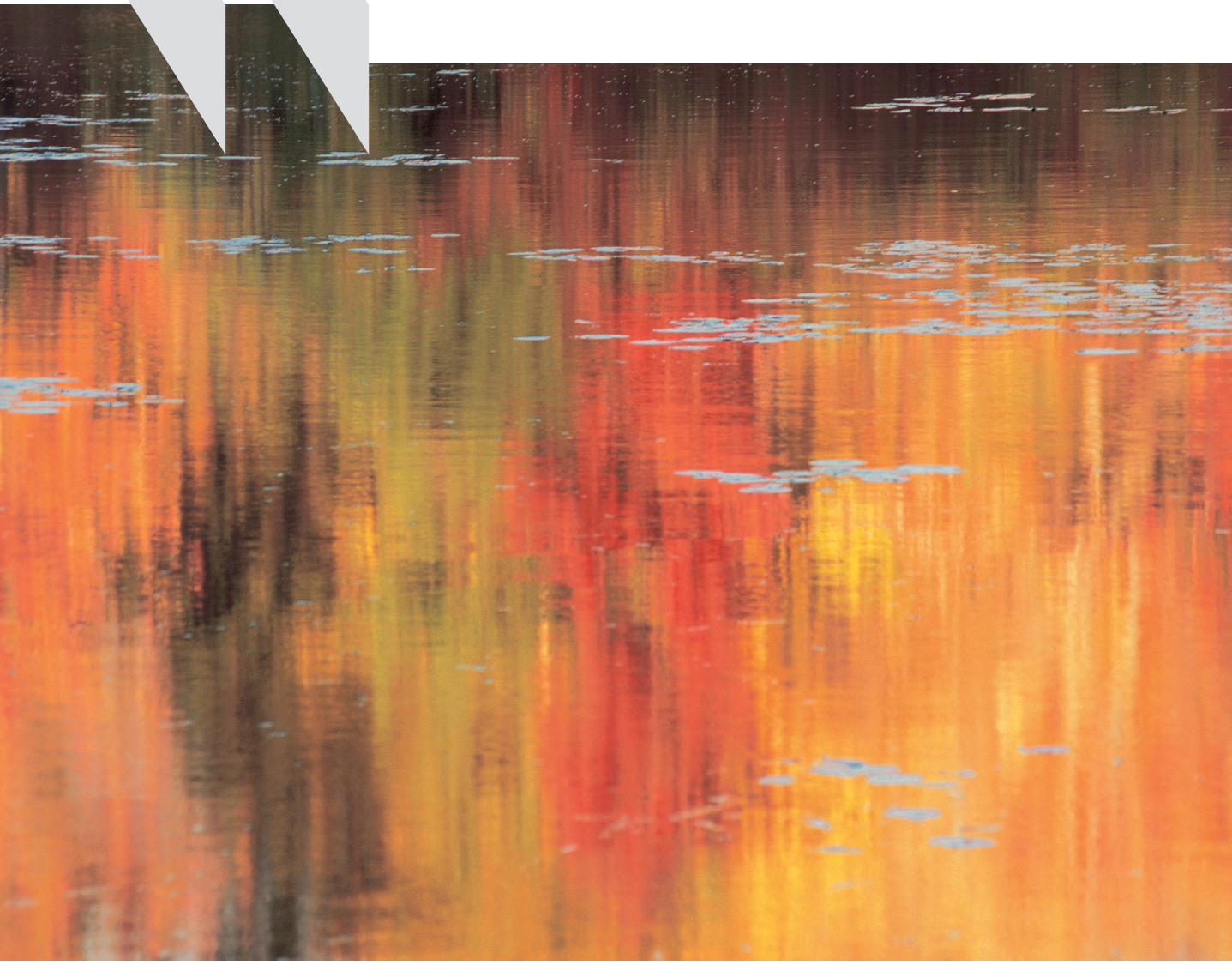
OECD Economic Surveys

PORTUGAL



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OECD Economic Surveys: Portugal 2010

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This Survey is published on the responsibility of the Economic and Development Review Committee of the OECD, which is charged with the examination of the economic situation of member countries.

The economic situation and policies of Portugal were reviewed by the Committee on 6 July 2010. The draft report was then revised in the light of the discussions and given final approval as the agreed report of the whole Committee on 23 July 2010.

The Secretariat's draft report was prepared for the Committee by Orsetta Causa, Álvaro Pina and Guida Nogueira under the supervision of Pierre Beynet. Statistical research was provided by Agnès Cavaciuti, Desney Erb and Sylvie Foucher-Hantala. The survey also benefited from external consultancy work.

The previous Survey of Portugal was issued in June 2008.

BASIC STATISTICS OF PORTUGAL, 2009

THE LAND

Land area (thousand km^2)	91.5	Major cities, resident population in thousands	
		Greater Lisbon	2 033
		Greater Porto	1 285

THE PEOPLE

Population (thousands)	10 638	Civilian labour force (thousands)	5 553
Number of inhabitants per km^2	116	Civilian employment in 2008 (thousands)	5 167
Net increase 2008-09 (thousands)	16.4	As a percentage of total	
		Agriculture	11.5
		Industry	29.4
		Services	59.0

PRODUCTION

Gross domestic product (billion EUR)	167.6	Gross fixed capital formation (per cent of GDP)	19.5
Gross domestic product per head (EUR)	15 757.4	Gross fixed capital formation per head (EUR)	3 071.8

THE GOVERNMENT

Public consumption (per cent of GDP)	21.1	Composition of Parliament	
General government total expenditure (per cent of GDP)	48.1	(Number of seats, September 2009)	
		Socialist Party (PS)	97
General government total revenue (per cent of GDP)	38.8	Social Democratic Party (PSD)	81
		Democratic and Social Centre – People's Party (PP)	21
Public debt (per cent of GDP)	76.3	Leftwing Block (BE)	16
		Unitarian Democratic Coalition (CDU)	15
		Total	230

FOREIGN TRADE

Exports of goods and services (per cent of GDP)	28.0	Imports of goods and services (per cent of GDP)	35.6

THE CURRENCY

Monetary unit: euro		Currency unit per USD, average of daily figures:	
		Year 2009	0.7198
		June 2010	0.8190

Executive summary

Portugal has made significant progress in modernising its economy over recent years. However, the already weak potential growth is likely to have been hit by the global crisis. Besides, widening sovereign spreads, if persistent, may put the economic recovery at risk. In these circumstances, the immediate challenge is to foster investor confidence by rapidly consolidating the public finances. The next challenge is to achieve a sustained reduction in the large external deficit. More fundamentally, Portugal needs to pursue policies to move to more dynamic and sustainable growth, which would help fiscal consolidation and narrow the large income gap with wealthier OECD countries.

- **Credible fiscal consolidation is the key to restoring investor confidence.** *The authorities' decision to frontload consolidation was appropriate and it is essential that the consolidation measures continue to be implemented swiftly. In this context, adopting a comprehensive medium-term expenditure framework supported by an expenditure rule would enhance the sustainability, and hence the credibility, of the fiscal adjustment. Nonetheless, as the required consolidation is sizeable, the government should stand ready to raise taxes further, focusing on those that are the least distorting to growth, such as consumption (VAT) and property taxes. Broadening the tax base should also help consolidation while reducing economic distortions.*
- **The sizeable current account deficit needs to be progressively reduced.** *Notwithstanding the ongoing policies to reduce energy dependence, a sustained correction of the external imbalance depends crucially on restoring competitiveness through improved productivity and rebalancing growth from consumption to exports. On the financing side, reliance on domestic savings, both public and private, must be enhanced. The adjustment can be speeded up by keeping public sector wages at bay to encourage economy-wide wage restraint and shifting taxation from employers' social security contributions to consumption (and property) taxes.*
- **Labour market dualism should be reduced.** *The authorities need to combat the segmentation of the Portuguese economy, which is reflected in a two-tier labour market where flexibility is essentially achieved at the margin. The authorities should further reduce employment protection legislation on regular contracts. Pursuing labour market reform should reduce the risk that the cyclical increase in unemployment and reduction in the labour force become structural. To foster labour supply while providing appropriate income support during unemployment spells, Portugal should revise the architecture of unemployment benefits (UB): UB duration and replacement rates should not be related to age and benefits should be a decreasing function of unemployment duration for all workers.*
- **Further structural reforms are necessary to restore productivity growth.** *The business environment needs to be further enhanced, with tax system simplification as one of the priorities, and the authorities should help develop transport infrastructure, while basing projects on transparent and careful cost-benefit analysis. Above all, ongoing efforts to upgrade the competencies and skills of the population should be consolidated. Better educational outcomes cannot be achieved without raising the equity of educational opportunities, which would help to close the educational gap while also reducing socioeconomic disadvantages. As the scale of the Portuguese training programmes has expanded, efforts should focus on evaluation tools, even more in the context of tight budget constraints. Portugal should reduce high rates of school-year repetition and further strengthen monitoring mechanisms of those at risk of dropping out.*

Assessment and recommendations

The fragile economic recovery needs to be buttressed by a comprehensive strategy to restore sustainable growth

In 2009, Portuguese GDP fell by 2.6%, a deep recession but nonetheless milder than in the euro area as a whole. Helped *inter alia* by the absence of a real estate bubble in the years preceding the crisis and low exposure to toxic assets, the financial sector has remained sound. However, growth prospects remain weak. Growth resumed in 2010 but it is set to remain sluggish in the medium run, as already weak potential growth is likely to have been hit by the global crisis. Portugal has not escaped recent financial market turbulence: debt has been downgraded and spreads have widened, putting at risk the recovery if the situation were to worsen. Against this backdrop, the immediate challenge is to restore investor confidence by rapidly consolidating public finances. The next challenge is to narrow macroeconomic imbalances, which is a necessary condition for a sustained reduction of the large external deficit, notably through improved competitiveness. Finally, Portugal needs to resume its convergence towards higher income-level countries. It stopped catching up from the early 2000s onwards and needs to nurture stronger potential growth. This will help to restore fiscal sustainability over the long run.

Rapid fiscal consolidation is the key to foster investor confidence

The fiscal consolidation strategy, aiming at bringing the deficit from 9.3% of GDP in 2009 down to 3.0% in 2012 and 2.0% in 2013, is appropriate. The decision taken by the government in May 2010, with support from the main opposition party, to frontload the consolidation path – the deficit target was adjusted to 7.3% of GDP in 2010 and then 4.6% in 2011 – was the right way to foster foreign investor confidence in the current circumstances of high market stress on sovereign risk, and it did help. *Hence, it is essential that the announced consolidation measures continue to be implemented as planned, even if cyclical developments turn out more adverse than now expected*. It is also important to maintain a strong political consensus for fiscal consolidation: *if acute market stress were to resurface, further fiscal tightening measures may need to be contemplated*.

The consolidation package is mostly expenditure-based, especially for the outer years, which is usually the most efficient way to achieve sustainable fiscal consolidation. Efforts should focus on those expenditure components where restraint is the least detrimental to potential growth. To ensure a long-lasting expenditure restraint, institutional arrangements should be improved. *Portugal should adopt a comprehensive medium-term expenditure framework, as envisaged by the government, supported by an expenditure rule*. This would help to improve the targeting of social transfers, which have been growing rapidly for some years, and, more generally, the efficiency of

public expenditures. Further, *the fiscal implications of pluriannual contractual spending commitments (e.g. Private Public Partnerships, PPPs) should be fully transparent*. Finally, *the authorities should ensure that expenditure restraint efforts are shared across all tiers of government*.

The necessary degree of fiscal consolidation requires measures on the revenue side also, but negative impacts on potential growth should be minimised. *Hence, revenue gains should mainly rely on those taxes which are the least distortive to growth and on curbing tax expenditures*. The recent decision to increase the VAT rate and announcements to reduce tax expenditures in direct taxes are positive in this respect. Eventually, the government should consider moving further towards a more growth-friendly and equitable tax system, an issue taken up in this *Survey*.

Reducing external imbalances by rebalancing growth

Large current account deficits led to high external debt, fuelled mainly by excessive private sector borrowing. Current account deficits mainly reflect a disproportionate reliance on consumption to support growth, weak export performance until 2005 and still high reliance on energy imports, despite the recent improvement in domestic energy production owing to the development of renewable sources. Since the mid-1990s, a faster rise in unit labour costs compared to core European countries, especially before 2006, eroded competitiveness. To reduce external imbalances, growth should be rebalanced from consumption to exports, as recognised by the government. This will require increased competitiveness through productivity gains in the medium term, but also by keeping labour costs at bay in the short-run. The latter could be encouraged by public sector wage restraint – as public wages have a strong influence on the private wage-setting process – and by reducing non-wage labour costs in a fiscal-revenue-neutral way, for example by a shift from labour to consumption taxes. Wage negotiations should take care to ensure that wage growth does not exceed productivity growth. Productivity gains could be achieved by further deepening structural reforms, in particular in the area of education, infrastructure, and the business environment. To resume convergence towards higher income countries, Portugal also needs to reduce labour market dualism to favour job reallocation towards more dynamic sectors.

Preventing cyclical unemployment from becoming structural

Since the late 1990s, the country has experienced a trend increase in the structural rate of unemployment and there is the risk that the current downturn will worsen this situation. One of the key policy priorities going forward will be to avoid the cyclical decrease in participation and the rise in unemployment becoming structural, which would further reduce potential output over the medium term. This makes it even more important to pursue labour market reform. Government measures, such as job subsidies and short-time working, have helped to support labour demand. But to avoid hindering the efficient reallocation of workers and constraining productivity growth, *it is important that labour demand support measures taken during the crisis remain temporary*. The government decision to withdraw many of these measures is thus welcome.

