

OECD Perspectives: Spain

Policies for a sustainable recovery



October 2011



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Foreword

The recovery of the international economy from what has been the worst global economic and financial crisis in recent decades remains fragile. Although the pace varies across countries, the global economy has generally been held back by high levels of public- and private-sector debt and the way financial markets have reacted to difficulties in solving these problems.

The impact of the crisis has lasted longer in Spain than in most OECD economies. Its main effects included the collapse of the construction sector, higher unemployment and a larger government deficit.

Spain has made substantial headway in addressing these challenges. The recent constitutional reform is an example of leadership and responsibility in taking firm action to face down the markets and issue a clear and unequivocal sign of long-term budgetary discipline. Among other measures, the government has taken decisive steps to reform the country's savings banks; and it has also improved conditions for competition and introduced major reforms in the education system. Major steps have also been taken to reform labour-market institutions. The new measures will have clear significant benefits for social cohesion, public finances and the private sector's ability to invest and create jobs once again.

In the longer term, sustained growth will require policies to increase productivity, encourage greater investment in innovative sectors and channel investment into human capital. Among other challenges, climate change needs to be tackled; and new sources of "green growth" must be pursued in areas such as energy, construction and transportation. In the final analysis, this means continuing to diversify the productive fabric and maintaining support for processes such as the internationalisation of Spanish enterprises. This is Spain's only path to modernisation and to being competitive and creating well-being for its citizens.

Fortunately, the country has several major strengths that it can draw upon in meeting these challenges. Its banking sector has withstood the collapse of the housing market well; the expansion of education coverage has outpaced that in most OECD Member countries; major social policies have reduced inequality; and efforts to improve public health have borne fruit. These achievements give the country a firm base on which to consolidate its recovery and make better use of its economic potential.

This paper provides an update on policies that the OECD believes can contribute in six areas that are crucial for a lasting improvement in Spain's future: public finances; the labour market; the pension system; innovation; the environment, green growth and climate change; and education.

The OECD will continue working with and for Spain in the design and implementation of policies and solutions that will help address these challenges, many of which are common to all OECD Member countries. By pooling efforts and sharing experience, the OECD and Spain can design and implement better policies for a better life.

Angel Gurría
Secretary-General

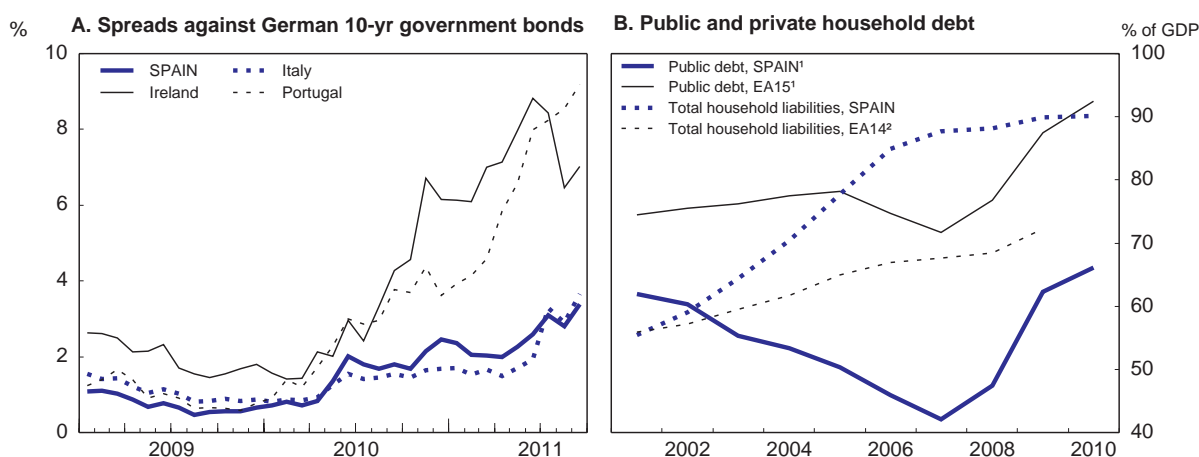


Economic growth and public finance

Recovering from the global economic and financial crisis has proceeded more slowly in Spain than in other OECD economies, and unemployment has stayed above 20%. The need to reduce high levels of business and household debt, compounded by the large government deficit, will continue to dampen the recovery, while the construction sector will continue to be held back by the oversupply of housing. In the context of the European debt crisis, the risk premium on Spanish government debt remains high; and, funding costs for the private sector could also rise significantly if the crisis persists. To deal with this scenario, reinvigorate the recovery and help create jobs, policies are needed to improve investor confidence, boost exports and diversify economic activity and the productive fabric.

In view of the current macroeconomic situation in the euro zone, the most immediate needs are to restore confidence in the banking system and to take decisive action to reduce fiscal deficits. Spain has made significant progress on both fronts. In the medium term, the priority is to spur competitiveness and productivity by reforming labour and product markets. Here too, measures are being implemented, but the results will not be immediate.

Recent financial developments



1. National accounts definition.

2. EA15 excluding Luxembourg, weighted average.

Source: OECD, Main Economic Indicators and Economic Outlook 89 databases

Consolidating public finances

The national government deficit was brought down from 11.4% to 9.2% of GDP in 2010, in line with the target; and the government has put an ambitious consolidation programme in place, mostly involving expenditure cuts, to reduce the deficit progressively to 6% in 2011, 4.4% in 2012 and 3% of GDP in 2013. Nonetheless, measures to fully achieve these targets still need to be defined. It is also important to require regional governments that have failed to meet their deficit targets to take further measures and strengthen supervision of their finances.

The constitutional reform introduced to ensure compliance with the EU deficit and debt targets, and to set limits on structural deficits for each level of government from 2020 onwards, sends an important message to markets on the government's commitment to financial sustainability. Moreover, regional

governments have to introduce expenditure rules similar to those adopted previously by central and local governments, which limit expenditure growth to the economy's trend growth rate. The pension system reform approved in 2010 helps to substantially dampen the expected growth in spending.

Another issue that could contribute to fiscal consolidation is tax revenue. The government has already taken major steps on this front, including increases in personal income tax (IRPF), particularly for the top brackets, and in VAT, which nonetheless remains below the levels in most European OECD countries. Restoration of the wealth tax contributes to the consolidation effort without harming economic activity, while also generating greater equity. In general, increases should be concentrated in the least distorting taxes, for example by restricting preferential VAT rates and eliminating exemptions, or moving towards environmental taxes.

Strengthening confidence in the banking sector

Spain's domestic banks, especially the savings banks (cajas), are heavily exposed to the housing sector. They have made substantial progress in recognising losses while maintaining significant buffers to absorb further write-offs. The Banco de España has made detailed information available on individual banks' exposure. The government has also raised capital requirements and stands ready to meet shortfalls with further capital injections. The savings banks are undergoing a major reform process, which has involved mergers, restructuring and the elimination of legal barriers for them to raise external capital, notably by transferring their lending business to subsidiaries quoted on the stock market. Their governance structure has also been improved. This reform process needs to be implemented in full, ensuring that the capital requirements are met soon and nonviable banks wound down.

To help speed up absorption of the unsold housing stock, it is important to continue supporting policies that promote rental activity, which remains at a very low level in Spain. Public funds to support the rented housing market could be provided in the form of a cash benefit for low-income households.

