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## ANNEX

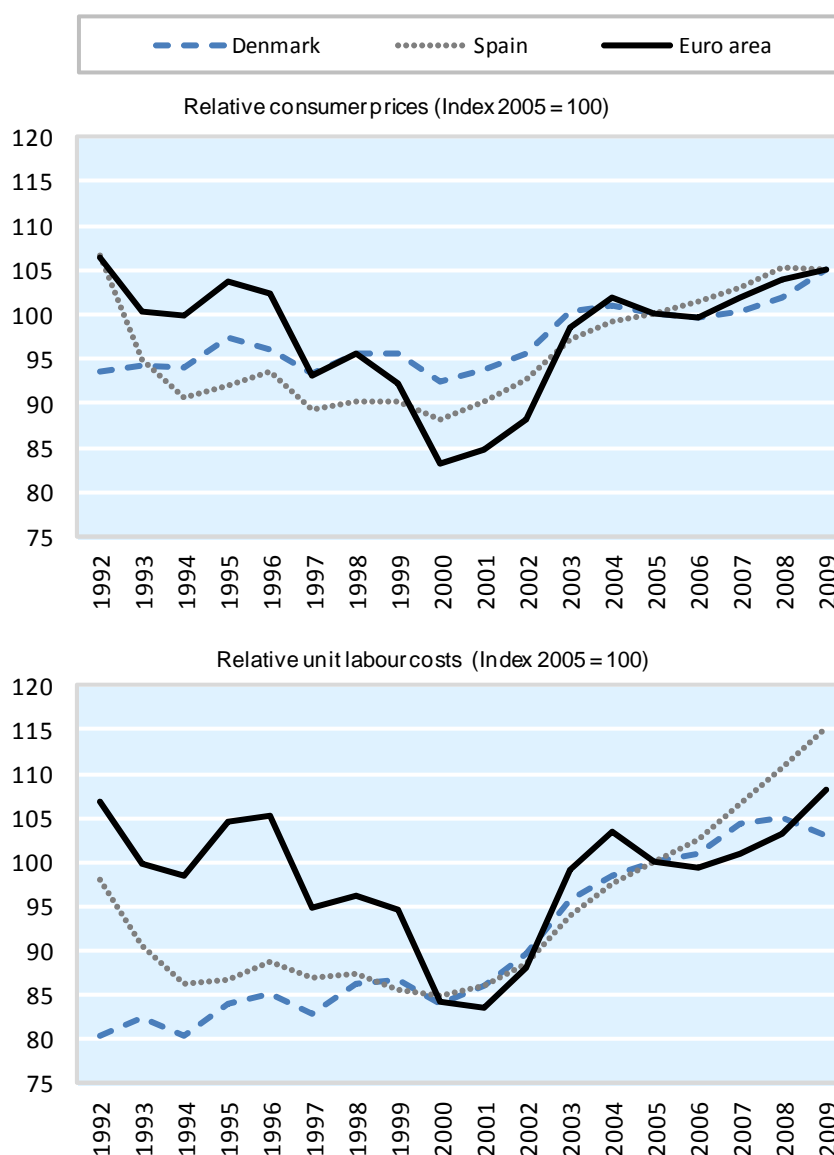
**Figure A.1. Change in import intensity and export propensity with developing countries, 1995-2009<sup>a</sup>**



a. Import intensity is total imports in terms of GDP and export propensity is total exports in terms of GDP.

Source: UNCTAD Database.