Making the most of active labour market policies

The authorities have been increasingly relying on multiple actors (municipalities, social partners, etc.) to support the unemployed. While this can compensate for the excess case-loads of the public employment services and enhance the speedy provision of activation services, *Portugal should monitor the quality and the effectiveness of these alternative counselling services.* As the training programmes for the unemployed are experiencing a lower take-up than budgeted, *continuing to improve information exchange between the public employment services and training centres is needed. Obligatory participation in training programmes after a specified duration of unemployment should be introduced, as in a number of other OECD countries.*

Reforming the unemployment benefits system, in particular by reducing the gap between the treatment of youth and older workers

Against the background of a potential rise in structural unemployment, the government should implement a fundamental revision of its unemployment benefits (UB), to provide adequate social safety supports while promoting employment. In early 2010, Portugal reduced the contributory period to access UB from the rather ungenerous 450 days to 365 days of salaried work, but the authorities recently withdrew this measure. However, most OECD countries require lower contributory periods, often less than 6 months. *Given the high proportion of workers under temporary contracts in Portugal, the authorities should consider cutting back again on the contributory period to access UB.* To encourage return to work, the government recently imposed a cap on replacement rates. Nonetheless, UB generosity remains related to age, which induces a striking gap between the treatment of youth and older workers. *UB duration and replacement rates should not be related to age and benefits should be a decreasing function of unemployment duration for all workers.*

Reducing labour market dualism

Reducing labour market dualism should be at the top of the agenda to favour worker relocation and support productivity growth. The share of temporary contracts in total employment has been increasing since the early 1990s, particularly after the 1998 reform reducing employment protection legislation (EPL) for temporary contracts. The rising share of temporary contracts has led to strong segmentation of the labour market, with the young and low skilled being the most exposed. The recently introduced labour code, by reducing EPL for regular contracts, is an important step in the direction of reducing labour market dualism, as will the new Contributory Code of Social Security. *However, employment protection legislation for regular contracts should be eased further to reduce the gap between protection of regular and temporary workers.* Another structural feature of the Portuguese labour market is that adjustment tends to occur exclusively by employment – and almost exclusively temporary employment. Building on the recent amendments to the Labour Code, *Portugal should continue improving flexibility in working-time regulations, which would help reduce cyclical employment losses and promote productivity growth.*

The tax system should be more supportive to growth with a switch from labour to consumption taxes…

Pursuing fiscal consolidation while seeking to step up the poor long term economic performance provides an opportunity to implement tax measures to improve efficiency and rebalance the economy. As fiscal consolidation progresses, the tax system can be made more growth friendly *by shifting the tax burden from labour taxation towards less distortive taxes, such as taxes on consumption and property*, while ensuring that the reform is non-revenue-decreasing. Besides the standard growth benefits, such a change in the tax structure could also help Portugal improve its competitiveness in the short-run. While wage moderation is key to ensure a long-lasting reduction of unit labour costs, a cut in employers' social security contributions (SSC) can smooth the adjustment by lowering labour costs to firms, at least in the short-run. The rebalancing in the tax system could also yield sizeable employment gains if larger SSC cuts are given to low wage earners. *Portugal should target the largest reductions of employers' SSC on low wage workers. For this purpose, the government could consider making employers' contributions progressive in the level of wages, as opposed to the current use of a flat rate.*

Owing to the fiscal consolidation constraints, a switch from labour to consumption and property taxes should be at least revenue neutral. This could be facilitated by the particularly large VAT base, which reflects the sizeable share of consumption in the economy, and the high proportion of goods enjoying reduced rates. Hence, *VAT and property taxes should be raised sufficiently to, at least, fully finance cuts in employers' SSC. In this context, Portugal would need to adjust social security financing, making it less reliant on contributions and more on general revenues. Further, additional revenue from property taxes, which currently accrue to municipalities, should either belong to the central government or be compensated through smaller grants to local governments.*

… an increased reliance on property taxes…

Despite a recent upward trend, property taxation in Portugal remains below the OECD average, especially as regards the least distortive components: recurrent taxes on immovable property (IMI) carry below-average weight, and inheritance or recurrent net wealth taxes virtually do not exist. In contrast, the highly distortive real estate transaction taxes (IMT) have an above-average weight, inflating prices and discouraging geographical mobility. *Portugal should levy IMT only on the initial transactions of property, while abolishing many of its exemptions. In the longer term, the authorities could consider replacing IMT by VAT on new house sales.* Furthermore, despite a reform of property taxes in 2003, IMI taxable values often remain far below market prices (updating mainly occurs when dwellings are sold). Besides, IMI is also undermined by numerous exemptions. *Portugal should substantially increase its reliance on IMI revenues, primarily by broadening the base by removing most exemptions and regularly updating property values.* However, an increase in tax rates is also likely to prove necessary, especially in the context of the tax rebalancing reform. In this context, potential interactions with the rental housing market and housing prices should be taken into account.

… and reduced complexity and compliance costs

Portuguese tax laws are complex and frequently changed, adding to high day-to-day compliance costs. While filing and payment were made much easier in recent years through the

use of electronic communications, the preparation of tax returns often remains burdensome, in particular for small and medium sized firms. Regarding SSC and personal income tax (PIT) withheld from employees' pay, companies currently file separate monthly returns for different agencies, whose databases are not integrated. Hence, building on the recent improvements in the exchange of information, there is scope for *enhanced co-operation between tax and social security agencies*. A new SSC Code, due to come into force in 2011, brings some convergence of SSC taxable labour income towards the PIT tax base, though the former base remains somewhat narrower. *Portugal should complete the convergence in labour income tax bases between SSC and PIT. Firms' tax returns for SSC and withheld PIT should be unified, and agencies' databases integrated and shared. In the longer term, the authorities could consider moving towards a single revenue agency for direct taxes and social contributions.*

Compliance costs are high in the case of disputes and litigation. Administrative review mechanisms have traditionally been slow, contributing to higher court litigation, although decisions on taxpayers' initial complaint mechanism (*reclamação graciosa*) have become much faster recently. *The authorities should extend progress to the administrative appeal mechanism (recurso hierárquico), and foster greater openness by the tax administration to reverse a previous decision when assessing an appeal. Recently announced plans to introduce binding arbitration as an alternative mechanism to the courts should be gradually implemented, starting with small cases,* which clog tax courts the most.

Enhance tax efficiency by reducing tax expenditures

The Portuguese tax system is characterised by extensive tax expenditures, which narrow tax bases and hence require higher-than-otherwise tax rates. This result in tax collection losses and less dynamic growth. Further, tax expenditures are frequently a costly way to pursue equity objectives, and may even induce regressivity. Authorities have introduced a time limit to some tax expenditures (those under the *Estatuto dos Benefícios Fiscais*), which are set to expire at the end of 2011. However, their underlying concept of tax expenditure is narrow *(e.g.* it does not include the main expense-related personal income tax credits). *The authorities should use the automatic expiry rule as a device for base broadening, and go further in cutting tax expenditures by extending its definition in line with international standards.*

Expense-related personal income tax (PIT) credits reach substantial amounts and are often inequitable or distortive. For example, Portuguese households can deduct 30% of their mortgage interest payments (up to a ceiling), which distorts investment towards the housing sector. Also, tax credits exist for education expenses at all levels *(e.g.,* books, tuition fees) and health care expenditure *(e.g.,* doctor payments, medicine). All are regressive as they benefit higher income earners most. *Expense-related tax credits should be reduced or eliminated.* In Portugal, both pensioners and the self-employed tend to pay less PIT than salaried workers. Pensions enjoy a more generous allowance than salaries, with no evident justification. Therefore, to further strengthen the convergence of allowances already envisaged by the government, *pension allowances should be set at the same level as for salary income.* Concerning independent workers, the income declared tends to be low, as they remain hard to tax. *Portugal should step up tax audit of independent workers to avoid significant losses in PIT and SSC revenues.*

Though the statutory rate of the Portuguese corporate income tax rate (CIT) is above the EU19 average, effective rates are comparatively lower, due to numerous base narrowing provisions. Many of these tax expenditures increase administrative and compliance costs, and further hamper

productivity through the dispersion of effective tax rates and the ensuing distortions of investment. Significant progress has been made in fighting fraud and evasion, but several indicators suggest that the scope for increasing tax compliance is far from exhausted. *The authorities should streamline CIT provisions, abolishing inefficient tax expenditures and promoting base broadening. The statutory rate, which retains some importance for investment decisions due to its high visibility, could eventually be decreased, after sufficient fiscal consolidation has been achieved.*

Portugal makes extensive use of reduced VAT rates. The resulting revenue losses are among the highest in the EU. Further, applying reduced rates to some sectors, such as the hospitality industry, is a poor way of targeting low-skill workers. Reduced rates for restaurants are also recognised as ineffective in increasing demand. *The authorities should substantially extend the scope of application of the VAT standard rate. The potential regressive impact of this reform could be compensated by targeted income support to poor households.*

A three-layer strategy to climb the productivity ladder at a faster

A strategy to increase productivity and competitiveness should be effective at delivering productivity growth from the short to the long term. In the short term, there are significant margins to increase productivity by encouraging the entry of efficient firms and the exit of inefficient firms, particularly so in non tradable services. In the medium term, further productivity gains can be achieved by continuing climbing the value-added chain in the traditional exporting industries, such as textile and tourism. In the long run, structural policies should favour the reallocation of resources to the high productivity growth sectors such as the skill and technology intensive industries. Improving transport infrastructure, as soon as financial conditions permit, but more importantly closing the country's substantial educational gap should help in that direction.

Further enhancing the business environment

The government has already made significant progress in improving the business environment through a wide range of reforms, including simplifying administrative procedures to do business and easing labour protection legislation. Consolidation of these reforms is essential, which implies addressing some remaining bottlenecks. *Portugal should ease licensing procedures further, notably at the local level. The length of the judicial process and the instability of the tax system should be reduced.* To foster regional competitiveness, the "Competitiveness and Technology Hubs" initiative is a promising approach and should be pursued further. *Portugal should expand industrial clusters and further develop co-operation programmes between firms and the R&D sector, but the effectiveness of such programmes should be evaluated.* The government announced in its Stability and Growth Programme 2010 a number of measures to rationalise state-owned enterprises (SOEs). *Portugal should further reduce the scope of the public enterprise sector by resuming the privatisation process as soon as the financial market conditions improve. The authorities should also increase efficiency in the SOEs by expanding performance monitoring mechanisms.*

Addressing infrastructure bottlenecks to foster productivity while promoting green growth

For a small peripheral country like Portugal, transport infrastructure is fundamental to achieve higher competitiveness. The government has launched a number of ambitious measures to enhance Portugal's transport infrastructure, notably via an ambitious integrated approach in high-speed railway and port platforms, partly aimed at enhancing the connections with Spain. Due to budgetary pressures, some of the projects have been postponed, notably the construction of the new Lisbon airport. *While postponing costly investment projects given current market pressure is a legitimate decision, the authorities should resume the new airport construction as soon as the financial conditions permit.* Nonetheless, *transport infrastructure project selection should be based on transparent and careful cost-benefit analysis based on cautious demand forecasts.*

Reducing greenhouse gas (GHG) emissions from the transport sector is a major challenge for Portugal. These emissions have nearly doubled since 1990. Furthermore, the transport sector imposes other external costs, such as congestion, an important problem in urban and metropolitan areas. The need to reduce the overreliance on road transportation has been acknowledged by the authorities, who *should pursue policy initiatives to eliminate the bias in favour of road transportation.* But more fiscal tools should also be introduced to address externalities from the road sector. Although fuel taxes are comparatively high and car taxes feature strong CO_2-based differentiation, the use of price-based instruments to address externalities other than GHG emissions is very limited. For instance, user charges in road transportation (essentially tolls) are only differentiated according to vehicle type. *Portugal should consider addressing transport sector externalities through extended infrastructure use charges – for instance, tolls differentiated according to location, time and vehicle environmental efficiency, or smart parking pricing. Some of these could provide a new source of revenue for local governments. The authorities also need to improve the supply and governance of metropolitan public transportation.*

Education policies: achieving stronger performance and inclusion

Education should remain on top of the agenda to boost productivity. The government has been extremely proactive in reforming the education system to up-skill the labour force and to reduce the level of early school leaving. However, Portugal's educational gap is compounded by a lack of equity with respect to educational opportunities. Achieving equity in education can be a goal in itself, but it is also desirable from an economic perspective. The economic benefits from education are large, and particularly so in Portugal, where returns to education are the highest among European OECD countries. Education also improves economic outcomes indirectly because it is associated with better health, and with successful parental and civic participation. Finally, achieving higher inclusion through better equity in the education system can help address the dual and segmented nature of the Portuguese economy.

Focusing on vocational education and training is key to reducing dropouts and upskilling the population

The government's focus on diversifying educational offerings, in particular through the promotion of vocational educational, is a major development in Portugal in the current context. It is key to prevent failure at school and drop-outs, and an effective tool to upgrade adults' qualifications. The authorities have been strengthening the supply of technical education, VET (vocational education and training), adults' qualification and several higher education programmes. Major reforms under this strategy are gathered under the *Novas Oportunidades* programme, launched in 2005. There has been a large expansion of the network of VET providers and a dramatic diversification in the supply of vocational education and training courses at the upper-secondary level. *The government now needs to enhance information on the various VET courses. The authorities should support the creation of a comprehensive career guidance website. Going further, Portugal should rely more on professionally-oriented training and apprenticeships systems.* There are currently more than one million candidates enrolled in the adult axis of the *Novas Oportunidades* centres. Portugal's experience is quite unique in this respect. *It is crucial at this stage of implementation that the quality of services provision matches the needs of participants in the programme and that training meets labour market demand. The authorities should further expand evaluation tools to monitor the effectiveness of the programme.*

Reforming schools to achieve higher educational quality

In 2009, Portugal raised the age of compulsory education from 15 to 18 years old. Widening mandatory school comes as a corollary to all the work developed on the diversification of the educational supply. This strategy has the advantage of providing a clear signal about the importance of education. *It is essential to provide training to school managers and teachers to address increased diversity and heterogeneity in the student body.* Raising compulsory schooling should not come at the cost of educational quality. *Portugal should closely monitor the impact of the rise of the compulsory age of education, including on schools' performance, taking into account the socioeconomic context in which schools operate.*

Over the last three years, important measures have been taken to strengthen teachers' skills and improve the quality of teaching. In particular, Portugal is introducing teacher performance evaluation at the primary and secondary level. *It will be important to implement training for teacher evaluation systematically within schools. As teacher evaluation takes place at the school level, Portugal should ensure appropriate articulation between school evaluation and teacher evaluation. To improve the quality of education and the efficiency of educational expenditure, Portugal should further increase school autonomy and accountability.*

School repetition in Portugal is among the highest in OECD countries, even though grade retention is known to be ineffective and to pose risks for equity. This is an issue of concern for Portugal as the impact of family background on school achievement is among the highest of OECD countries. *Portugal should reduce high rates of school-year repetition and continue strengthening monitoring mechanisms of those at risk of dropping out, particularly at transition points in secondary school.*

Targeted interventions should help prevent underachievement

More than in other OECD countries, Portugal displays poor educational outcomes in socio-economically disadvantaged schools. This suggests that general increases in resources may not be very effective in raising equality of opportunity. Portugal has recently introduced a number of measures to target education spending to disadvantaged schools and pupils. One of the most important measures is "Educational Territories of Priority Intervention" (TEIP). *External evaluation mechanisms should be reinforced in every school to properly evaluate the effectiveness of the TEIP programme. There should be incentives for qualified teachers to work in difficult schools. Consideration should also be given to incentive-based pay for teachers. More broadly, Portuguese schools should be given more autonomy for hiring staff in the context of stronger accountability.*

Chapter 1

Rebalancing the economy towards sustainable growth

Since the early 2000s, Portugal has seen its convergence process towards more developed OECD economies come to a halt. Slow trend growth has mostly reflected the imbalances of the Portuguese economy. Over-reliance on consumption, weak labour productivity gains and insufficient wage moderation have led to a marked deterioration of competitiveness, especially until 2006, and sizeable external indebtedness. The economic crisis is likely to have worsened the situation as potential growth has probably taken a hit and fiscal sustainability has deteriorated, which has fuelled a rise in sovereign spreads. To rebalance the Portuguese economy and move towards a higher and sustainable growth path, rapid consolidation of the public finances is essential. Consolidation measures should continue to be strictly implemented, preferably through expenditure restraints, but the government should stand ready to curb tax expenditures and raise the least distortive taxes if needed. The opportunity to make the tax system more growth-friendly should be seized, as analysed in Chapter 2. Policies to boost potential growth should be pursued, in part because stronger growth will help to restore fiscal sustainability over the long run. To boost labour utilisation, the authorities should revise the unemployment benefit structure and reduce the dualism of the labour market. Raising labour productivity is also a challenge and is addressed in Chapter 3.