Strengthening competitiveness and increasing productivity

The major labour-market reforms approved last year are essential to strengthen the recovery, create more jobs and generate stable and sustained incomes for all households, and help redistribute resources across the economy. Nonetheless, further steps are needed in redesigning the collective bargaining system and the inflation-indexing of wages. Fast-track arbitration procedures have been introduced, and firms are being given greater flexibility. Nonetheless, those that do not have their own agreements remain obliged to adopt the outcomes of collective bargaining processes, even if they are not represented in them.

Although the last decade saw significant reforms in product markets, there is still room for deepening. Establishing more dynamic product markets is essential for strengthening Spain's international competitiveness. Most recently, entry barriers in professional services have been reduced, and the independence, accountability and powers of sector regulators have been strengthened in several network sectors. Steps have been taken to make greater use of competitive tendering in public transport services and to lower the costs involved in starting a business. However, regional regulations continue to obstruct entry for large retailers. Entry barriers in professional services are also still needlessly high.

Key OECD Recommendations

- **Continue improving fiscal sustainability.** Measures for achieving government deficit targets need to be specified, and the least distorting taxes should be raised where necessary. In particular, the use of preferential VAT rates could be reduced, VAT exemptions removed and environmental taxes increased. Budgetary rules for regional governments should be reformed.
- **Complete the restructuring of the savings banks.** Further reduce the presence of regional and local governments in savings bank governance and activity. Support them if further capital injections are needed.
- **Push reform of collective bargaining further.** Firms should not be forced to adopt collective wage bargaining outcomes. Social partners should abandon wage-indexing clauses once and for all.
- **Boost productivity growth.** Product-market reform needs to be deepened by strengthening competition in retail trade and professional services.

Employment

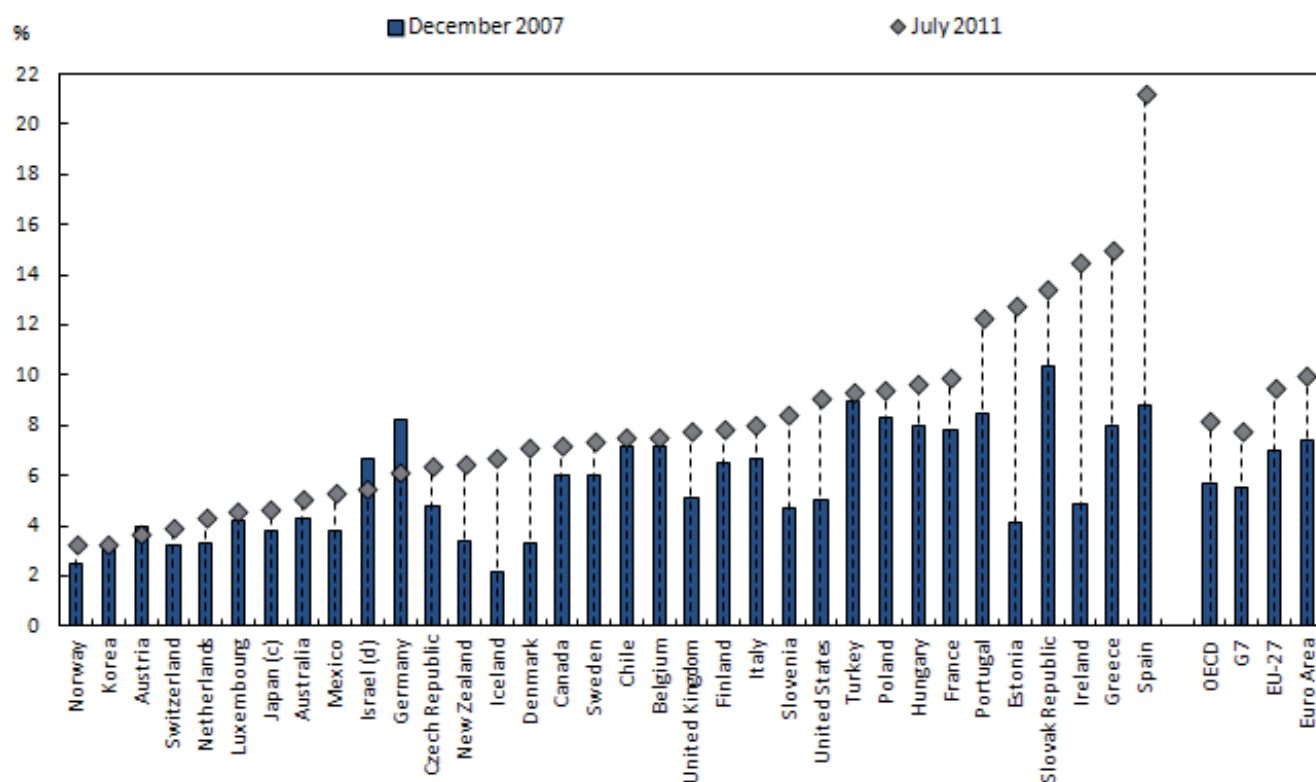
Unemployment in Spain has surged; a total of 2.2 million jobs have been lost since the crisis took hold in late 2007, and the unemployment rate has more than doubled to 21.2% of the workforce, the highest level in the OECD (where the average is 8.2%). The currently unsettled macroeconomic environment suggests that joblessness is likely to remain very high in Spain over the next few years.

The wide disparities in unemployment rates between the different autonomous communities shows that, in addition to persevering with legislative reform, it is important to continue promoting the renewal of the productive fabric and redirect economic activity toward sectors with greater job-creating capacity.

Spain has embarked on a series of labour-market reforms, in which the key measures include: regulatory changes to address labour-market duality; promoting internal flexibility (the possibility of adjusting wages and working hours instead of laying-off workers); offering subsidies to firms hiring young people, lower- skilled workers, women and the long-term unemployed; and improving labour-market intermediation and the delivery of employment services.

Unemployment rates

Percentage of the labour force, December 2007 to July 2011^{a, b}



Notes:

a) March 2011 for Greece; May 2011 for Turkey and the United Kingdom; June 2011 for Chile, Norway and OECD-34; 2011 Q2 for Estonia, Iceland, Israel, New Zealand and Switzerland (OECD harmonised unemployment rate data are not available on a monthly basis for the last five of these countries).

b) Harmonised unemployment data for Iceland, Israel, New Zealand and Switzerland are not available on a quarterly basis, but, for comparison purposes, the quarterly averages are reported on a monthly basis. December 2007 corresponds to 2007 Q4 for those countries.

c) The results for Japan excludes three prefectures (Iwate, Miyagi and Fukushima) struck by the Great East Japan Earthquake, where the survey operation has been suspended since March 2011.

d) The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Source: OECD Main Economic Indicators Database.



Prioritise reducing long-term unemployment

The proportion of the unemployed who have been out of work for more than 12 months grew from 21% in early 2007 to 40% at the end of 2010. Long spells of unemployment reduce employment prospects even when the economy starts to recover, since workers' skills may become obsolete and employers may prefer to hire candidates with recent work experience.