Figure A.2. Competitiveness position of Denmark and Spain

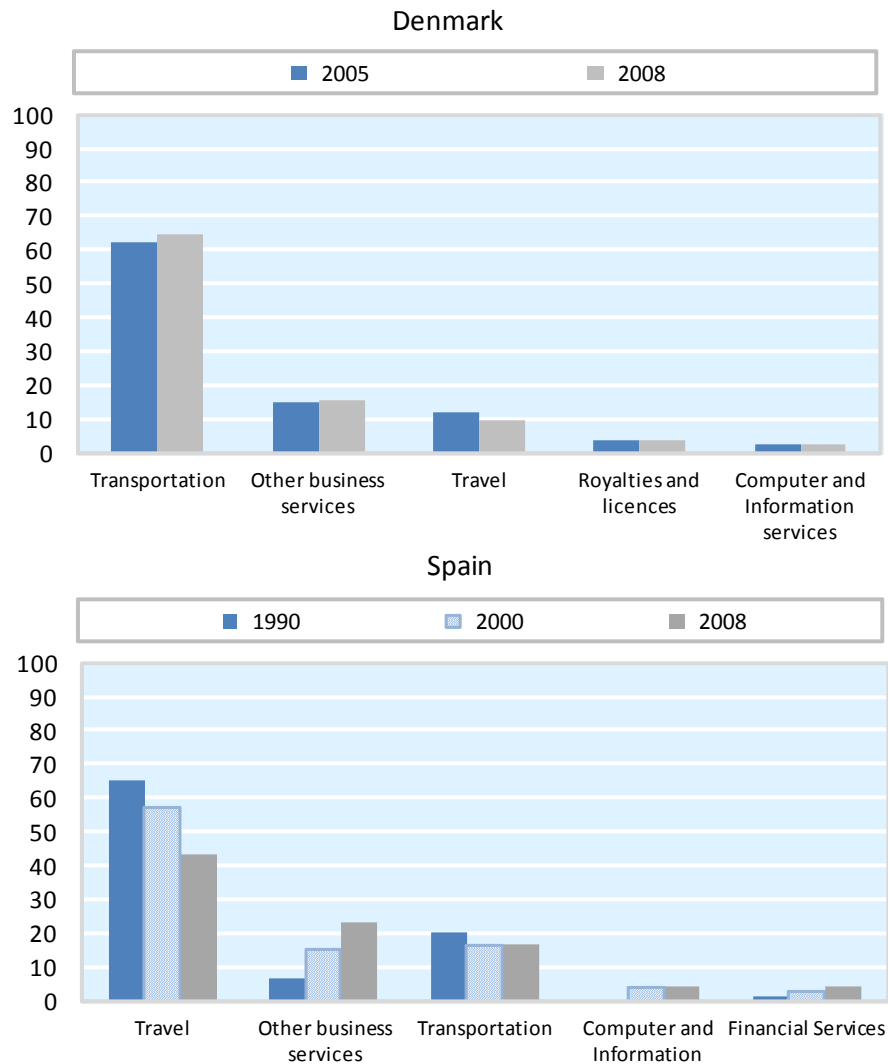


*Note:* Competitiveness-weighted relative consumer prices in dollar terms. Competitiveness-weighted relative unit labour costs in the manufacturing sector in dollar terms. Competitiveness weights take into account the structure of competition in both export and import markets of the manufacturing sector of 42 countries. An increase in the index indicates a real effective appreciation and a corresponding deterioration of the competitive position. For details on the method of calculation see Durand, M., C. Madaschi and F. Terribile (1998), "Trends in OECD Countries' International Competitiveness: The Influence of Emerging Market Economies", OECD Economics Department Working Papers, No. 195. See also OECD Economic Outlook Sources and Methods ([www.oecd.org/eco/sources-and-methods](http://www.oecd.org/eco/sources-and-methods)).

Source: OECD Economic Outlook 87 database.