Portugal was hit hard by the global crisis, which exacerbated underlying weaknesses

A deep recession in 2009, which will have a lingering impact on growth prospects

The need to correct imbalances will slow the recovery

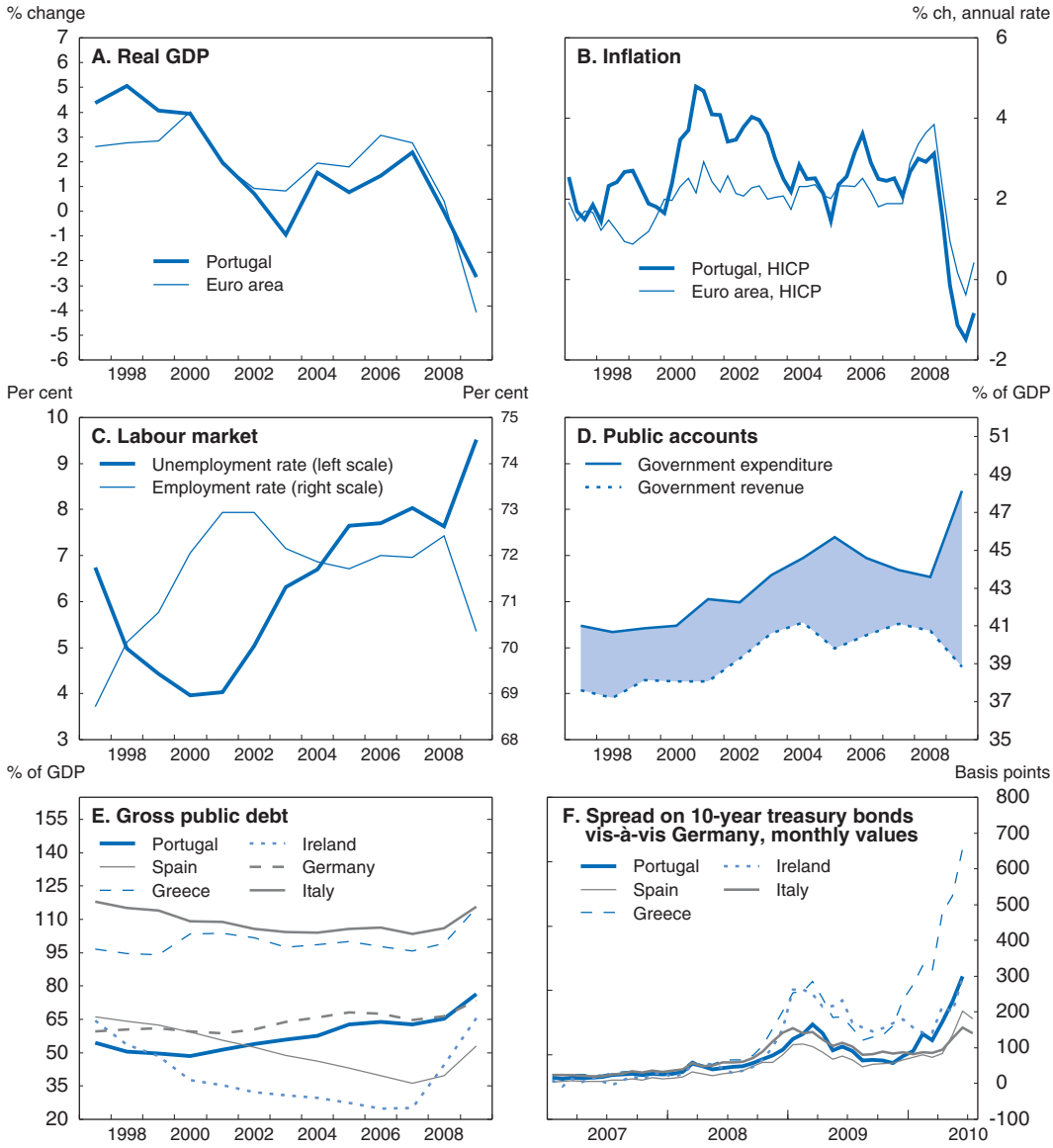
After several years of sluggish growth, the Portuguese economy entered into recession in late 2008 as a consequence of the global crisis. GDP fell by 2.6% in 2009 (Figure 1.1), the worst outcome since 1975 but nonetheless a smaller contraction than in the euro area as a whole (–4.1%). The absence of a real estate bubble in the years preceding the crisis and the overall good shape of the financial sector, as confirmed for the main banks by the recent EU-wide stress tests (Box 1.1), partly explains this relative resilience. In addition, the larger weight of Portuguese private consumption (Figure 1.2) and a vigorous increase in public consumption helped cushion the fall in foreign demand.

The fiscal deficit started to deteriorate in 2008 and reached 9.3% of GDP in 2009. This followed a large fiscal consolidation in 2005-07 and, to some extent, was induced by measures that were not directly related to the crisis, such as a cut in VAT and a sizeable (2.9%) wage increase for civil servants in 2009. The stimulus packages *per se* included cuts in direct and property taxes, faster VAT refunds, a temporary increase in social and employment support, increased public investment, subsidies to promote the use of renewable energy sources and other forms of support to economic activity, such as credit lines to small and medium-sized enterprises (SMEs). Worsening public accounts also arose from the automatic stabilizers, compounded by adverse compositional effects in private consumption (a large fall in durables), which further depressed tax revenues. Finally, a residual set of factors played a role in the deterioration in the budget deficit, such as the absence in 2009 of the significant temporary proceeds witnessed in 2008, and a fall in VAT revenues beyond what can be accounted for by macroeconomic developments and policy measures.

While the large size of consumption and the fiscal stimulus helped stabilise the economy in the short term, they both pose problems for the future. A rebalancing of growth from private consumption to external demand will be needed to correct external imbalances. Relatively high public indebtedness (Figure 1.1) combined with weak potential growth makes fiscal consolidation a pressing concern to prevent the development of a snowball effect. With general market nervousness in the peripheral euro area countries, investors became more reluctant to buy Portuguese debt in spring 2010 and spreads peaked in early May 2010 (Figure 1.1). As a response, the government revised its fiscal consolidation programme by making it more frontloaded. The authorities decided to postpone some major investment projects, such as the new Lisbon airport, and set more ambitious deficit targets from 2010 to 2013, announcing additional consolidation measures and bringing forward some measures initially scheduled for 2011.

In the coming years, growth is projected to remain modest (Table 1.1). Fiscal consolidation will constrain public consumption and household income growth. Private consumption is also hampered by high indebtedness, an already low saving rate and

Figure 1.1. **General developments**



Source: OECD, *OECD Economic Outlook* and *Main Economic Indicators Databases*.

StatLink http://dx.doi.org/10.1787/888932330441

unfavourable labour market conditions, with the unemployment rate expected to remain above 10%. Ample spare capacity and expectations of weak demand continue to depress investment, and concerns about sovereign risk are weighing on credit conditions more generally. Despite the recovery in external demand, poor competitiveness undermines export growth: both the rise in labour costs during the crisis and weak productivity make it unlikely that Portugal will regain significant market share in 2010 and 2011. A large negative output gap will keep price and wage inflation low, which is needed to restore competitiveness. The current account deficit may only be reduced slowly, however, as the net investment income balance is expected to worsen.

Box 1.1. **Measures to support the financial sector and recent developments**

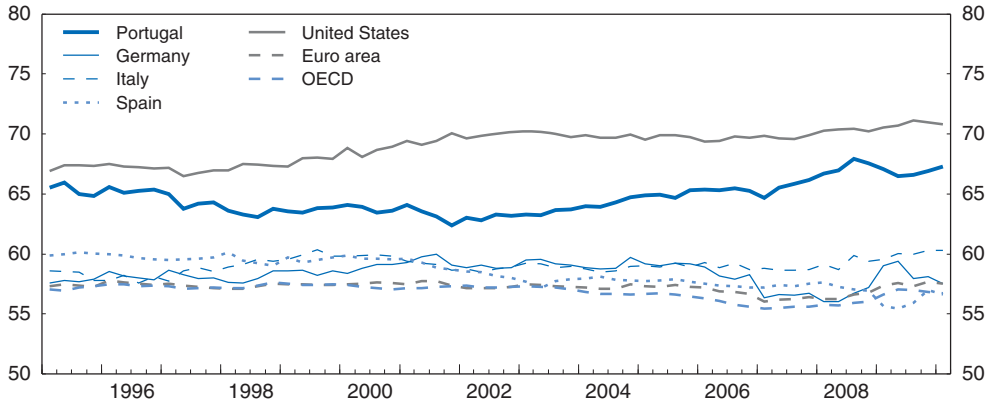
In the last quarter of 2008, at the climax of the financial crisis, the Portuguese authorities took several measures to reinforce financial stability. These measures included the provision of state guarantees to securitise debt issues by Portuguese banks (up to 20 000 million euros), funds for bank recapitalisation (up to 4 000 million euros, within the preceding 20 000) and a four-fold increase in deposit guarantees (from a maximum of 25 000 to 100 000 euros per depositor and per institution). Only around a quarter of the ceiling for state guarantees has been used so far, and none has been provided since April 2009. Further, no private institution has taken advantage of the recapitalisation facility, which to date has only been activated for a 1 000 million euro capital increase of the State-owned Caixa Geral de Depósitos (CGD), held in 2009 to further strengthen CGD's sound capital ratios. The government has extended the debt guarantees and recapitalisation schemes until the end of 2010, while the increase in deposit insurance will expire one year later.

Insolvency problems were confined to two small banks, Banco Português de Negócios (BPN) and Banco Privado Português (BPP), which at the end of 2007 accounted for only 1.8% and 0.5% of the banking system total assets, respectively (Banco de Portugal, 2010). In both cases, the global crisis may have worked as a detonator of latent fragilities induced by alleged mismanagement and fraud. Fearing systemic repercussions, the authorities nationalised BPN in November 2008 and placed it under CGD management. BPN reprivatisation procedures are under way. The smaller BPP received from six Portuguese banks a 450 million euro loan which benefitted from a state guarantee, and a provisional administration was entrusted with preparing and submitting to the authorities a recovery plan for the bank. The ensuing proposals were deemed unsatisfactory, and a decision to liquidate the institution was taken in April 2010.

The fact that the Portuguese banking sector has weathered relatively well the global crisis can be attributed to the absence of a real estate speculative bubble in Portugal, as well as to no substantial exposure to subprime-related complex assets. Portuguese banks did not have to shrink their balance sheets in either 2008 or 2009. Credit to households and non-financial firms has continued to expand, though with a very marked slowdown since mid-2008. During 2009, these developments were made possible by a gradual normalisation in wholesale debt markets and by a strong increase in banks' capital, moving up the overall capital adequacy ratio and the Tier I ratio. Participation in the Eurosystem's one-year fixed-rate refinancing operations with full allotment was also sizeable. Non-performing loans reached historically high but still manageable levels, with some stabilisation or even mild reversal in late 2009 and early 2010. Information pertaining to the first quarter of 2010 broadly confirms 2009 trends (Banco de Portugal, 2010).

Despite its overall resilience and good performance, the Portuguese financial sector continues to face non-negligible risks. Renewed tensions in the sovereign bond market will affect the price and availability of banks' wholesale funding. Stock market fluctuations are another source of market risk, with implications for profitability and solvency both through banks' own portfolios and via those of their pension funds. Finally, greater materialisation of credit risk cannot be ruled out either, associated *inter alia* to the short-run contractionary impact of fiscal consolidation and to the likely gradual increase in interest rates, and thus debt service costs, from their current historically low levels. Credit and market risks, on which the recent EU-wide stress tests have mainly focused, remain nonetheless manageable: the four Portuguese banking groups involved in the stress test exercise (accounting together, directly or indirectly, for almost two thirds of the banking system total assets in 2009) have displayed a high degree of resilience to the test's adverse scenario, with therefore no need for recapitalisation.

Figure 1.2. **Private consumption**
As a percentage of GDP



Source: OECD, *OECD Economic Outlook Database*.

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Table 1.1. **Portugal: Demand, output and prices**[1]

	2006	2007	2008	2009	2010	2011
	Current prices EUR billion	Percentage changes, volume (2000 prices)				
Private consumption	101.6	1.6	1.7	–0.8	1.5	0.1
Government consumption	32.1	0.0	1.1	3.5	–0.9	–1.0
Gross fixed capital formation	33.8	3.1	–0.7	–11.1	–5.4	1.1
Final domestic demand	167.5	1.7	1.1	–2.1	–0.2	0.0
Stockbuilding[2]	0.7	0.1	0.3	–0.4	0.3	0.0
Total domestic demand	168.2	1.7	1.3	–2.5	0.0	0.0
Exports of goods and services	48.2	7.8	–0.5	–11.6	5.3	5.3
Imports of goods and services	61.0	6.1	2.7	–9.2	1.9	2.3
Net exports[2]	–12.8	0.0	–1.4	0.1	1.0	0.8
GDP at market prices	155.4	1.9	0.0	–2.7	1.0	0.8
GDP deflator	–	3.0	2.0	1.2	0.7	1.2
Memorandum items						
Harmonised index of consumer prices	–	2.4	2.7	–0.9	0.9	1.1
Private consumption deflator	–	2.7	2.6	–1.8	1.3	1.4
Unemployment rate		8.0	7.6	9.5	10.6	10.4
Household saving ratio[3]	–	6.1	6.4	8.8	6.9	6.4
General government financial balance[4, 5]	–	–2.7	–2.9	–9.4	–7.4	–5.6
Maastricht definition of general government gross public debt[4]	–	63.6	66.3	76.8	84.9	88.5
Current account balance[4]	–	–9.4	–12.0	–10.3	–10.2	–10.3

1. National accounts data and definitions refer to base 2000, and are hence prior to the recent updating to base 2006.
2. Contribution to changes in real GDP.
3. As a percentage of disposable income.
4. As a percentage of GDP.
5. Based on national accounts definition.

Source: OECD, *OECD Economic Outlook 87 Database*.

The crisis will durably affect potential output

The economic crisis is likely to result in a permanent loss in the level of potential output in Portugal so that, even as the recovery takes hold, GDP may not attain its pre-crisis level for some time. The last *Economic Outlook* projections (OECD, 2010a) incorporated

reductions in potential output mainly due to increased capital costs and higher structural unemployment, but also from reduced labour force participation. The bulk of the total loss is estimated to come about as a consequence of changes in potential labour input. Although the extent of this loss is uncertain,[1] it will be large enough to put additional pressure on already strained public finances as it will also mean a reduction of taxable capacity as well as some increase in social transfers. This suggests that structural policy responses to the crisis can either amplify or dampen the negative impact of the crisis on potential output and have important implications for Portugal: well-designed labour market policy can reduce the risk that the economic crisis results in a permanent and long-lasting loss of potential output (see below).