Long periods of unemployment have also put increased pressure on the income-support "safety net" for the unemployed. Over 9% of Spain's working-age population is receiving unemployment benefits (either unemployment insurance or unemployment assistance). However, the rise in the number of people receiving benefits has lagged behind the growth of unemployment, in part because more and more of the unemployed have exhausted their entitlement to unemployment benefits and need to rely on other forms of support which may put them at risk of poverty. Social-assistance payments, at around 30% of the median wage, are typically well below the poverty line and, for single parents, they are among the lowest in the OECD.

The measures introduced in the last few months place special emphasis on long-term unemployment, particularly through subsidies or the hiring and strengthening of job search and placement services. It is also necessary to intensify the application of requirements giving entitlement to unemployment benefits.

Improve employment prospects for youth, immigrants and temporary workers

Segments of the labour force that were already at a disadvantage — young people, immigrants and temporary workers — have borne the brunt of rising unemployment, largely as a result of their low skill levels. Immigrant unemployment has climbed to 31.9%, nearly thirteen percentage points higher than in the native-born population. Among 15-24 year-olds, unemployment has surpassed the 45% mark, far above the OECD average of 16.7%.

One reason why young people and immigrants have been so badly affected is that both groups are disproportionately hired on temporary employment contracts. Government proposals to diminish dualism in the labour market are welcome. The government also might consider introducing a single labour contract for permanent employees — one that would cut back the overly generous compensation rights that permanent workers currently enjoy. As part of the proposed reforms to collective bargaining, Spain could also consider making it easier for firms to opt out of regional- and sector-wide contracts. This would allow companies to apply longer probationary periods for permanent contracts, and it would increase incentives to hire young and inexperienced workers in permanent jobs.

Greater emphasis on active labour-market policy

The recent increase in funding for active labour-market policies (ALMPs) and public employment services will provide much-needed resources to address high unemployment. Yet the quality and effectiveness of redeployment services also need to be improved. Part of the problem lies in the lack of clarity in the distribution of responsibilities between the central and autonomous government authorities. It is essential to create adequate incentives to encourage investment in best practices by the regions. Existing programmes need to be efficiently supervised to identify clearly what works and what does not, and why. Emphasis needs to be placed on training and the updating of competencies and skills, specially targeting the most productive sectors and those with the best prospects.

Additional efforts are also needed to help unemployment benefit recipients to find a job and thereby reduce the risk of long-term exclusion and joblessness. Spain should make it compulsory to register on a placement waiting list as a precondition for receiving unemployment benefits; and applicants should

be subjected to a thorough interview. Attention should also be given to ensuring that participation in active labour-market policies is compulsory after a specified period of unsuccessful job search. Making more use of private placement agencies, as the government proposes, could enhance the capacities of the Public Employment Service and expand hiring capacity. Spain could benefit from experience in this field in other OECD countries, such as Australia, the Netherlands and the United Kingdom.

Key OECD recommendations

- **Reduce the dualism in the labour market.** Consider introducing a single permanent employment contract with lower severance entitlements, together with stricter enforcement of regulations on temporary contracts.
- **Place greater emphasis on activating the unemployed and upgrading their skills.** Offer them more support and require them to take part in labour-market activation programmes, particularly after a long period of job search. Stress continuous training and the need to keep skills and qualifications up-to-date and adapted to market needs, both present and future.
- **Improve the job prospects of the most vulnerable groups.** Place emphasis on policies and incentives specially targeting young people, immigrants and workers.
- **Strengthen services for lower-income groups,** especially families with dependents, to avoid the adverse consequences of a deterioration in their economic situation.

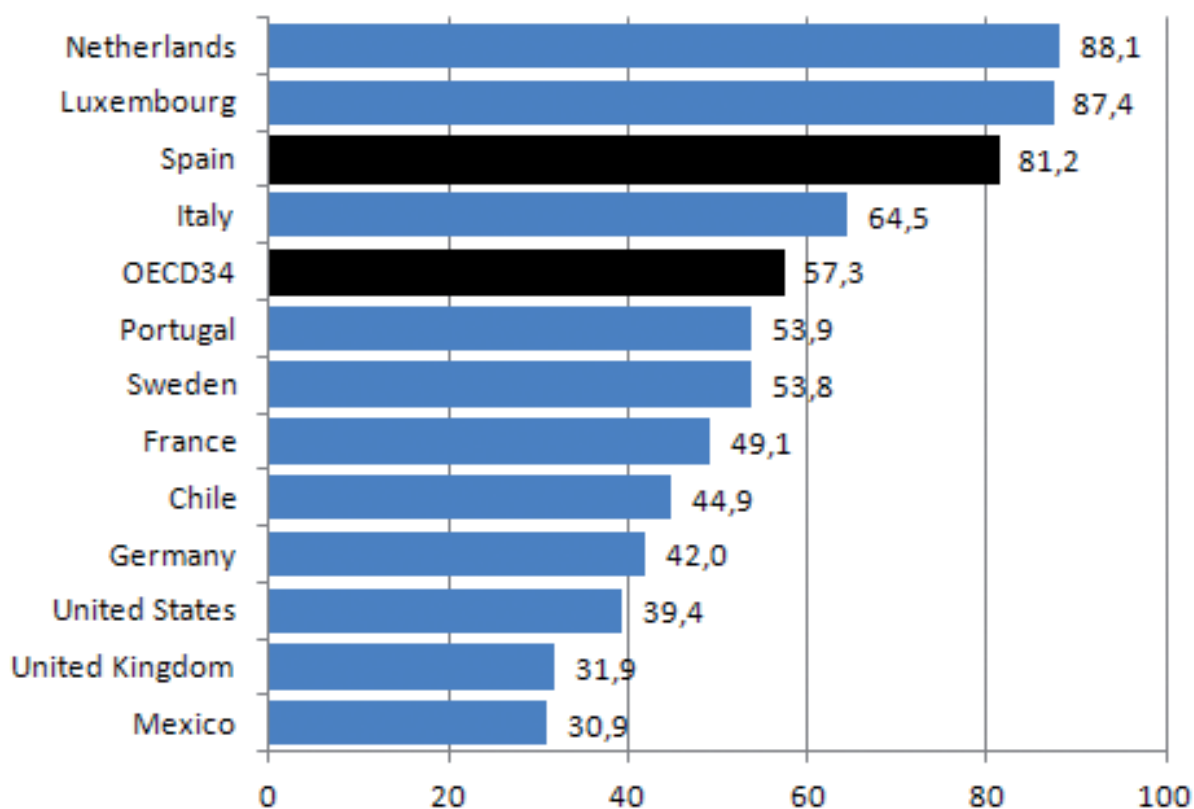


Pensions

Spain's population is ageing at an accelerating pace; life expectancy at birth is now among the OECD's highest, while fertility rates are near the lowest. In 2050, there will be fewer than two persons of working age for every pensioner, compared to the current ratio of 4 to 1.

The projected pension replacement rate for Spain — i.e. the value of the pension benefit relative to earnings when working, calculated for a full-career worker entering the labour market in 2008 — is 81.2%, significantly above the OECD average (57.3%). That said, wages are generally below the OECD average. The recent reform approved by the government in early 2011 is a welcome step in the right direction towards significantly closing the gap with the OECD average.