**Figure A.3. Trade in services**

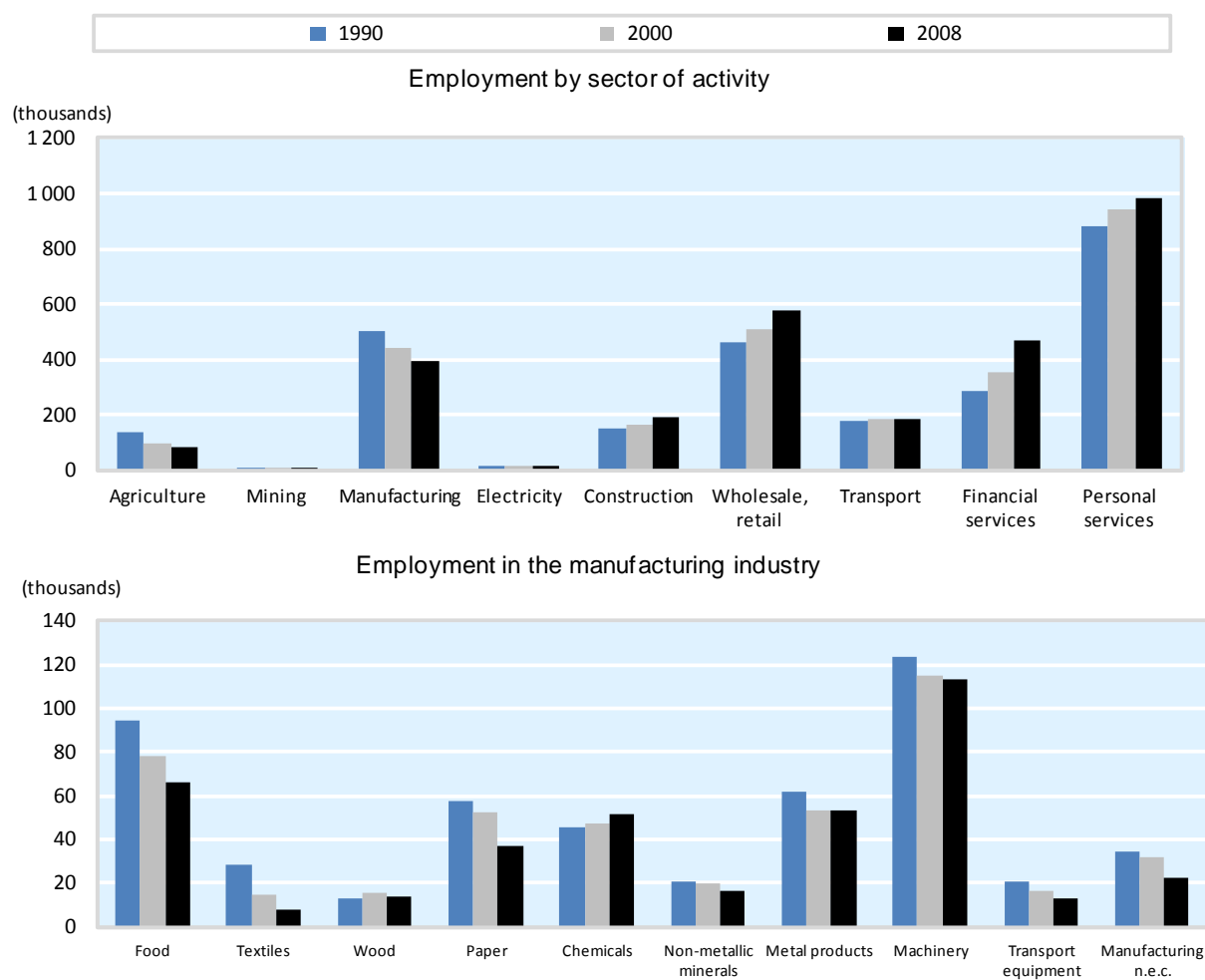
Share of exports by category



Source: OECD Trade database.