Underlying weaknesses of the Portuguese economy have been exacerbated

Poor external competitiveness…

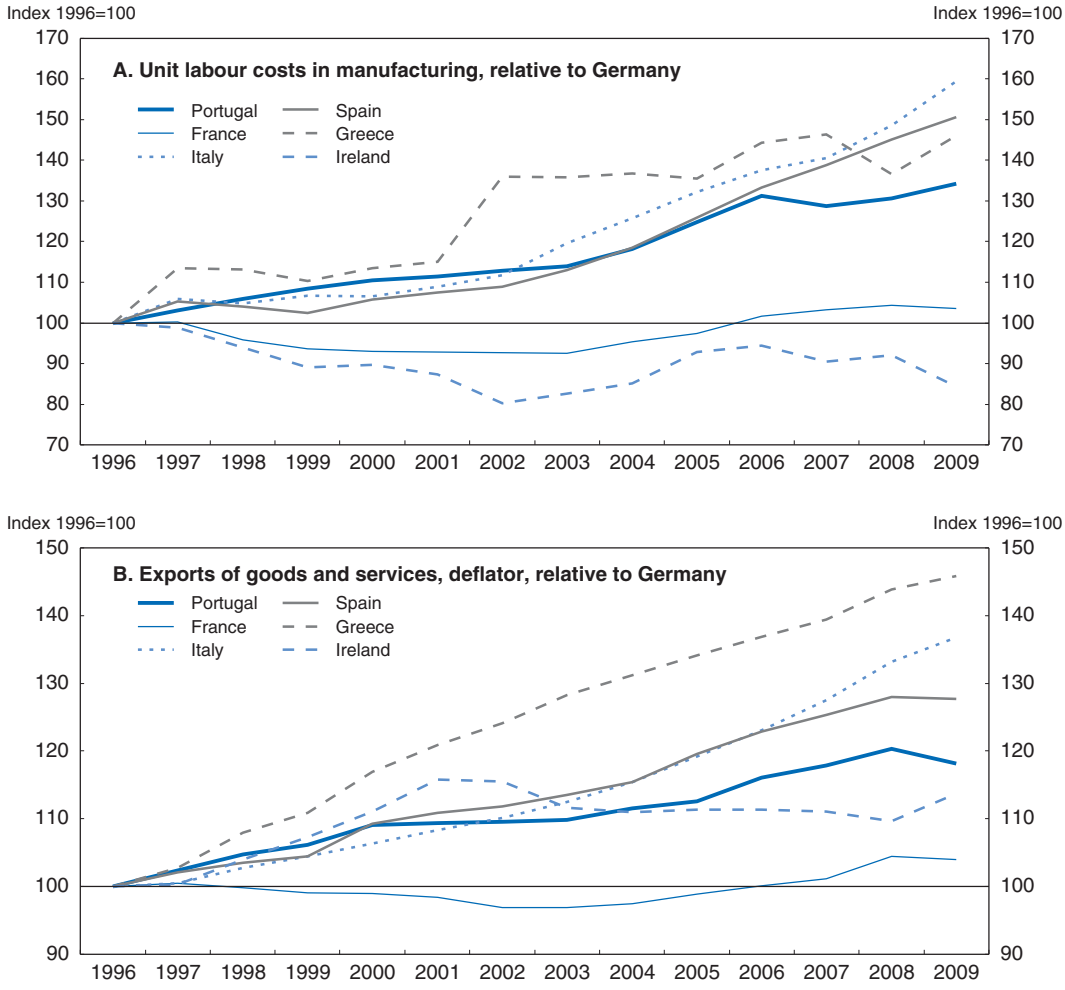
Eroded external competitiveness lies at the heart of Portuguese macroeconomic problems. Since the mid-1990s the real exchange rate has persistently appreciated, leading to a growing wedge in manufacturing unit labour costs relative to core European countries (Figure 1.3, Panel A), especially until 2006.[2] Though successive years of low growth and rising unemployment over the past decade have led to more moderate cost increases than in other countries, such as Spain, Portugal has failed to reverse the real appreciation trend, and hence to regain any competitiveness. Indicators also suggest that profitability in sectors exposed to international trade deteriorated, as the cumulated increase in relative export prices of less than 20% since 1996 (Figure 1.3, Panel B) was smaller than that of costs (more than 30%; Figure 1.3, Panel A). Competitiveness developments relative to most central and eastern European countries have also been adverse, leading to a comparatively high *level* of unit labour costs in manufacturing (Figure 1.4).[3]

Increases in unit labour costs have been due both to a disappointing productivity performance and to insufficient wage moderation, where pressures from the sheltered sectors (including the public sector) are likely to have played a major role. Indeed, the relative price of non-tradables to tradables has risen markedly (Figure 1.5), mainly reflecting the former sectors' greater ability to pass labour costs onto prices. There is indeed evidence of weak competitive pressure in services in Portugal (Chapter 3 and OECD, 2010b).

Alternative measures of manufacturing competitiveness, with a wider breadth than the price and cost dimension, also point to Portugal's weaknesses. Recent work based on firm-level data for the years 2002-03 present indicators to evaluate the competitiveness of European firms in terms of efficient use of available inputs, given the institutional and market setup in which they operate (Ottaviano *et al.*, 2009). According to the first indicator, called "overall competitiveness", Portugal ranks in the last position among 12 European countries (Figure 1.6).

The same analysis provides a second indicator called "producer competitiveness" to assess whether a country's competitiveness is due to geography or factors that can be influenced by policy. Portugal's ranking is not altered by this adjustment (Figure 1.6), which suggests that the country's position is not the outcome of geographical location, but rather of institutional and technological disadvantage. Sweden is similarly located on the periphery of Europe, as Portugal, and it ranks only eighth in terms of overall competitiveness. However, it ranks second in terms of producer competitiveness, which implies that a good institutional environment can counteract the negative effect of geography.

Figure 1.3. **Competitiveness indicators**



Source: OECD, *OECD Economic Outlook Database.*

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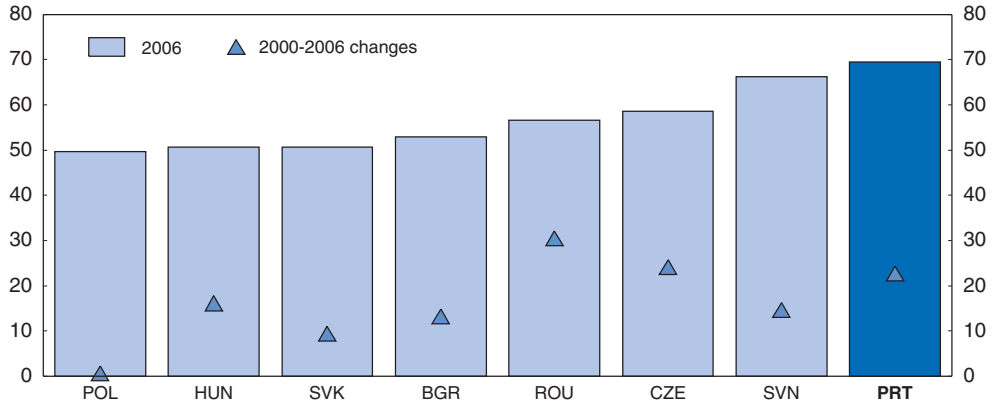
… led to unsustainable external imbalances…

Deteriorating competitiveness cut export market shares; Portugal's cumulative losses since the mid-1990s come close to 20% (Figure 1.7), though with a broad stabilisation as from 2006. A high specialisation in low-technology industries (such as textiles and clothing) which are heavily exposed to competition from low-cost non-European producers accounts for part of those losses, especially in 2004 and 2005. However, market share losses in recent years also took place in medium-high technology sectors, such as electrical machinery or transport equipment (Amador and Cabral, 2008), where Portugal faces strong competitive pressure from central and eastern European countries. Indeed, there is evidence of some association between cost competitiveness and market shares at the sectoral level, not only in traditional sectors but also in more modern industries (OECD, 2008a). More encouraging developments took place in exports of services, where double-digit real growth in 2006 and 2007 played an important role in stabilising overall goods and services market shares.

Figure 1.4. **Unit labour costs in manufacturing**[1]



1. Levels. Annual unit labour costs (ULCs) are calculated as the quotient of total labour costs and real output.

Source: OECD, *OECD Unit Labour Costs – Annual Indicators Database.*

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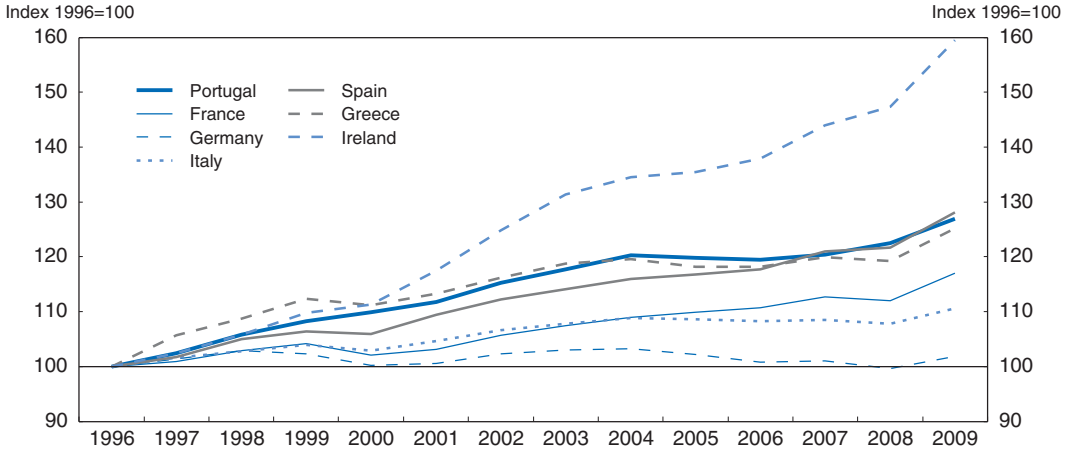
Figure 1.5. **Ratio of services to industrial goods prices**



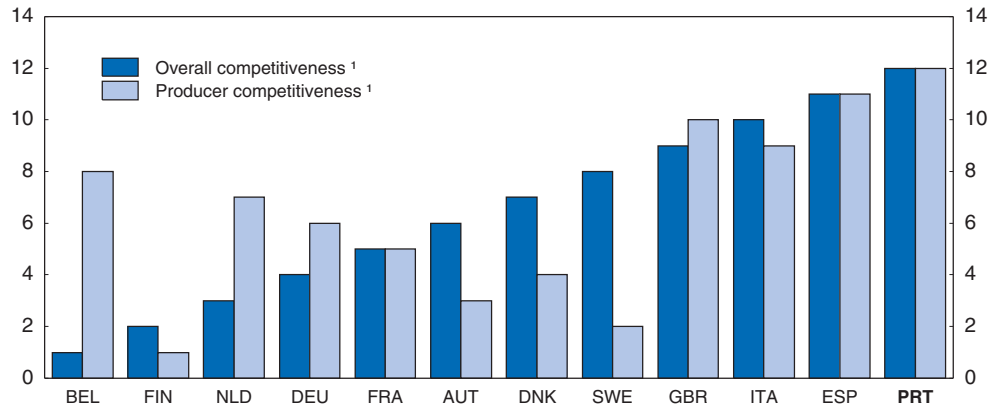
Source: Eurostat.

StatLink http://dx.doi.org/10.1787/888932330517

Over the past decade, Portuguese exporters have gone some way in tapping opportunities in fast-growing emerging markets, which nonetheless remain far from fully explored. Sizeable losses were recorded in mature European markets, with the notable exception of Spain (Table 1.2), and greater geographical diversification of exports has occurred, with the weight of non-EU15 destinations progressing by almost 10 percentage points (Table 1.3). However, more than half of this increase is accounted for by the very fast growth of sales to a single country, Angola. In the absence of soaring exports to Angola, the aggregate market share indicator (Figure 1.7) would actually have further deteriorated,[4] rather than broadly stabilised, from 2005 onwards. In contrast, the presence of Portuguese firms in the largest emerging markets, such as China or India, remains residual.

Overall, a large and persistent goods and services imbalance, reflecting excessive consumption, weak export performance until 2005 and relatively high energy imports (addressed below), has been the main driving force behind large current account deficits,[5]

Figure 1.6. **Countries' competitiveness rankings based on firm-level indicators**

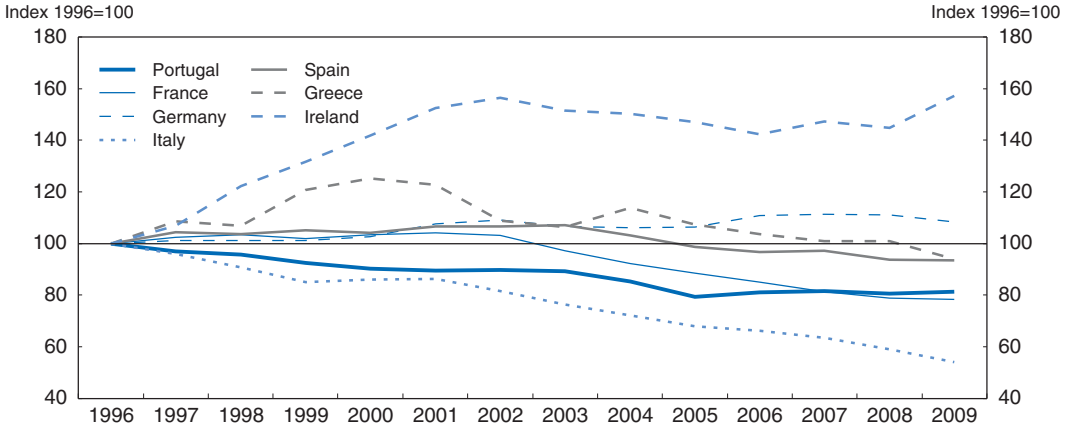


1. Firm-level indicators. A high value indicates low competitiveness.

Source: Ottaviano, G., D. Taglioni and F. di Mauro (2009), "The Euro and the Competitiveness of European Firms", *Economic Policy*, January 2009.

StatLink http://dx.doi.org/10.1787/888932330536

Figure 1.7. **Export performance**[1]



1. Exports of goods and services relative to export market.

Source: OECD, *OECD Economic Outlook Database*.

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the subsequent deterioration in the net international investment position, and the resulting growing net investment income deficit (Figure 1.8). To a smaller extent, the current account has also worsened due to shrinking surpluses in current and capital transfers, which reflect the decreasing importance of migrants' net remittances and, more recently, also of EU structural funds inflows. The current account deficits of the past fifteen years are clearly unsustainable, as weak potential growth would lead to a snowball effect on foreign indebtedness. In 2009, the negative international investment position already stood at –109.0% of GDP, higher than in Spain, Greece or Ireland.

Portugal's large energy balance deficit (4.4% of GDP in 2008, against 3.3% in the EU19) is due *inter alia* to structural features such as above-average energy dependence and energy intensity (Amador, 2010), and entails an enhanced vulnerability to oil price shocks, as witnessed in 2008. To tackle these problems, as well as to reduce CO_2 emissions (see Chapter 3), the government has been actively promoting stronger reliance on renewable

Table 1.2. **Portugal's share in selected import markets**

As a percentage

	2000	2008
Angola[1]	17.3	16.5
Spain	2.7	3.3
France	0.9	0.9
Germany	1.1	0.5
United Kingdom	0.8	0.5
Netherlands	0.5	0.4
Italy	0.4	0.4
Brazil	0.3	0.4
Belgium	0.8	0.4
Russian Federation	0.1	0.1
United States	0.1	0.1
China	0.02	0.03
India	0.02	0.02

1. Mirror data (Angola's imports are inferred from the exports of reporting countries).

Source: *Comtrade Database*, UNCTAD (2010).

energy sources and higher energy efficiency. The ambitious targets for 2020 set in the recent National Energy Strategy, which include a 20% reduction in final energy consumption and a fall in energy dependence to 74%,[6] are expected to reduce net energy imports by around 2 000 million euros (slightly above 1% of GDP) relative to 2010. Estimating the overall impact on the current account is nonetheless more complex: the fall in energy imports and the development of energy-related industrial clusters with export potential need to be weighed against more expensive electricity from renewable sources (at least at current oil prices) and the opportunity cost of resources channelled into renewable energy.

Current account deficits have mirrored the shortfall in saving relative to investment, to which both households and non-financial companies have contributed. In the second half of the 1990s, booming housing and firms' investment decreased households' net lending, and increased corporations' net borrowing. These developments took place in an environment of rapidly falling interest rates, and could plausibly be interpreted at the time as a largely benign private sector response to a new macroeconomic regime (Blanchard, 2007). Since the turn of the century, however, despite a decline in investment, indebtedness has continued to grow. Household saving has decreased markedly, as a consequence of robust private consumption. Saving by companies has also declined, mainly due to growing dividend distribution and, more recently, to higher interest payments as well. Portuguese banks have continued to borrow abroad to finance the huge credit demand from domestic private agents, which in the case of firms has overwhelmingly been channelled to non-tradable sectors.[7] As a result, households' and especially companies' debt-to-GDP ratios are now among the largest in the euro area (Banco de Portugal, 2010 and Figure 1.9).