Pre-tax pension replacement rates in selected OECD countries, average earners



Source: OECD (2011) Pensions at a Glance 2011: Retirement-income systems in OECD and G20 countries and OECD Pension models..

Ensure the sustainability of the pension system and adequate incomes in old age

The combination of rapid population ageing with a generous pension system poses major challenges. In Spain, pensions currently account for 9% of gross national product (GNP), which is slightly above the OECD average but almost equal to it when demographic data are taken into account. As the years go by, the pension reform passed in 2011 will significantly improve the system's financial sustainability. In the long run, public expenditure in this category will decrease to the equivalent of 3.5% of GNP.

It is essential to guarantee adequate income and benefits for older adults. Although poverty rates among older people are higher than in the rest of the population in all OECD countries, the difference is particularly accentuated in Spain. This is the result of two factors: the high proportion of pensioners who receive only the minimum benefit because they only contributed for short periods; and the fact that rapid economic growth and rising real incomes in Spain prior to the economic and financial crisis left many older people behind.

The rise in minimum pensions, of between 12% and 19% in real terms between 2004 and 2008, has made it possible to reduce poverty among older adults. It is also important to note that home ownership, which is much more widespread in Spain than elsewhere, partly mitigates the income gap between pensioners in Spain and those in other OECD countries.

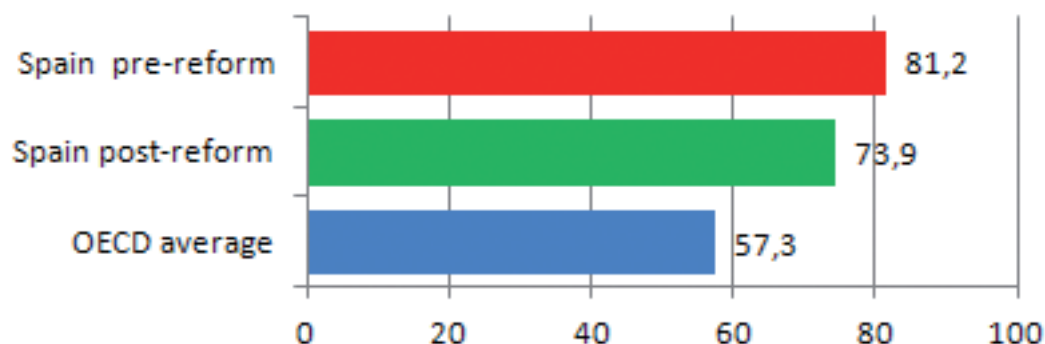
Lengthen working life

One effective policy option for dealing with the problem of old-age poverty, while at the same time keeping the pension system sustainable, would be to extend the length of working life. Although the official retirement age in Spain is 65, in practice the average retirement age in the workforce was around 61.4 years for men between 2002 and 2007. The employment rate among 55-64 year-olds was only 43%, compared to an OECD average of 52%. In many cases, workers can take early retirement at age 60 and there are no strong incentives for persons to keep working beyond 65.

In this context, the recent pension reform, approved by the government in January 2011 after reaching agreement with social partners, is an important step towards achieving sustainability. The reform raises the minimum legal retirement age from 65 to 67 while at the same time strengthening the link between contributions and benefits. Moreover, under the automatic review mechanism that will take place every five years — which is essential to secure long-term sustainability and adequate future benefits — further parameter adjustments are foreseen after 2027, to reflect changes in life expectancy at age 67.

The results of an OECD simulation, not including adjustments to life expectancy, suggest a reduction of the replacement rate to 73.9% (on the OECD's standard assumptions of 2.5% price inflation and 2% real earnings growth). Although this is about 7 percentage points below the pre-reform level, the estimated replacement rate remains well above the OECD average.

Gross pension replacement rates for new labour-market entrants, average earners



Source: OECD (2011) Pensions at a Glance 2011: Retirement-income systems in OECD and G20 countries and OECD Pension models.

Boost private pension coverage while improving regulations

Private pensions are a major alternative for diversifying sources of retirement financing, all the more so in light of the expected effects of the latest reform. Although Spain's private pension system was set up over 20 years ago, it is one of the least developed in the OECD area, and its accumulated assets represent only about 7% of GDP, well below the 60% average in the rest of the OECD. While private pension coverage is relatively high in comparison with other countries -it extends to 54% of the working



population- participants' contributions remain very low. Around 66% of participants contribute less than €300 a year. The low-level of contributions to private pension systems until now may also be a reflection of the generous benefits offered by the public system.

In order to boost the coverage of private pensions the authorities could consider channelling current incentives more effectively (for example, through a system of “matching” contributions by employers and government). It could also establish regulations to protect private pensions better from financial-market volatility (for example, by introducing life-cycle investment strategies).

Key OECD Recommendations

- **Guarantee the long-term stability of public pensions** by raising the effective retirement age as planned.
- **Restrict eligibility for early retirement** by introducing incentives in the pension calculation formula that would encourage people to work longer.
- **Expand people's contributions to private pensions** through better incentive mechanisms and improving the framework for shielding private pensions from the effects of financial volatility.

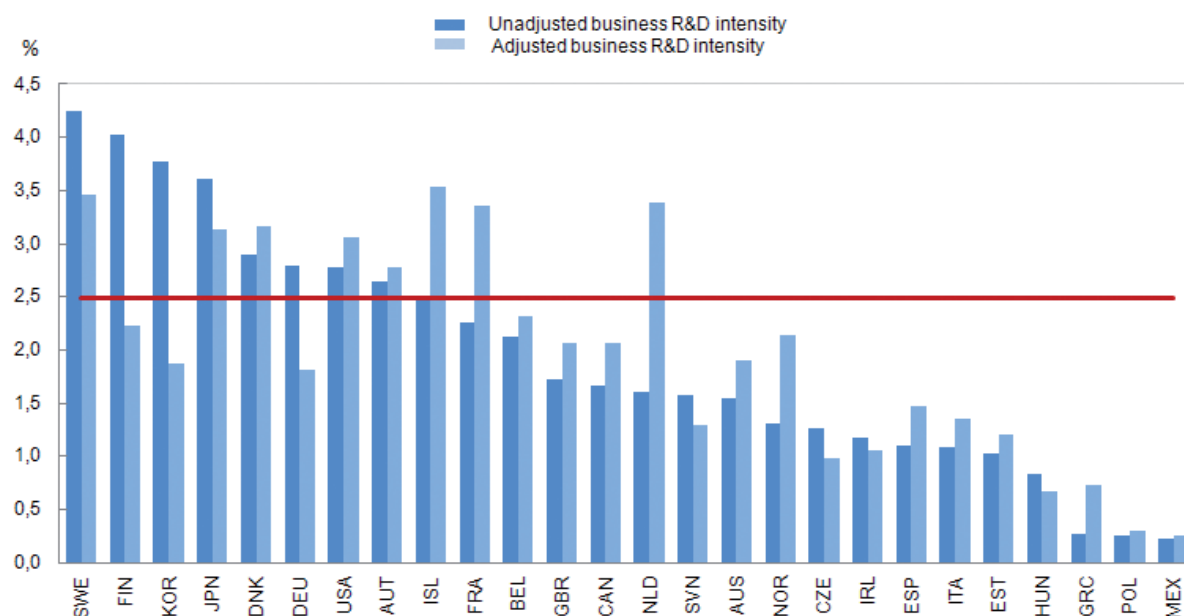
Innovation

Harness innovation for stronger and sustainable growth

The Spanish government and the business sector have shown a strong commitment to innovation as a means of diversifying the economy and steering it towards more solid and sustainable growth. In 2010, the Spanish government launched a new State Innovation Strategy with the aim of boosting innovation in the economy by 2015 by increasing the number of firms engaging in R&D activities, as well as levels of R&D spending and employment in medium- and high-technology sectors. The introduction of the new Science, Technology and Innovation Law last May will be a major step in the progressive co-ordination and internationalisation of Spain's scientific system.