**Figure A.4. Total employment by sector of activity in Denmark, 1990-2008**

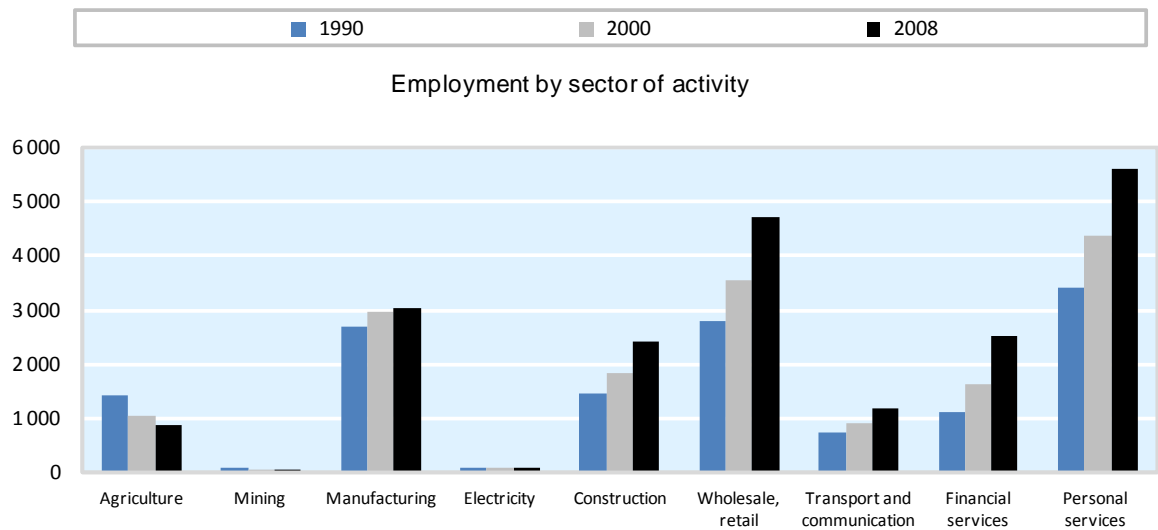
In thousands



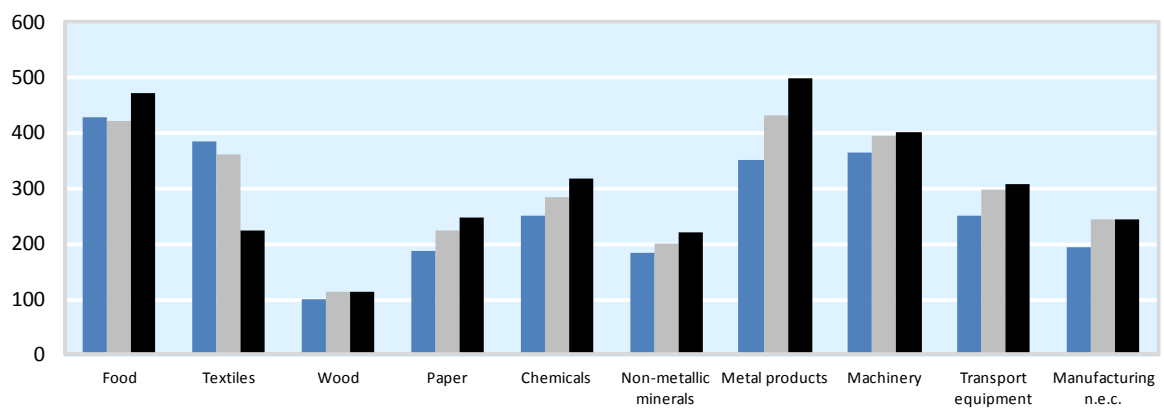
Source: OECD STAN Database.

**Figure A.5. Total employment by sector of activity in Spain, 1990-2008**

In thousands



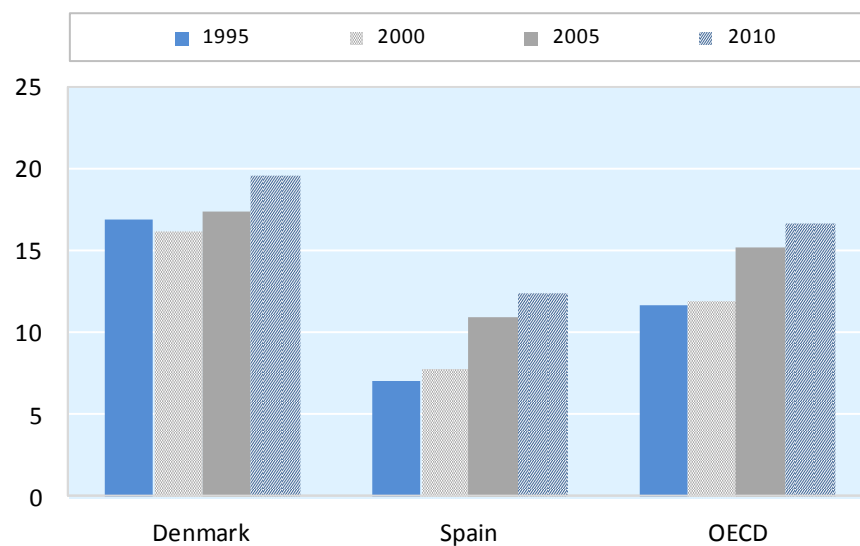
Employment in the manufacturing industry



Source: OECD STAN Database.

**Figure A.6. Working-time in Denmark and Spain, 1995-2010**

Share of part-time employment to total employment (in percentage)

*Source:* OECD Database on full-time part-time employment.