… whose unwinding will require sustained medium-term austerity efforts

Halting the rising trend in foreign indebtedness will require a major improvement in the goods and services balance, which would prove disruptive if it were to be fully achieved in the short term. In arithmetic terms, stabilising the international investment position (as a share of GDP) at the 2009 level would require an immediate and permanent improvement of the "primary" current account (*i.e.*, net of the income balance) close to 7 percentage

Table 1.3. **Shares in Portuguese exports**

As a percentage

	1990	2000	2009
EU15	**80.6**	**80.3**	**70.3**
Of which:			
Spain	13.5	19.3	26.3
Germany	16.7	18.1	13.0
France	15.5	12.7	12.1
Former African colonies[1]	**3.4**	**2.5**	**8.5**
Of which:			
Angola	2.5	1.4	7.2
European Union new members + Turkey	**0.4**[2]	**1.7**	**3.3**
United States + Canada + Japan	**6.7**	**6.8**	**3.6**
Of which:			
United States	4.8	5.8	3.0
Latin America (without Brazil)[3]	**0.3**	**0.8**	**1.5**
Of which:			
Mexico	0.0	0.2	0.6
BRICS	**0.9**[2]	**1.3**	**2.1**
Brazil	0.3	0.8	0.9
China	0.2	0.2	0.6
Russian Federation		0.1	0.3
South Africa	0.2	0.2	0.2
India	0.2	0.1	0.1
MENA (Middle East and North Africa)[4]	**0.9**	**1.2**	**2.5**
Of which:			
Morocco	0.3	0.4	0.7
Algeria	0.1	0.1	0.6
Tunisia	0.0	0.1	0.4
Saudi Arabia	0.1	0.2	0.2
ROW	**6.8**	**5.4**	**8.2**

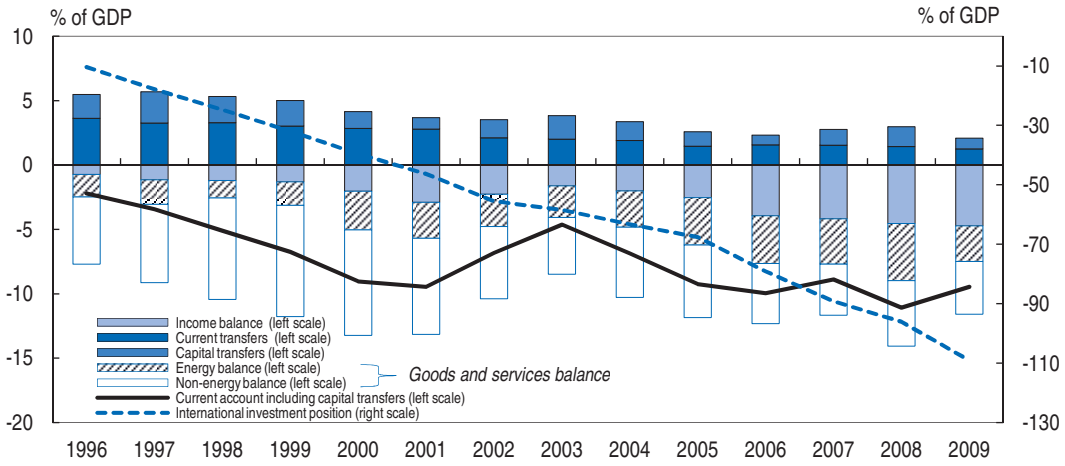
1. Angola, Cape Verde, Guinea-Bissau, Mozambique, São Tome and Principe.
2. Data for 1990 excludes Czech Republic, Slovenia, Slovak Republic, Estonia, Latvia, Lithuania and Russian Federation.
3. Argentina, Bolivia, Mexico, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Nicaragua, Panama, Paraguay, Peru, Uruguay, Venezuela.
4. Algeria, Morocco, Tunisia, Libyan Arab Jamahiriya, Egypt, Bahrain, Djibouti, Islamic Republic of Iran, Iraq, Jordan, Kuwait, Lebanon, Oman, Occupied Palestinian Territory, Qatar, Saudi Arabia, Syrian Arab Republic, United Arab Emirates, Yemen and Sudan.

Source: OECD, *International Trade by Commodity Statistics Database (ITCS)*.

points of GDP.[8] A more orderly unwinding of current account imbalances can be envisaged in the medium term if external demand is supportive, market share losses are reversed, or at least halted, and the ratio of consumption to GDP gradually declines. Fiscal policy can contribute to this adjustment process by switching taxes from labour to consumption, in a revenue-neutral way (see also Chapter 2) and by setting the tone for the private sector in terms of wage restraint.

The adjustment of macroeconomic imbalances can be speeded up by keeping public sector wages at bay to encourage economy-wide wage restraint. Indeed, public wages have a relatively strong influence on the wage-setting process in Portugal, compared to other European countries (Lamo *et al.*, 2008). Moreover, there is strong evidence, when comparing like for like, that the wages of civil servants are set at a figure far above the private sector

Figure 1.8. **Current account imbalances and external indebtedness**



Source: Banco de Portugal and OECD, *OECD Economic Outlook Database*.

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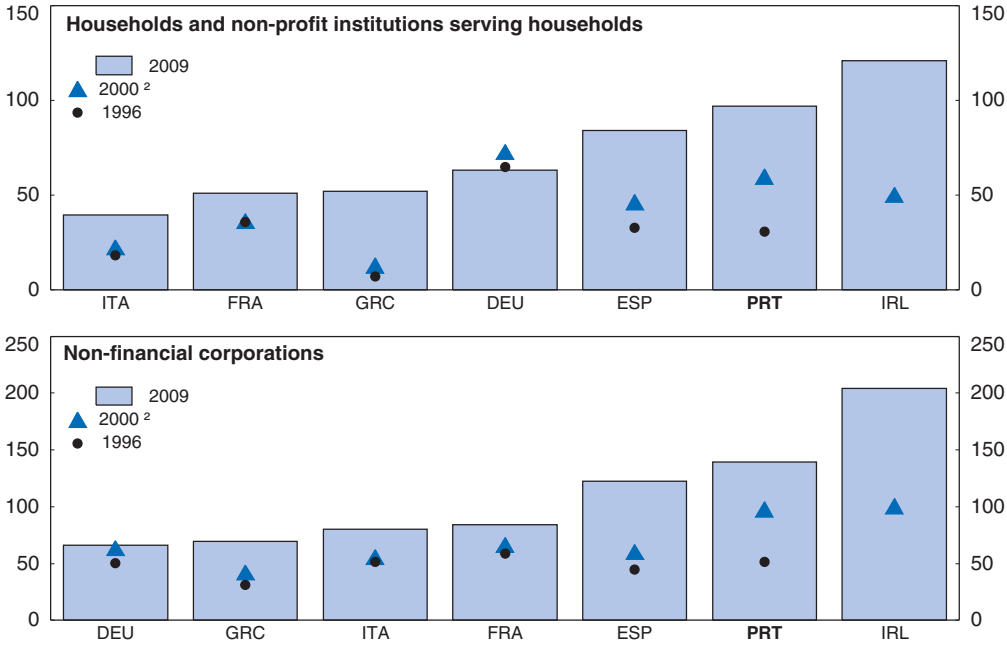
Figure 1.9. **Financial debt**[1]

As a percentage of GDP



1. Financial debt is calculated as the sum of loans and securities other than shares using consolidated amounts except for Ireland. The latest available year is 2008 for France, Italy and Spain.
2. Data refer to 2001 for Ireland.

Source: Eurostat and OECD, *OECD Economic Outlook Database*.

StatLink http://dx.doi.org/10.1787/888932330593

(Portugal and Centeno, 2001). Against this background, the authorities should extend the freeze in nominal public sector wages until 2013 (while retaining performance-based bonuses) and encourage medium-term agreements between social partners to restore cost competitiveness. Recent evidence suggests that the responsiveness of real wages to unemployment has declined over the last decade. The indication of a fall in the cyclical sensitivity of wages may be associated to the nature of the mechanisms of wage determination in a low-inflation environment, in particular under severe nominal rigidity of wages, as observed in Portugal (Marques *et al.*, 2009; Portugal, 2006). To some extent, the low cyclicality of wages might also reflect the widespread use of extension mechanisms applied in collective agreements (Marques *et al.*, 2009; OECD, 2004).[9] Economic research suggests that administrative extension is a potential device to stifle competition in labour and product markets (Bassanini and Duval, 2006; Traxler *et al.*, 2001). Portugal should consider reducing the recourse to legal extension procedures in the wage-setting process.

Policies to restore a sustainable growth path

Fiscal consolidation is a pre-condition for a sustainable recovery

The consolidation strategy aims at bringing down the deficit from 9.3% of GDP in 2009 to 3.0% in 2012 and 2.0% in 2013. The strategy is mostly expenditure-based, especially in the outer years, with strong restraint in wage and non-wage public consumption, social transfers and public investment. The contribution from the revenue side, initially modest, was significantly scaled up by the additional measures announced in May 2010 (Table 1.4). These have included, besides the earlier phasing out of all the anti-crisis stimulus measures and further expenditure cuts, a 1 percentage point increase in all VAT rates and hikes in personal and corporate direct taxes. Annex 1.A2 details the main consolidation measures – both initial and additional – and their estimated direct budgetary impacts.

Table 1.4. **Direct effects of fiscal consolidation measures**
As a percentage of GDP

	2010	2011	2012	2013
Decrease in expenditure	0.5	2.0	2.7	3.4
March 2010 Stability and growth programme (SGP) measures	–	1.2	2.1	2.7
May 2010 additional measures[1]	0.5	0.8	0.7	0.7
Increase in revenue	0.6	2.1	2.1	2.2
March 2010 Stability and growth programme (SGP) measures	–	0.6	0.7	0.8
May 2010 additional measures[1]	0.6	1.4	1.4	1.4
Total effects	1.2	4.1	4.9	5.6

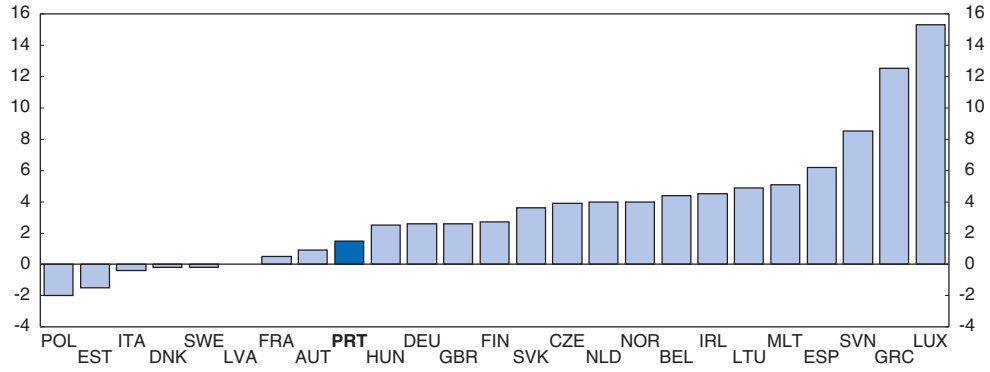
1. Effects in 2010 also include the frontloading of some SGP measures.
Source: Portuguese Ministry of Finance.

Continuing to implement the consolidation measures in a strict way is essential to secure fiscal sustainability, even if the cyclical situation turns out worse than expected. Otherwise, the financing conditions for both the public and private sectors may deteriorate substantially, with a sharp increase in risk *premia* and severe consequences for economic growth. It is also important to maintain a strong political consensus for fiscal consolidation: if acute market stress were to resurface, threatening debt sustainability and potentially the credit supply to the economy, further fiscal tightening measures may need to be contemplated. Provided immediate consolidation is successfully carried out and

spreads subside, medium-term fiscal sustainability should not be threatened by the financial sector, which is considered as sound (Box 1.1). Also, the projected long-run increase in pension spending (as well as total ageing costs) is below the EU average (Figure 1.10), owing to major pension reforms carried out from 2005 onwards whose implementation pace is being accelerated in the recent SGP.

Figure 1.10. **Projections of pension spending in EU countries**[1]

2010-60 change, in percentage points



1. Pension spending includes gross public pensions (*i.e.* before taxes and compulsory social security contributions) and is expressed as a percentage of GDP.

Source: Eurostat.

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Thoroughly reforming the budgetary process will enhance the credibility of the fiscal adjustment and help improve the efficiency of public spending, therefore making expenditure cuts more sustainable from an economic and social point of view. In a welcome step, the authorities have announced the intention to revise the Budget Framework Law in the near future, which should be used as an opportunity to adopt a comprehensive medium-term expenditure framework supported by an expenditure rule, in line with the OECD's Review of Budgeting in Portugal (OECD, 2008b). A way to achieve this would be to enshrine in the Framework Law an expenditure ceiling (Loureiro *et al.*, 2008). Regularly conducting sectoral expenditure reviews would foster efficiency in important areas of public policy and would thus also help underpin aggregate budget discipline. In line with the decision taken in May 2010 to reduce transfers to local and regional governments, whose spending growth has tended to outpace that of central authorities, budget rules should ensure that expenditure restraint is shared across all tiers of government. Though often outside general government, more efficient management of state-owned enterprises (see Chapter 3) is also important for public spending control through reduced subsidies and capital transfers, as envisaged by the authorities.

Fiscal consolidation should attempt to minimise any negative impacts on potential growth. From this perspective, an expenditure-based consolidation is generally regarded as preferable to a revenue-side one, leading to more sustainable fiscal consolidation. Nonetheless, as the magnitude of the necessary fiscal adjustment in Portugal is sizeable, the government should stand ready to raise taxes further, if needed. However, it is important to minimise the negative impacts of a higher tax burden on employment and productivity. Though increases in the rates of personal and corporate direct taxes, such as

those recently adopted, help deliver a rapid deficit reduction, a reform of the tax system needs to be eventually implemented (Chapter 2), as revenue gains should mainly rely on consumption and property rather than on labour, and on base broadening rather than on higher marginal rates.

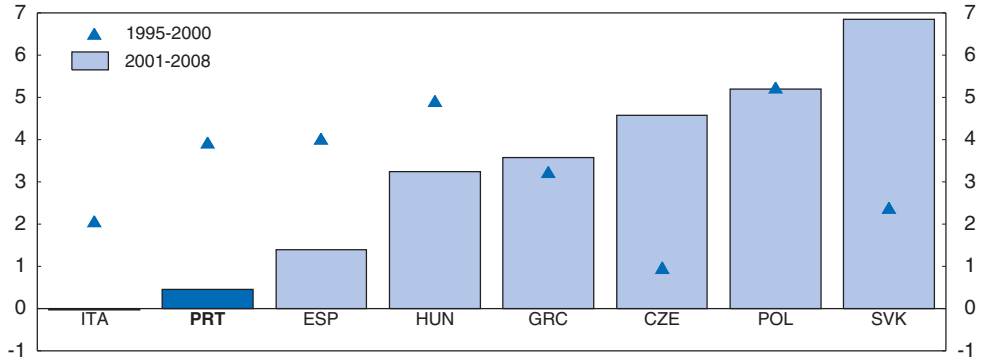
As further analysed in Chapter 2, base broadening can be pursued both by curbing tax expenditures and by fighting tax evasion and fraud. The Portuguese tax system offers a very large scope for the former. Recent announcements by the authorities to reduce tax expenditures in direct taxes are hence welcome, though still lacking full specification. In turn, estimates of a comparatively large shadow economy in Portugal (Feld and Schneider, 2010)[10] suggest that tackling tax evasion, despite significant progress in recent years, also remains an important avenue towards base broadening.