Although Spain's gross R&D expenditure has grown from 1.12% of GDP in 2005 to 1.38% of GDP in 2009, it remains well below the OECD average of 2.3% of GDP. At the same time, private investment remains muted. This is only partly explained by the country's industrial structure. Data from the OECD's new Science, Technology and Industry Scoreboard 2011 (September 2011) shows that adjusting for industrial structure would yield hypothetically higher business R&D intensity for Spain and other countries (1.47% as a share of added value in industry instead of 1.1% for the non-adjusted business R&D intensity), but this would nevertheless fall short of the OECD average of 2.49%.

Business R&D intensity, adjusted for industrial structure, 2008



Source: OECD Science, Technology and Industry Scoreboard 2011 (Forthcoming). Calculations based on the Structural Analysis (STAN) and ANBERD Databases, July 2011; OECD, Main Science and Technology Indicators Database, June 2011.

Improve the environment for innovation

A culture of entrepreneurship and innovation needs to be developed, in particular through the creation of financial vehicles to foster entrepreneurship and give a higher international profile to innovative activities. Government regulation and procurement can help create demand and markets for innovation, especially in emerging sectors such as the "green economy" and biotechnology, where OECD data on patents show Spain has strengthened its position. Still, there is also room for improving the dissemination and application of existing innovations and technologies in more traditional sectors of the economy.

Entrepreneurship is also a key driver of innovation, contributing to the development or improvement of products, services and processes. Communities that have put their faith in entrepreneurship have not only made progress in modernising the productive fabric and restructuring activity, but are also creating more and better-quality jobs. The private sector's contribution to innovation depends on



having an adequate support policy in place, as well as a suitable regulatory framework and a highly skilled workforce. Barely 20% of Spain's working-age population has received training in how to start a business. There is still much room for improvement in this area.

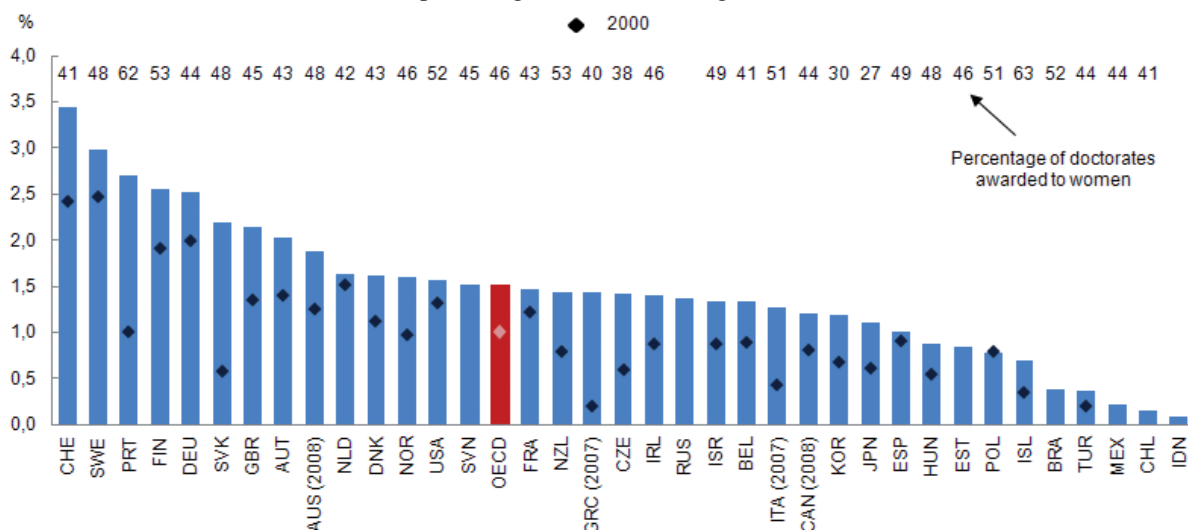
While in-house R&D remains important for innovation, collaboration and external cooperation, often referred to as “open innovation”, can also help firms access a much broader range of ideas and technologies. OECD data shows that few Spanish companies, especially in the SME segment, are currently involved in collaboration projects related to innovative activities.

Strengthen the science and technology base and forge links between science and industry

Spain has benefited from ongoing efforts to reform the research system (universities and public research organisations) with a view to increasing and diversifying its output. The capacities of universities and public research organisations to recruit highly qualified researchers from non-EU countries now need to be strengthened. The possible creation of a State research agency, as envisaged in the new law, would make it possible to channel resources in this direction, while helping to retain talent and promote mobility. Tools and resources for managing research and strategic planning need to be more widely disseminated. Persons with doctorate-level qualifications are key players in research and innovation. In Spain, the percentage of PhDs is very low compared to other OECD countries and has not improved since 2000.

Graduation rates at doctorate level, 2007

as a percentage of the relevant age cohort



Source: OECD Science, Technology and Industry Scoreboard 2011 (Forthcoming). Data based on Education at a Glance 2011: OECD Indicators and (2009) Education at a Glance 2009: OECD Indicators, OECD, Paris.

Supporting research, development and innovation in firms and promoting links between science and industry remains one of the key challenges for modernising the Spanish economy.

The government has taken steps to simplify business access to R&D promotion schemes, including funding, and involving different ministries and regions; but more could be done in this area. The capacity to manage and transfer technology should be improved through greater networking and consolidation among the many existing intermediaries. In addition, public investment and procurement should be enlisted to modernise urban infrastructure (transportation, water, sewage, energy) with a view to

stimulating innovation in the business sector. The focus of the new State Innovation Strategy (E21) on pre-commercial public procurement is a welcome development in an attempt to stimulate innovation from the demand-side.

Improve the governance and evaluation of innovation policy and foster apprenticeship policies

At a time of fiscal austerity, it would be worthwhile persevering with efforts to improve coherence and co-ordination among ministries and different levels of government, in order to give greater priority to investments aimed at achieving a critical mass in the domains of research, development and innovation. The OECD has been supporting these efforts to improve consistency between regional and national policies on innovation, through studies such as those produced for Catalonia and the Basque country (OECD Reviews of Regional Innovation: Catalonia (2010); and Basque Country (2011)).

The OECD's Working Party on Innovation and Technology Policy is developing a project on Smart Specialisation in Global Value Chains to help participating countries and regions identify priority areas for future investment in knowledge, through a process of "entrepreneurial discovery". Spain is contributing to the project with a case study of Andalusia and another of the Basque country. These initiatives should be multiplied and expanded to improve the management and evaluation of the policies implemented.