Restoring a higher growth path

After joining the EU in 1986, Portugal undertook a wide range of reforms which contributed to economic growth and allowed the country's living standards to converge with those in richer OECD countries. GDP per capita rose from below 60% the OECD average in 1986 to close to 70% in 2000. However, in the early 2000s, GDP growth in Portugal fell compared to the OECD average. Growth in GDP per capita averaged 0.4% between 2001 and 2008, and GDP per capita relative to the OECD average fell back over the same period. A number of OECD countries, similarly lagging behind in the mid 1990s, managed to achieve significant convergence in a rapidly changing global environment. Portugal experienced a notable deceleration in its income growth and its catching-up process and a subsequent deterioration of its relative position, similar in that respect to Italy (Figure 1.11).

Figure 1.11. **Growth in GDP per capita in a comparative perspective**[1]

Percentage change at annual rate



1. GDP in constant prices, constant purchasing power parities.

Source: OECD, *National Accounts Database*.

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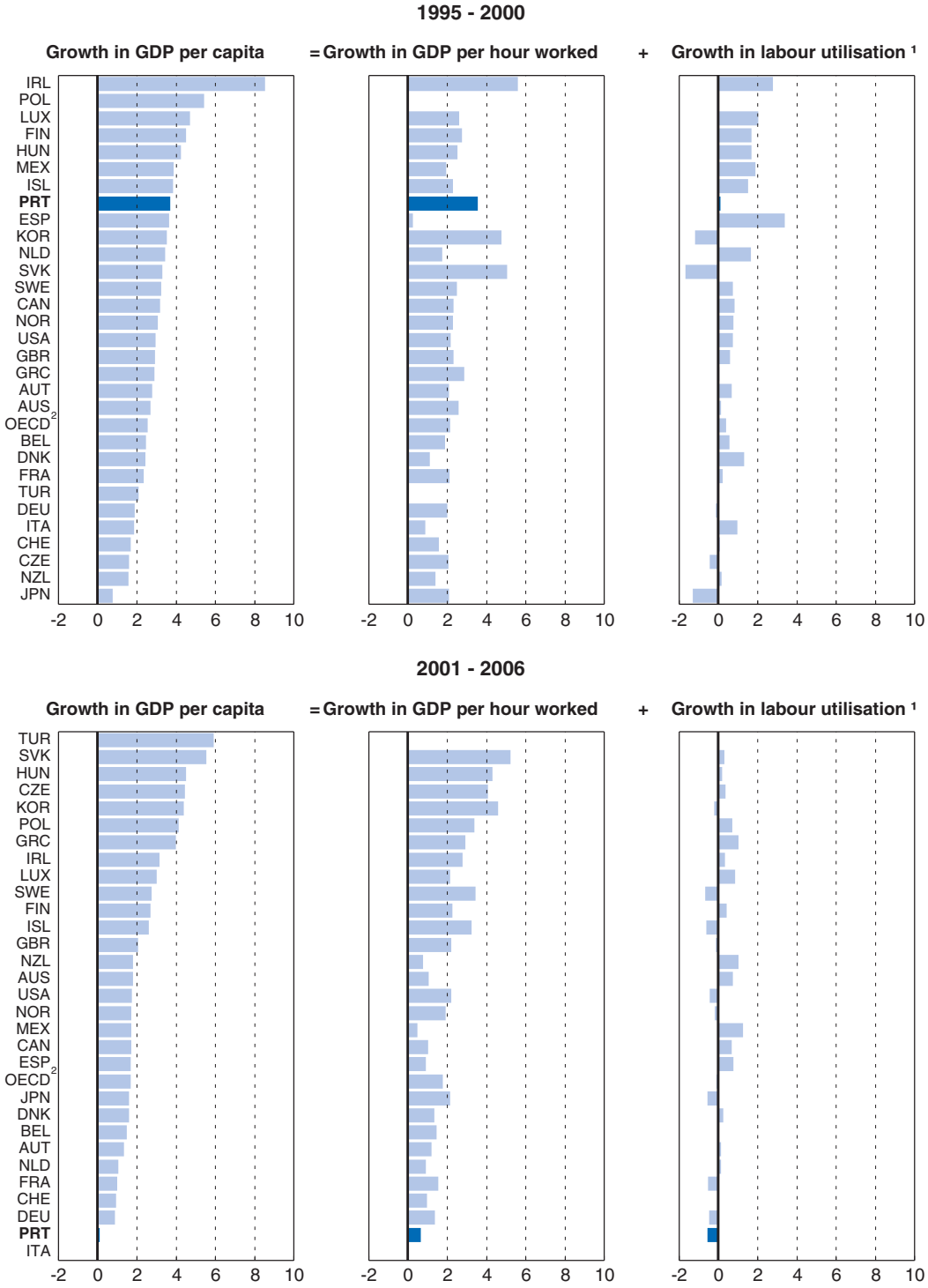
The deceleration in output per capita growth since the beginning of the 2000s was due to a marked slowdown in trend productivity growth (Figure 1.12). Over the two sub-periods, labour utilisation remained a relatively minor component of growth. While employment growth continued to have a positive impact on GDP per capita growth after 2000s, the share of working age population in total population started exerting a negative impact (OECD, 2008a). In the future, population ageing is expected to result in a negative contribution of

Figure 1.12. **Contributions to GDP per capita growth**

Total economy, percentage change at annual rate



1. Labour utilisation is measured as total hours worked per capita.
2. OECD aggregate does not include Poland and Turkey.

Source: OECD, *Labour Productivity Database*.

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labour to growth. Against this background, the next section focuses on how to improve labour market settings in Portugal so as to respond to the current job crisis while boosting potential labour in the medium to long run. Resuming the convergence process will also require structural policies to restore labour productivity growth, as discussed in Chapter 3.

Labour market policies in the aftermath of the crisis

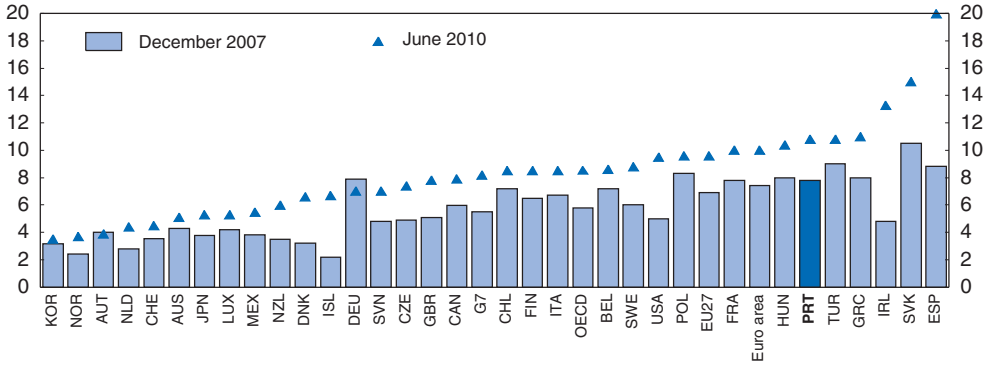
The risk of reduced potential labour input

The risk of rising structural unemployment

Portugal has been facing a steady increase in unemployment since 2002, when it was about 5.1%. Unemployment fell slightly in 2007, with a low of 7.8% in December 2007, before rising again as a result of the economic crisis; this deterioration is not as severe as in some countries, notably those that experienced large housing price bubbles. However, unemployment has currently reached one of the highest levels in the OECD (Figure 1.13) and there is great uncertainty looking forward.

Figure 1.13. **The rise in unemployment**[1]

OECD harmonised unemployment rates as a percentage of labour force, seasonally adjusted



1. March 2010 for Greece; May 2010 for Chile and Sweden; April 2010 for Norway, Turkey and United Kingdom; 2007Q4 and 2010Q1 for Switzerland and New Zealand; 2007Q4 and 2010Q2 for Iceland and 2007Q4 for Mexico.

Source: OECD, *Main Economic Indicators Database*.

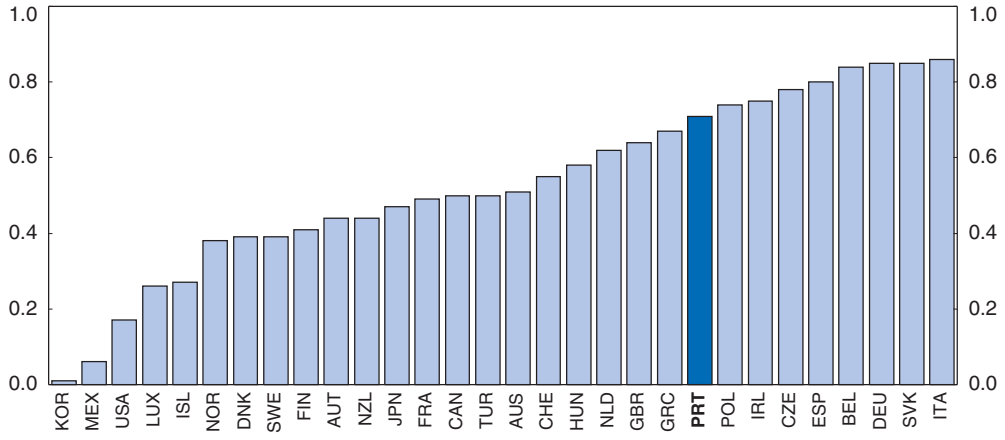
StatLink http://dx.doi.org/10.1787/888932330669

The current crisis increases the risk that much of the substantial increase in unemployment is transformed into higher structural unemployment as a result of so-called "hysteresis" effects. This might arise because workers who remain unemployed for a long period may become less attractive to employers, as a result of declining human capital or because their intensity of job search diminishes (Machin and Manning, 1999). This risk is particularly high in Portugal, given the significant prevalence of long-term unemployment in a comparative perspective: 67.8% when long-term unemployment is defined for 6 months and 48.3% when it is defined for 12 months and over, compared with respectively 54 and 38.6% in the EU15 on average (2008 data from OECD, 2009a). In Portugal, the impact of an increase in unemployment on its structural component is relatively strong in a cross-country perspective: after a permanent shock to unemployment, it is estimated that 71% of the unemployed eventually become long-term unemployed (Figure 1.14, see OECD, 2009b).

According to recent estimates (OECD, 2010a), the current downturn could imply a peak increase in the non-accelerating inflation rate of unemployment (NAIRU) of more than two percentage points over the period 2007-11.[11] This large increase may reflect unfavourable institutional settings in Portugal – in particular generous long term unemployment benefits and less competitive product market regulation. Addressing the potential rise in structural unemployment is particularly challenging because there is some evidence that the trend increase in structural unemployment started well before the crisis. Centeno *et al.* (2009a) stimate that the NAIRU was around 5.5% until the late 90s and increased thereafter to slightly above 7%; empirical work suggests that part of this trend increase might be related to the generosity of the unemployment benefit (UB) system (Centeno *et al.*, 2009a; Bassanini and Duval, 2006).

Figure 1.14. **The long-term impact of a unit increase in unemployment on its long-term component**

Effect of 1% rise in unemployment rate on long-term unemployment



Source: OECD (2009), "Adjustments to the OECD's Method of Projecting the NAIRU", *OECD Economic Outlook*, No. 85.

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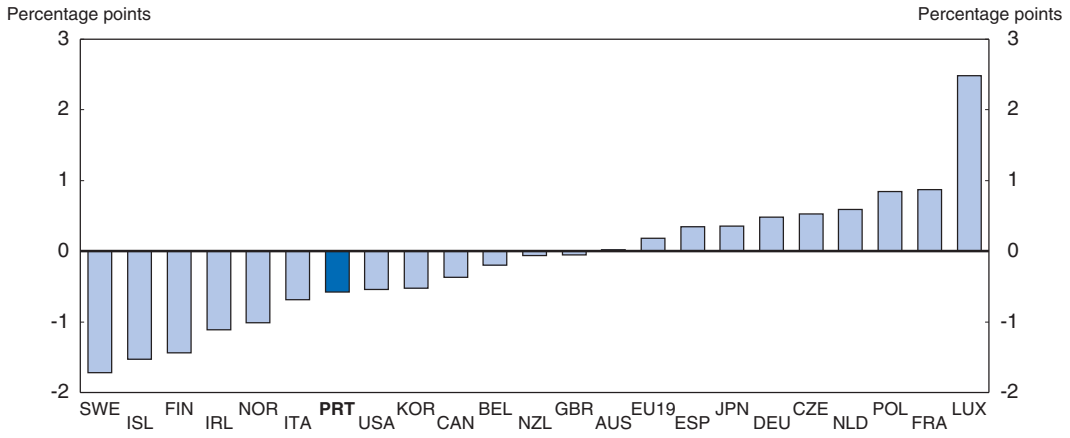
The risk of lower trend labour force participation

The current downturn might also have long-lasting adverse effects on trend labour force participation, which would further reduce potential output over the medium term. Discouragement effects seem to be weighing on the Portuguese labour market, as suggested by analysis of alternative measures of labour market slack (OECD, 2010c). These effects arise as some workers withdraw from the labour force, as employment opportunities diminish in a recession. Portugal experienced a decrease of 0.6 percentage points in the participation rate between 2008 and 2010 (annual data, Figure 1.15).[12] One of the key policy priorities going forward is to avoid a protracted period of labour market slack and to reduce the risk that the rise in unemployment and the decrease in participation may become structural. This makes all the more important and urgent to pursue labour market reform in Portugal (see below).

It is too early to judge what the long-lasting effects will be, but Portugal displays a relatively high cyclical labour force responsiveness (OECD, 2010a), which can be explained by a number of sources, including demographic and institutional factors that influence attachment to the labour force of various categories of the population. Strict employment

Figure 1.15. **The decrease in labour force participation**

Change between 2008 and 2009



Source: OECD, *Labour Force Statistics Database*.

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protection legislation (EPL) may help limit job losses in the early stages of the downturn, but may also hamper hiring in the subsequent recovery, with adverse consequences for unemployment and participation. This latter effect appears to dominate, so that the adverse effect on trend labour market participation seven to eight years after a severe downturn is estimated to be about ½ percentage point more for the countries with the strictest EPL compared to those with the least strict (OECD, 2010a). Considerable changes in the labour code over the last two years brought Portugal closer to the OECD average in terms of the overall rigidity of EPL (2.84 in 2009 *versus* 2.23 on average in OECD countries). More needs to be done, however. Protection of permanent workers against (individual) dismissal is still the strongest among OECD countries (3.51 in 2009 *versus* 2.09 on average in OECD countries).

The uneven impact of the recession in a dual labour market

There are significant differences across workforce groups and sectors in the way employment and average working hours respond to the business cycle. In all countries, already disadvantaged groups, such as youths, immigrants, low-skilled and temporary workers, bear the brunt of rapidly falling demand for total hours worked.[13] A particularly important reason why some groups may be affected more than others is differences in their *turnovercosts*, that is, the costs that employers incur when they replace existing employees with new recruits (Lindbeck and Snower, 1988, 2001).[14] The relative sensitivity of disadvantaged groups is particularly strong in Portugal in a comparative perspective, due to the dual nature of the Portuguese labour market.

Historically, workers on a temporary contract have been the most sensitive to changes in the business cycle in Portugal (OECD calculations based on OECD, 2009a). Their business cycle sensitivity is almost 6 times higher than that of the national average, suggesting that they have borne the bulk of labour market adjustment in the downturn. Youths are also extremely vulnerable: business cycle sensitivity is more than 4 times as high for youths as for individuals aged between 25 and 54 and 160% above the national average: again, relative vulnerability is much stronger in Portugal than in other OECD countries. These effects reinforce each other, given that youth tend to be overrepresented among temporary workers. The share of youths (15-24) among temporary workers was 23% in the second

quarter of 2009, while their share in overall employment was 8%. Over the same period, 50% of youth were employed under temporary contracts, similar to other European countries characterised by comparable levels of dualism, such as Spain and Poland (OECD, 2009a and 2010c).