Key OECD recommendations

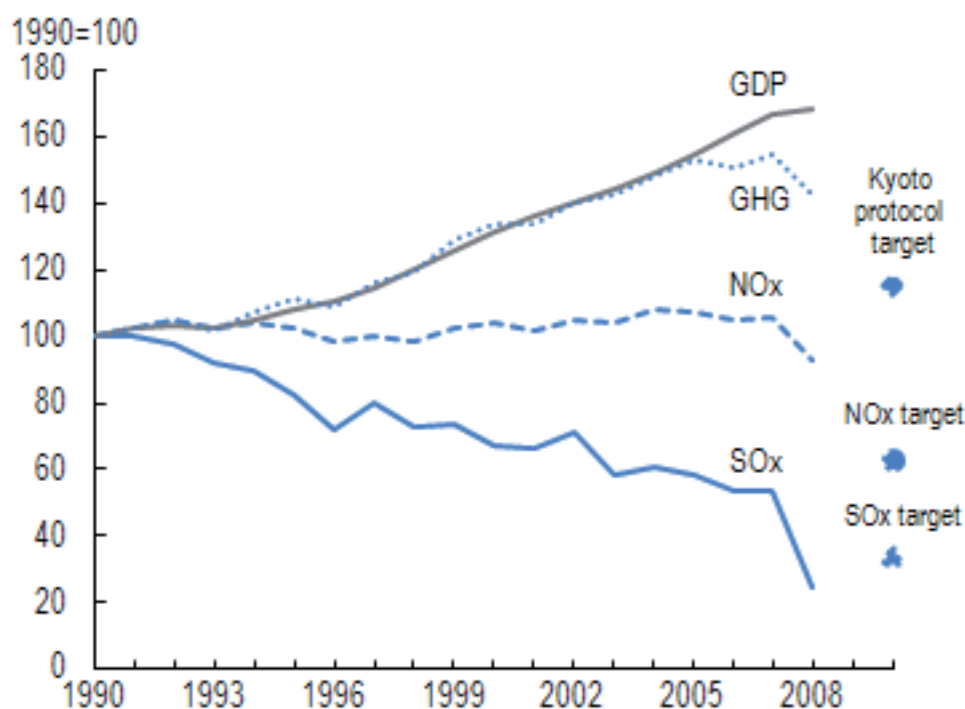
- **Strengthen the science and technology base**, focusing on excellence, and create a critical mass of knowledge and highly skilled human capital.
- **Increase support for R&D and innovation activities** and foster links between science and industry.
- **Promote mobility and strengthen human resources** for science and technology.
- **Improve the management and assessment of innovation policies..**



Environment, green growth & climate change

Spain has taken major steps to reinforce its environmental policy and institutional framework. It has made good progress in applying EU environmental directives and has made considerable investments in environmental infrastructure. As a result, sulphur oxide (SO_x) emissions decreased in the period 1990-2008. Although emissions of nitrogen oxides (NO_x) and greenhouse gases (GHGs) increased in the same period, they did so more slowly than GDP. More recently, emissions have fallen sharply, partly as a result of the crisis, but also thanks to the promotion of renewable energies. Nevertheless, further progress towards the targets for reducing emissions of these and other pollutants, in the long-run requires strengthened policies and better integration of environmental considerations into energy and transport policies.

Air pollution and greenhouse gas emissions, 1990-2008



Source: OECD Environment Directorate; UNFCCC.

Promoting green growth

In May 2011 the OECD launched a Green Growth Strategy which is fully consistent and aligned with the policies Spain has been implementing over the last few months. Shifting workers out of the crisis-hit construction and tourism sectors and into “green and ecological” jobs is a priority; and this transition needs to be accomplished by implementing well-designed policies. One of the main pillars of Spain’s green growth strategy is renewable energy, which in 2008 accounted for 7.3% of primary energy supply and now exceeds 10%. The goal is to increase this percentage to 20% by 2020. In late 2010, renewables were already generating 32% of the nation’s electricity.

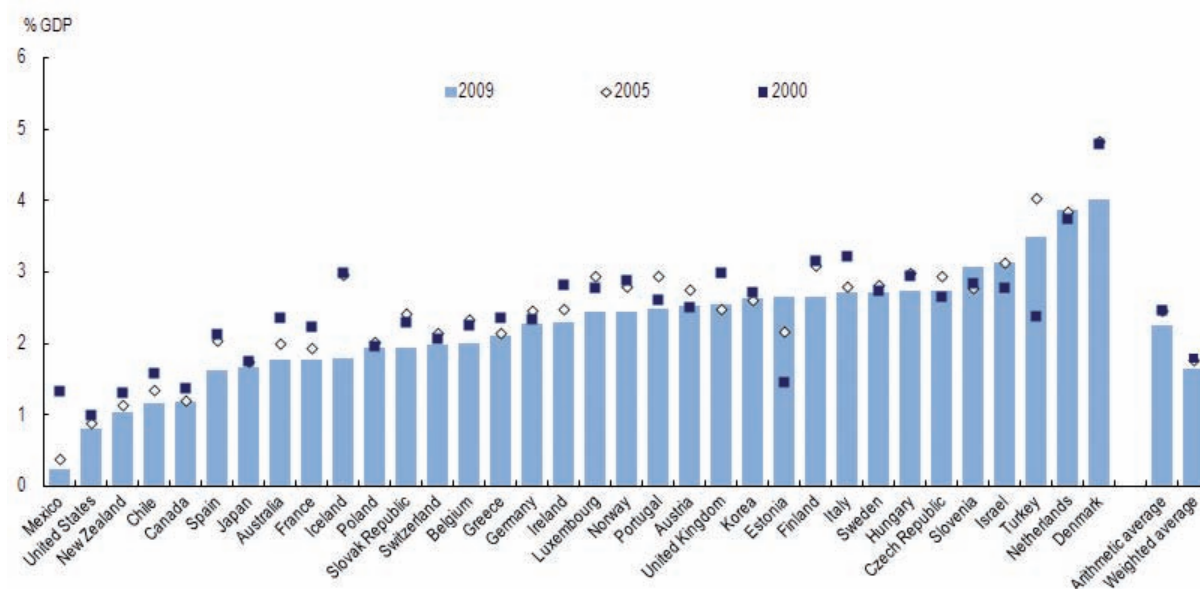
Hydropower is the dominant source of renewable energy in Spain, which is also a world leader in the generation of wind power. However, some of the challenges facing the energy sector came to the fore when solar power output plunged after state subsidies were withdrawn. Spain needs to establish a stable, transparent and cost-effective framework for renewable energy that is as technology-neutral as possible.

Climate change

Although it has made significant progress, Spain has not yet met its Kyoto target. Its greenhouse gas emissions in 2009 were about 30% higher than in 1990, substantially short of its Kyoto objective which was to cap growth at 15% between 2008 and 2012. Spain's growth in CO₂ emissions between 1990 and 2009 was among the highest in the OECD. Nonetheless, the emissions trend is positive, and investments in both energy efficiency and renewable energy and participation in the European Union Emissions Trading System are important elements that could help improve the results. Implementation of the sustainable mobility strategy, adopted in 2009, would also help reduce emissions in the transportation sector, which is an increasingly important source.