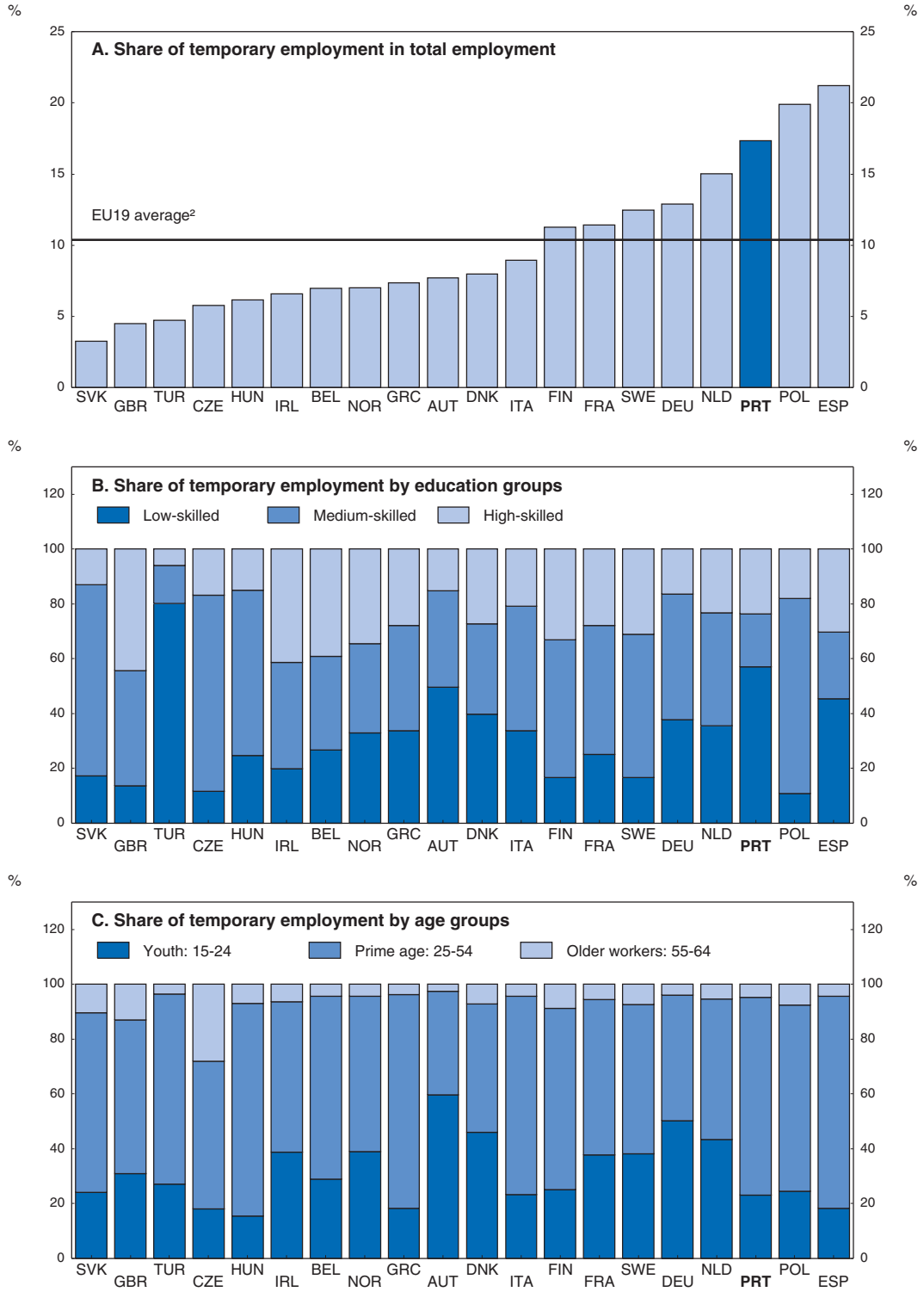
Available labour market indicators confirm the historical patterns.In particular, the non-renewal of fixed term contracts is by far the most important reason of entry in unemployment: recent 2010 data show that non-permanent contracts are responsible for 65% of all quarterly transitions from salaried employment to unemployment (*Labour Force Survey* data). Total employment fell by 3% from the fourth quarter of 2008 to the fourth quarter of 2009, with youth and low skilled employment falling respectively by 15% and 7% (OECD, 2010c). Because youth and low skilled workers are over-represented among temporary workers, the reductions in temporary youth employment and in temporary low-skilled employment were large, with both categories declining by 11%. Migrants are also a particular vulnerable in Portugal and they are also more likely than natives to be in temporary employment (OECD, 2009c). In 2007, the share of immigrants in temporary employment exceeded that of the native-born by 60%.

The share of temporary employment in total employment has been increasing since the early 1990s, with a particularly marked increase since 1998, after the reduction of EPL for temporary contracts (Kahn, 2007; Boeri, 2010). This feature of the Portuguese labour market is associated with the recognized issue of labour market segmentation and dualism (Vieira *et al.*, 2005). Portugal displays one of the highest shares of temporary workers among OECD countries: most of them are low-skilled, which is partly the reflection of the Portuguese educational gap (Figure 1.16).[15] While the rising share of temporary employment has been associated with increasing job and workers flows, it has led to strong segmentation and polarisation of the labour market, which can be assessed by the significant and increasing incidence of fixed-term contracts and self-employment among specific groups, such as the young and low skilled, who have less stable job trajectories and are more exposed to labour market fluctuations.

During the first half of the decade, fixed-term contracts have become the largest, and at times the sole, contributor to employment growth. According to estimates based on microeconomic data from Quadros de Pessoal (Centeno *et al.*, 2008), average hiring rates under fixed-term contracts and open-ended contracts were respectively 46.4% and 9% in 2005. Net job creation was negative for permanent contracts and positive and increasing for fixed term contracts, rising from 8.3% in 2003 to 13.2% in 2005. Employment growth has been concentrated in low quality occupations. Net job creation rates of workers in the first quintile of the wage distribution and the fifth quintile of the wage distribution were respectively 1.5% and –0.5% in 2005. Fixed-term contracts have rarely been an entry into stable employment. According to 2005 data presented in Centeno *et al.* (2009b), around one quarter of fixed-term contracts were converted into open-ended contracts in Portugal, a lower proportion than in other OECD countries; for example, in France the equivalent figure was 37%.

The widespread use of temporary contracts in Portugal might strengthen the impact of the current downturn on the labour market, compared with previous recessions. Indeed, empirical analysis presented in OECD (2009a) suggests that the increased use of temporary contracts has led to an increase of almost 24% in average aggregate labour market volatility in Portugal, compared to 9% on aggregate in OECD countries.[16] The segmented nature of

Figure 1.16. **Temporary employment in a comparative perspective**[1]



1. Data refer to 2009Q1.
2. EU19 average excludes Luxembourg.

Source: European Union Labour Force Survey (EULFS) from Eurostat for all the European countries and National labour force surveys for the other countries.

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the Portuguese labour market makes it all the more important to address labour market heterogeneity by ensuring that the system protects the most vulnerable while at the same time it supports labour supply.

The introduction of the new labour code in 2009, by reducing EPL for regular contracts, is an important step in the direction of reducing labour market dualism, as will the new Contributory Code of Social Security. More needs to be done, however. The authorities have acknowledged the need to continue reforming the labour market and are currently discussing a new strategy with the social partners. EPL for regular contracts should be reduced further, which would reduce the gap between the protection of regular and temporary workers.

Responding to the jobs crisis while supporting strong potential employment in the long run

Making the most of income support policies: reforming the UB system

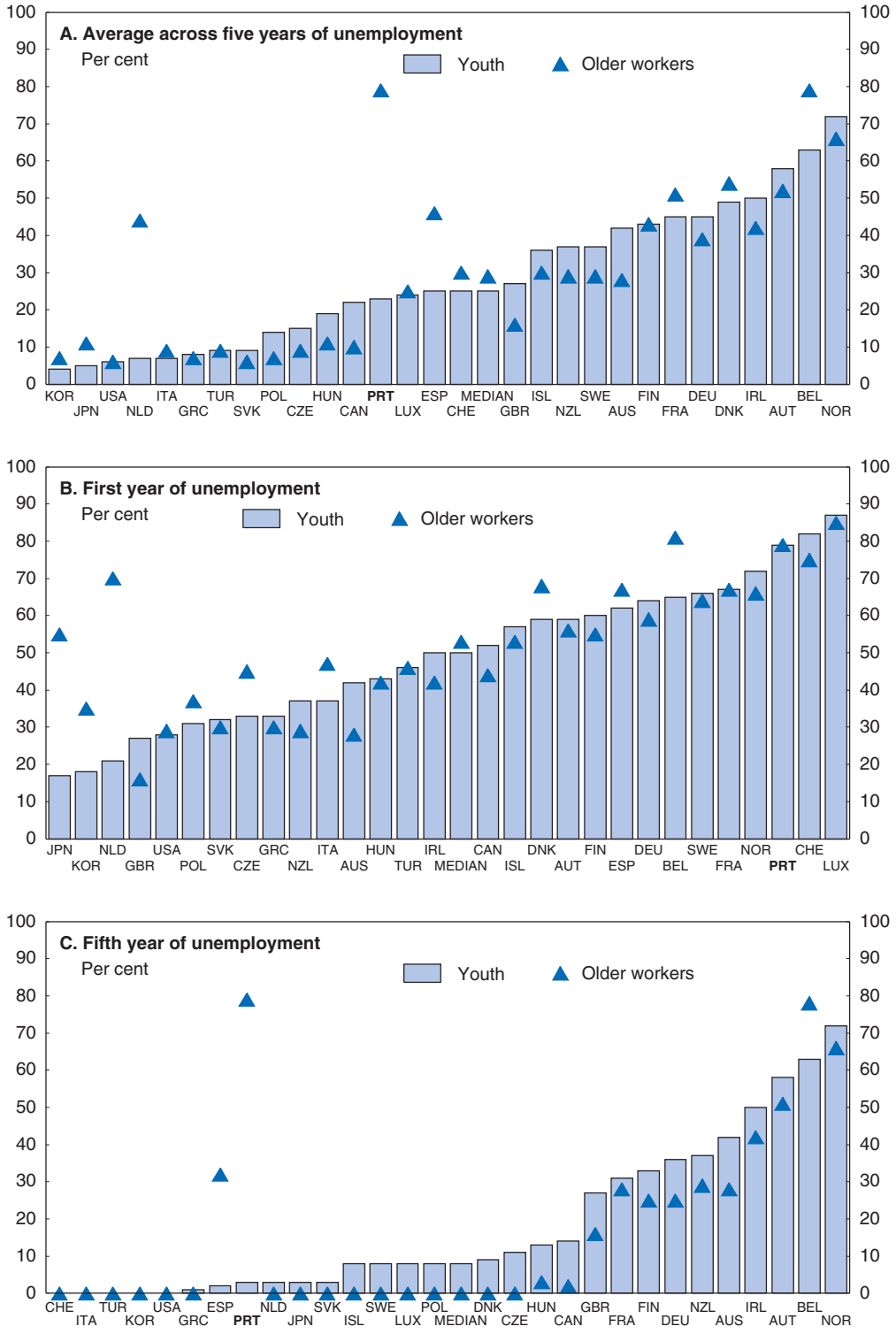
Portugal should consider a fundamental revision of its unemployment benefits (UB) system, to provide adequate social safety supports during downturns while promoting employment. In early 2010, the authorities reduced the contributory period to access UB from the rather ungenerous 450 days to 365 days of dependent work, but this measure was withdrawn in May 2010, owing to its fiscal cost. However, most other OECD countries require lower contributory periods, often less than 6 months. Given the high proportion of workers under temporary contracts, who are less likely to meet contribution requirements, the authorities should consider reducing again the contributory period to access UB and make this change permanent. The government should concomitantly expand monitoring and evaluation mechanisms aimed at avoiding opportunistic behaviour (such as creating a job only lasting the minimum eligibility period).

In parallel to easing entitlement criteria to access unemployment benefits, Portugal should continue to encourage return to work by both reinforcing activation policies and reducing the generosity of the system, especially for older workers.[17] The government already took a step in the right direction defining a new frame on replacement rates and reinforcing sanctions associated with lack of job search in May 2010. Nonetheless, UB generosity remains related to age, which induces a striking gap between the treatment of youth and older workers. A peculiar feature of the system is the definition of the entitlement period, which is partly determined by the individual's age at the beginning of the unemployment spell: duration increases with age and contributory record following the last unemployment spell. This feature is quite rare and it is one of the main factors that explain the current regressivity of the system, since in practice, longer durations of subsidized unemployment are observed for individuals with higher pre-unemployment income. Hence, the UB system has a degree of inequality that is larger than wage inequality (Centeno and Novo, 2007).

UB can be conducive to weak labour supply for older workers due to the relatively high replacement rates and very long benefit duration. Indeed, net unemployment replacement rates of older workers are in Portugal the highest among OECD countries, and for older workers they do not decrease with unemployment duration (Figure 1.17). This has prompted some labour market analysts to criticise the current system for excessive moral hazard that weakens labour supply. There is abundant empirical evidence on the substantial impact of unemployment benefits on both unemployment duration and reservation wages in Portugal (Portugal, 2008; Addison *et al.* 2008; Addison *et al.*, 2009).

Figure 1.17. **The generosity of unemployment benefits: youth *versus* older workers**

Net replacement rates at different points during an unemployment spell, 2007



Source: OECD, *Tax-Benefit Models*.

StatLink http://dx.doi.org/10.1787/888932330745

Portugal's unemployment is historically high in a comparative perspective for older workers: unemployment rates for men aged 55 to 64 was 7.3% in 2008, whereas the OECD European average was 5.1%. Moreover, the average duration of completed unemployment spells for older workers is in Portugal 32.8 months in Portugal, compared to 24.4 months on average across OECD countries (data from OECD, 2009d). The UB system can also be conducive to early retirement. Indeed, older workers on long-term unemployment, whether they receive benefits from unemployment insurance or from unemployment assistance, have special conditions to access early retirement. In practice, therefore, long-term senior unemployed have no incentives to take a new job and use the system as a bridge to the Old Age Pension.

The gap between the treatment of youth and older workers should be reduced, allowing the former to receive adequate support during unemployment spells and the latter to be given effective incentives to come back to work. UB duration and replacement rates should not be related to age and benefits should be a decreasing function of unemployment duration for all workers. Reforming the UB system to make it more equally distributed by age and supportive of labour supply should be combined with continued efforts to improve the credibility of activation policy for the unemployed, in the spirit of the "flex security" model.

A second category of atypical workers is the so-called "falsely self-employed", who are in fact often temporary employees and thus at high risk of unemployment. They are not counted as temporary workers in the official statistics and would be difficult to quantify, but anecdotal evidence suggests that they represent a non-negligible proportion of the employed.[18] There are several reasons that explain the reliance on this contractual arrangement in Portugal: *i)* the strong protection of permanent workers creates incentives for firms to employ less formal workers; *ii)* compared to employees, the self-employed are currently subject to lower social security contributions; on this respect, it should however be noted that the new Contributory Code of Social Security (which is expected to come into force in 2011) should limit the incentives for both workers and employers to rely on these arrangements; *iii)* the increase in the share of employment in the services sector has generated a concomitant rising demand for low cost external service provision. At the end of 2009, only slightly more than 60% of the unemployed were receiving unemployment benefits (unemployment insurance or unemployment assistance).[19] While reducing the contributory period for UB should allow protecting job losers on temporary contracts, it will not provide income support to other forms of atypical job losers such as the "falsely self-employed". The authorities should ensure the availability and adequacy of lower-tier assistance benefits, such as social assistance under the Minimum Income support, for those categories of unemployed not covered by the system.