Spain could do more to reduce GHG emissions and improve energy security by reforming energy prices. Consumption and production subsidies for fossil fuels that harm the environment serve as an incentive for activities that produce carbon emissions. Abolishing these subsidies would reduce the overall cost of stabilising GHG concentrations and provide stronger incentives for the transition to new renewable-energy sources. Spain still subsidizes domestic coal production for power generation, although less heavily than in the past. Petrol and diesel prices in Spain are amongst the lowest in OECD Member countries, as are its tax rates on vehicle fuels. An increase in fuel taxes, and abolition of the differentiation between petrol and diesel, would also provide greater incentives for reducing emissions and using more fuel-efficient vehicles, while also contributing to fiscal consolidation on the revenue side.

Revenues from environmentally related taxes as a percentage of GDP



Source: OECD/EEA database on instruments for environmental policy, www.oecd.org/env/policies/database.

Protecting water resources

The droughts of recent years have highlighted some of the challenges facing Spain in managing its scarce water resources. Despite new legislation, water management reform and substantial investments, water resources are not being administered in a sustainable manner. Water quality in many rivers is sub-standard; groundwater is being used up faster than it is being replenished; competition for water use is intensifying between households, agriculture, energy, tourism, industry and many other demands; and climate change is making this competition fiercer. A cost-recovery approach to water pricing would help



rein in demand, allocating water to its highest-value use while also enabling water utilities to operate on a more sustainable financial footing. Any strategy for reforming water prices must take into account the necessary institutional changes as well as the reactions of social groups that may feel adversely affected.

Key OECD Recommendations

- **Raise fuel taxes and phase out subsidies to coal** so as to internalise environmental costs more effectively, and thus reduce energy demand and help reduce government deficits.
- **Provide targeted support for renewable energies in a transparent way** that is cost-effective and technologically-neutral, in order to set a stable policy framework that will encourage private investment in renewable energy while keeping prices affordable to consumers.
- **Effectively implement the recently adopted Sustainable Mobility Strategy** in order to reduce transportation emissions.
- **Develop a strategy to gradually raise prices** to cover the full costs of providing water, taking into account the attendant institutional changes and social impacts.

Education

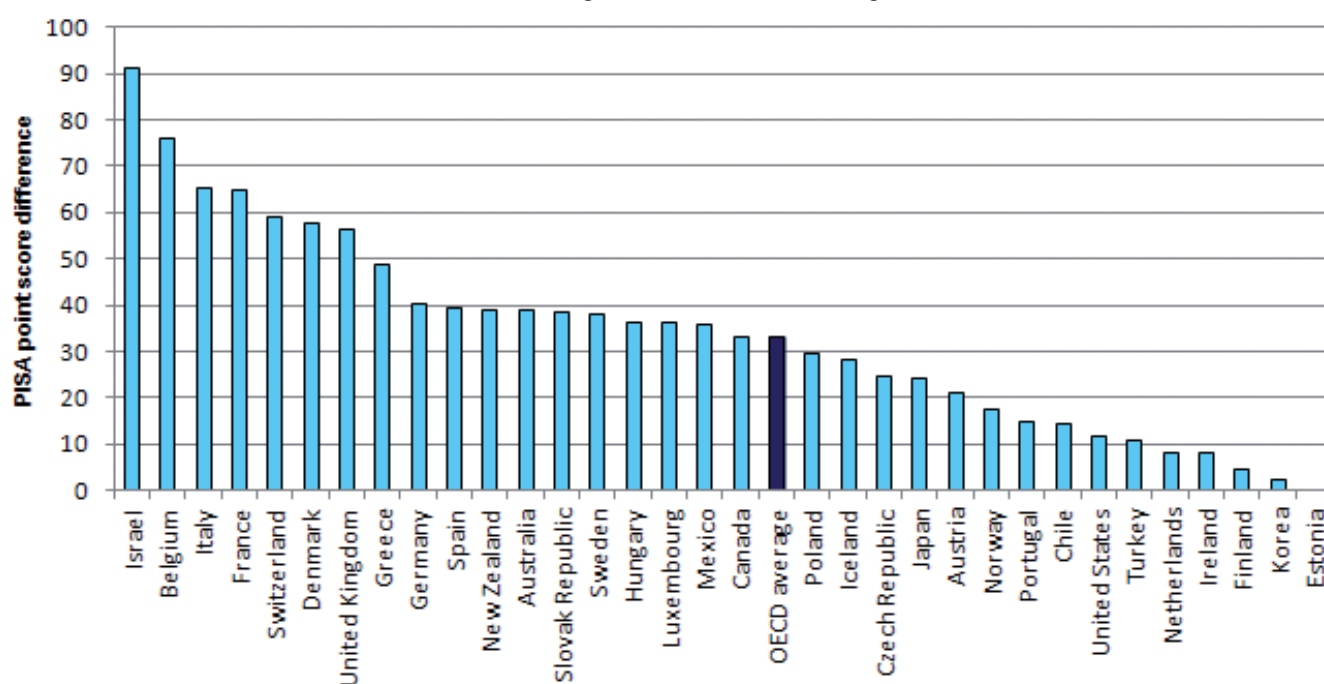
Improving educational outcomes must be a key element in the Spanish strategy for responding to the crisis, restructuring its productive model and addressing present and future challenges. Reforms in education could also help reduce inequalities by interrupting the intergenerational transmission of income differences based on access to education and training between parents and children. Although Spain has made impressive progress over the last 30 years in terms of coverage at all levels of education, there are still major challenges to be addressed. These include supporting quality in early childhood education, reducing drop-out rates, enhancing vocational education and training, and expanding capacity and resources in tertiary education.

Continue focusing on early childhood education and care

Investing in high-quality early childhood education and care can educate children, combat child poverty and help children overcome potential educational disadvantages stemming from the family environment in which they are growing up. The main additional measures in this age bracket include supporting parents and promoting female employment. Across OECD countries, 15-year-old students who attended pre-school for one year or more scored more than 30 points higher in PISA reading tests than those who did not, regardless of their socioeconomic backgrounds. In Spain, the score difference was even greater, close to 40 points.

Difference in student performance in reading between students who report having attended pre-school (ISCED 0) for more than one year and those without pre-school attendance

After accounting for socio-economic background



Source: OECD, PISA 2009

Spain increased its public spending on early childhood education and care considerably between 2003 and 2007 by re-allocating public expenditures from later stages of education. Participation rates in early childhood education and care at ages 3 and 5 are nearly universal, while rates among the under-threes are slightly above the OECD average. Further efforts to strengthen this level, especially for disadvantaged native and immigrant children, could focus on developing a structural regulatory framework (e.g. staff-child ratio, curriculum, pedagogy and guidelines, staff training levels and working conditions), parental and community engagement, data collection and results monitoring.



Address the high-school drop-out rate

Completion of upper-secondary education should be a minimum requirement, since this level provides the basic skills required to either enter the labour market or to proceed to further studies. Yet in Spain, 26% of students do not finish upper secondary education. Student drop-out at this level is the result of many factors, including the skills students have when they enter this level and the relevance it has to their daily lives as they move through the cycle. Other factors also contribute to the high drop-out rate, such as lack of apprenticeship opportunities. Strategies to support successful completion of upper-secondary education firstly need to prevent drop out early on, by consolidating the quality of primary and lower-secondary education and reducing the repetition rate. Specific policies include facilitating equivalence and possibilities for transfer between traditional secondary education and vocational training, as well as specific strategies to support those on the verge of dropping out. Helping schools be effective can also help reduce drop-out. Schools should be given more autonomy, particularly in terms of teacher hiring and decisions on curriculum content. At the same time, school principals need better training and support to motivate their teachers to do their utmost for the school and their students' academic achievement.

Evaluations and measurements of learning outcomes can also be key tools. Although some regional governments in Spain have introduced periodic centralised testing, this is not done at the national level to establish a benchmark for regional education policies and thus define appropriate methods. External assessment of schools should be expanded to all regions and used as a benchmark for rating performance, according to agreed objectives, and to identify priorities for the necessary actions.

Increase the attractiveness and efficiency of vocational education and training

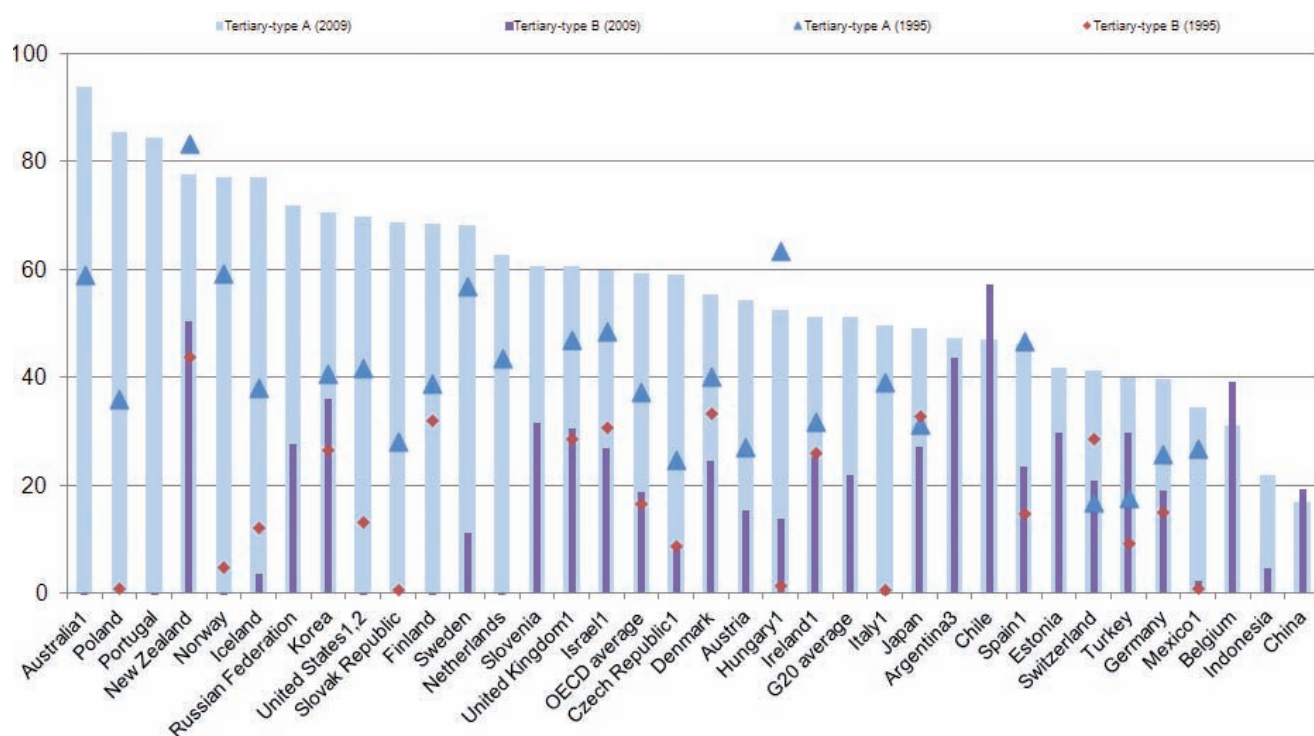
The recent royal decree approved in July to define the general organisation of vocational training is a major step forward in expanding the supply of teaching and making it more flexible, which will help make this track attractive. Many of its measures respond to recommendations made earlier by the OECD, although there is still room to improve the efficiency and quality of this branch of education.

One measure would involve giving schools greater responsibility and autonomy. Schools that offer vocational training should be assessed in light of their graduates' success in finding skilled jobs; and the results should be published. Incentives also need to be provided for professional workers to participate more in teaching tasks and the work of teachers, which would help bring the classroom closer to the world of employment. Another issue which business repeatedly complains about is the weakness of graduates' general skills, such as written expression and foreign languages. Greater emphasis on general aptitudes would also help graduates retain the capacity to find jobs later in life. The attractiveness of vocational education in the secondary school system is also diminished by the limited ease of transition from vocational training to tertiary education.

Improve access to tertiary education

Despite the exceptional progress made in recent decades and the major scholarship policy implemented during the crisis, there is still room for improvement in terms of access to university education. There are no public loans for most higher education courses and, although not excessively high in Spain compared to other OECD countries, universities charge fees, whereas there are no fees for post-secondary vocational courses. Although subsidies and other forms of support are available for students from low-income families, based on socioeconomic status, a student loan system would provide the necessary support for access to university education at a lower cost to the State.

Entry rates into tertiary-type A and B ^a education (1995 and 2009)



a. Type-A tertiary education refers to university education. Type-B tertiary education refers to shorter, vocationally oriented tertiary education programs

1. Year of reference 2000 instead of 1995.

2. In 2009, the entry rates for tertiary-type A programmes include the entry rates for tertiary-type B programmes.

3. Year of reference 2008 instead of 2009.

Countries are ranked in descending order of entry rates for tertiary-type A education in 2009.

Source: OECD. Argentina, China, Indonesia: UNESCO Institute for Statistics (World Education Indicators Programme). Tables C2.1, C2.2. See Annex 3 for notes (www.oecd.org/edu/eag2011).

Spain's 2015 University Strategy highlights the need to coordinate the systems in the various autonomous communities to modernise higher education. Despite the important objectives set, the universities' dependence on regional financing still restricts incentives to create educational centres of excellence that will command nationwide prestige. A national financing system needs to be set up to supplement regional financing and reward universities on the basis of teaching excellence. Many autonomous communities still do not take academic results into account when defining university financing. Linking funding to results would also make it possible to give greater contractual autonomy to the most outstanding universities.

Key OECD recommendations

- **Continue investing in early childhood education and care**, especially coverage for the most deprived sectors, and prioritise policies targeting quality, by focusing on staff issues, curriculum and data.
- **Increase the proportion of students graduating from upper secondary education** through early interventions in primary and lower-secondary and reducing repetition, and provide support for students on the verge of dropping out.
- **Make vocational training more attractive**, and support pathways into more academic tracks in upper-secondary and into tertiary education.
- **Help schools be effective by giving them greater autonomy**, especially in decisions on teacher hiring and course content and providing school principals with appropriate training and support.
- **Introduce a student loan system related to family income**, for all tertiary students including those in the vocational stream.
- **Link universities' financing more closely to outcomes** to give them greater independence, especially in setting pay and working conditions.

www.oecd.org/spain