Making the most of active labour market policies

As most OECD countries, Portugal expanded spending on ALMP as a result of the crisis. Expansion of ALMP during the downturn is desirable and Portugal should be proactive in maintaining as much as possible the capacity to provide adequate case-management and re-employment services. Most of the planned increase is temporary, and a number of measures were already phased out in May 2010 due to fiscal pressure. Box 1.2 summarises the main labour market measures taken through the *Iniciativa para o Investimento e o Emprego*.[20]

Box 1.2. **Labour market measures taken to deal with the rise in unemployment**

The package *Iniciativa para o Investimento e o Emprego* (IIE) was approved by the government in January 2009. Most of the measures were extended at the beginning of 2010 but some were withdrawn during the course of the year. The programme is targeted at the most vulnerable workforce groups: youth, low-skilled, temporary and older workers, and long-term unemployed. Major measures can be summarised as follows:

- Measures to stimulate labour demand:
  - Reductions in non-wage labour costs:
    - Reductions in employer social security contributions applying to continuing workers (3 p.p. reductions in 2009 for micro and small firms and older workers, and 1 p.p. reduction in 2010 for low wage workers). The reduction depends on maintaining the level of employment during the year. The first measure was withdrawn in May 2010.
    - Reductions in employer social security contributions and hiring subsidies applying to new hires (fixed-term contracts for long-term unemployed, youth, and senior unemployed).The hiring incentives are conditional on net employment creation and the maintenance of employment for the duration of the contract of employment created.
  - Expansion of short-time working schemes (STW) in the automotive, textiles, clothing, tourism, furniture and trade sectors. STW is associated with subsidized training. This measure was withdrawn in May 2010.
- Re-employment measures for jobseekers: the expansion of job search assistance offered by local actors (municipalities, entrepreneurs and social partners association, non-profitable organisations.)
- Expansion of training and work experience programmes: for existing workers under STW schemes, for youth in apprenticeships schemes, for young unemployed and unemployed who have improved their qualifications.
- Income support for job losers: 6 months extension of the entitlement to unemployment benefit and reduction in the contributory period to access UB, from 450 to 365 days of dependent work. These measures were withdrawn in May 2010.

Labour demand support measures should be targeted and temporary

One of the goals of ALMP is to keep all unemployed persons engaged with employment related activities. In this context, the labour demand support measures enacted in Portugal as a response to the jobs crisis – reductions in employer social security contributions for workers and new hires of designated disadvantaged groups, targeted job subsidies and expansion of short time working schemes – are in principle an effective backstop to activation regimes through a period of market slack, in part because they have been targeted to the most vulnerable. Portugal needs keep monitoring carefully the effectiveness of these measures once the expansion is underway, since if they remain in place too long they might inhibit a recovery of employment.

As a response to the labour market crisis, Portugal introduced an important number of temporary measures to stimulate labour demand. Most of them are targeted reductions in non-wage labour costs for continuing workers or new hires of disadvantaged groups (see Box 1.2). Reductions in employers' social security contributions applying to continuing

workers have been targeted at small firms in 2009 and at low-wage workers in 2010. Reductions in employers' social security contributions applying to new hires have been targeted to long-term unemployed, youth, and older unemployed. Employers are exempt from paying social security contributions for three years (or for the first two years in addition to a hiring subsidy) if they hire long-term unemployed or young people in full-time permanent jobs. Alternatively, employers benefit from a 50% reduction in social security contributions for new hires of older unemployed. Firms must have net hiring over a three-year period, meet certain accounting standards, fulfil tax and social security contributions, and not have wage arrears. By exclusively concentrating on newly created jobs, hiring subsides have the potential to be more cost-effective than reductions in non-wage labour costs applying to continuing workers, particularly when they are conditional on raising net employment, as done in Portugal through the marginal employment subsidies (OECD, 2009a).

While marginal employment subsidies can be a cost-effective tool to cushion the labour market crisis, these measures have suffered from low take-up rates in Portugal, which might be related to the relatively strong conditionality requirements imposed on Portuguese firms. The marginal employment subsidies introduced under *Programa Iniciativa Emprego* could be designed and operated more effectively. Conditionality requirements could be alleviated to increase the impact of the scheme. The requirement of 3 years net employment creation along with the maintenance for 36 months of the new contract could be relaxed. For example, in Turkey, marginal employment subsidies require that there be net hiring for one year. It has to be recognised, though, that such measure might incur the risk of increasing work precariousness.

STW policies have received an unusual degree of emphasis in the current downturn in OECD countries, including in Portugal, where STW was temporarily expanded between early 2009 and May 2010. The number of workers under STW schemes was more than three times higher in January 2010 than in 2008. However, available estimates suggest that take-up was low in a comparative perspective and the scheme accounted for less than one per cent of employees in 2009 (OECD, 2010c). Compared to other European countries, the Portuguese STW might have been ineffective at preserving employment in 2009. Indeed, OECD (2010c) recently constructed a measure of the short-term impact of STW, by estimating the percentage change in permanent employment that can be attributed to STW. According to this analysis, STW had a small proportional impact in Portugal relative to other countries that introduced such measures.[21] This outcome mostly reflects the low take-up rates of STW in Portugal in 2009, but also the size of the output shock, which was relatively weak. Worker conditionality requirements – notably, the requirement to engage in training activities – risk reducing take-up rates but they may help to reduce displacement effects that arise when such schemes support unviable jobs. As with the marginal employment subsidies, policy design has to seek a balance between tight conditionality and potentially sizeable deadweight losses.

Over the long run, available studies suggest that labour demand support measures are not effective at preventing transitory factors from destroying valuable job matches. Effective targeting of support to "viable" jobs is difficult, particularly so in times of rapidly deteriorating labour markets. Protecting jobs in declining or low productivity sectors carries the risk of unduly slowing structural adjustment in Portugal, with detrimental consequences for growth and productivity. To avoid protecting the "wrong" jobs and impeding employment growth during a subsequent recovery, it is important to attach clear

and credible time limits to remaining labour demand support measures. If enacted too long, those measures risk impeding employment and productivity growth during the recovery by limiting the efficient reallocation of workers across firms and sectors. To support employment in the longer term, Portugal should consider introducing a wide-range reform of the structure of taxation (switching from labour to consumption taxes), as discussed in Chapter 2.

Low STW take-up rates in Portugal might also have resulted from structural features that lead labour market adjustment to occur exclusively by adjusting employment – and almost exclusively temporary employment – *versus* hours worked: *i*) relatively rigid working-time regulations, which make it difficult for firm to adjust employees' working hours;[22] *ii*) the incidence of temporary employment and the flexibility associated with firing temporary employees, which make it easier for firms to fire employees than to adjust their working time. It is notable that Portugal is, along with Sweden, the only OECD country having experienced increased working hours during the recession (OECD, 2010c). The 2009 Labour Code made it easier to introduce flexible working schemes at the company level or by collective agreements. Under this framework, Portugal should continue to introduce more flexibility in working-time regulations, which would help labour demand to adjust hours worked during recessions and possibly reduce employment losses. Allowing more flexibility in working arrangements would also stimulate labour supply in the longer term (Causa, 2008).

The expansion of training has to be accompanied by enhanced information and activation tools

Portugal's response to the labour market crisis put great emphasis on training for unemployed workers, employees at risk of unemployment, and other targeted groups of inactive individuals, such as youth. The targeted expansion of training is a welcome initiative, especially as there are several reasons to believe that the cost-benefit balance for offering training to job losers typically will be higher in a recession than when the labour market is less slack. The opportunity costs of the time required to train is lower when jobs are scarce anyway. Also, economic downturns tend to be associated with accelerations of structural change, implying that a usually large number of job losers may need to change industry or occupation to become re-employed, and hence may be likely to benefit from, and, indeed, require, training.

As with the STW, however, the substantial expansion of targeted training supply for the unemployed is experiencing lower take-up than budgeted, however. In 2010, efforts are being concentrated on promoting better identification of training available to the unemployed along with their access to active employment measures. These initiatives should be pursued to better reach target groups through information campaigns, training of public employment services (PES) staff to inform them on new priorities and involvement of local stakeholders. Collective information sessions held at PES should be used to provide information on training available to the unemployed. Portugal should also better target ALMP to vulnerable groups, such as immigrants. Empirical results show that immigrants arriving during a downturn suffer immediate but also long-term effects associated with the difficult labour market conditions encountered upon arrival (OECD, 2009c). Introductory programmes for this group need to be strengthened, especially since targeting the group under mainstream ALMP programmes is not generally done.

In the current context and over the long run, efforts should be continued to improve exchange of information between the PES and training centres, and in particular the *Novas Oportunidades* centres. Currently there are multiple actors providing training to the unemployed: the professional training centres that directly depend on the PES, the so-called "Centros de Formação Profissional de Gestão Directa", centres that provide professional training in specific areas/industries/sectors (automotive, footwear, food, construction, cork, textile…), the so-called "Centros de Formação Profissional de Gestão Participada", and *Novas Oportunidades* centres. Coordination is essential in the context of activation policy, that is, to ensure that benefit recipients have a better chance to find employment. It will also help increasing take-up rates of training programmes. More broadly, failure to enrol targeted unemployed individuals in training programs raises important concerns over the effectiveness of Portugal's active labour market programs. Yet, given the high proportion of long-term unemployed and the risk that this proportion will raise as a result of the crisis, the authorities must work to improve the design of active labour market programmes and activation tools used by the PES. Several measures aimed at promoting the effectiveness of the PES are already underway, such as the designation of "employment managers" whose role is to improve the matching process between labour demand and labour supply by better identifying jobseekers and firms' respective needs, and the development of tools to monitor job interviews. Effective activation policy would improve incentives to return to work, especially so when those are weakened by the generosity of the Portuguese UB system.

Empirical studies have found that job search assistance programs and continuing vocational training speed-up re-employment for benefit recipients and other jobseekers. These findings have led to suggestions – expressed among others in the Restated OECD Jobs Strategy in 2006 – that in situations of longer unemployment duration, compulsory participation in active labour market programs can help improve employment prospects by reducing the risk of long term unemployment and labour market exit (see OECD, 2007).[23] This is of particular concern for Portugal, which features relatively high long-term unemployment and long unemployment spells, in particular for mature individuals. In principle, benefit recipients need to comply with a referral to an ALMP by a PES counsellor, but participation does not depend on unemployment duration. This weakness in the activation regime coupled with the generosity of UB for long-term unemployed and in particular for older unemployed, might explain the high proportion of long term unemployment and older individuals' unemployment. Portugal should introduce obligatory participation in training or other active labour market programmes for all benefit recipients after a well-specified spell of unemployment, as done in some other OECD countries (such as Australia, Denmark, the Netherlands, Sweden and the UK) and as currently contemplated by the government. Further targeting could be introduced by specifying different thresholds for young and older jobseekers, as done in the UK and Denmark.[24]

It is important to allow ALMP participants time for continuing job search, and for the PES to verify that job search, since take-up of market jobs would usually have priority over employment programmes. This would suggest that active programmes should not be full-time activities. Exceptions might be certain types of training courses that should not be terminated before graduation. In Portugal, unemployed enrolled in ALMP are exempt from job search obligations. Job search requirements should continue along with verification, which implies designing training programmes in such a way that they leave participants time for job search.

Box 1.3. **Main recommendations on rebalancing the economy towards sustainable growth**

Reducing current account deficits

- Extend the freeze in nominal public sector wages until 2013 to set the tone for the private sector and encourage medium-term agreements between social partners to restore cost competitiveness. A switch from labour to consumption and property taxes (see Chapter 2) can smooth the adjustment process.

Restoring fiscal sustainability

- Ensure that the consolidation measures continue to be strictly implemented, even if the cyclical situation turns out worse than expected.
- If acute market stress were to resurface, threatening debt sustainability and potentially the credit supply to the economy, further fiscal tightening measures may need to be contemplated.
- Adopt a comprehensive medium-term expenditure framework supported by an expenditure rule
- Ensure that expenditure restraint efforts are shared across all levels of government.
- Curb tax expenditures and raise the least distortive taxes, if needed.

Increasing labour utilisation

- During the labour market downturn, ensure that atypical laid-off workers, such as temporary workers or the "falsely self employed", have access to unemployment benefits (UB) or lower-tier assistance benefits.
- Reduce the necessary contributory period to access UB closer to the OECD average and make the change permanent.
- In the medium run, reform the UB system by ensuring that UB duration and replacement rates are not related to age. Benefits should be a decreasing function of unemployment duration for all workers.
- To reduce labour market dualism, employment protection legislation for regular contracts should be reduced further.
- The labour demand schemes that have not been phased out yet should be unwound quickly once the job market recovers.
- Continue increasing flexibility in working-time regulations as a way to allow greater incidence of adjustment of hours worked compared to employment.
- Focus on increasing the take-up of training programmes for the unemployed, by implementing measures aimed at reaching target groups, such as information sessions in PES. Ensure efficient exchange of information between training centres for the unemployed and PES.
- Enhance targeting of ALMP to the most vulnerable, in particular youths and new immigrant arrivals.
- Introduce obligatory participation to training after a specified duration of unemployment.
- Job search requirements should continue along with verification of job search for unemployed enrolled in training. Design training programmes in such a way that they leave participants time for job search.
- Monitor the quality and the effectiveness of the multiple counselling services available to the unemployed.

Job search assistance is usually provided by Instituto de Emprego e Formação Profissional (IEFP) centres, the Portuguese PES. The steep rise in unemployment therefore implies an important reduction of staff to client ratios in public sector employment agencies. This raises concern over on the capacity to provide adequate case management to the increasing numbers of job losers in Portugal: while it is true that the effectiveness of jobseeker support relative to training policies might decrease when labour market conditions deteriorate, it is very important to prevent job losers from becoming disconnected from the labour market. As a consequence, core elements of activation regimes, such as drawing up of a personal re-employment plan, regular meeting with case managers and behavioural requirements to search actively for a job should not be allowed to lapse, even if it is judged necessary to implement those measures in a somehow diluted form.

While not expanding job search assistance and counselling offered by PES, the authorities supported the creation of 425 new offices, called "Gabinetes de Inserção Profissional" (GIP), to support unemployed in 2009. GIP is non-profit public and private entities financed by IEFP. Municipalities, entrepreneurs, social partners associations, and schools can all apply to become GIPs. IEFP gives approval, defines their activities and goals, and provides them financial support. The increasing reliance on multiple actors at the local level introduces flexibility to tailor the packages of re-employment services to conditions prevailing in the local labour markets. While this can compensate for the excess case-loads of PES and somehow enhance the speedy provision of activation services, it would be important to monitor the quality and the effectiveness of these alternative counselling services to the unemployed. Managing performance of employment services under a "quasi-market" arrangement raises a number of challenges for the public authority, which implies developing effective monitoring mechanisms.

Notes

1. OECD estimates suggest a peak reduction in the level of potential output for Portugal of about 3% by about 2013.
2. The sizeable real appreciation *vis-à-vis* Germany estimated on the basis of manufacturing unit labour costs (ULC) is corroborated by the use of ULC for the whole economy, which are often seen as statistically more reliable. According to Banco de Portugal computations, whole economy ULC increased by 30% from 1999 to 2009 (this figure takes on board the recent release of national accounts data with benchmark year 2006 and hence is no longer influenced by the fast growth of transfers to the civil servants' pension scheme, CGA, which in the past led to overestimation of Portuguese labour cost increases). The ensuing real appreciation relative to Germany in the same decade (1999-2009) amounted to 23%, which compares with 24% in manufacturing alone (Figure 1.3).
3. This approach was used in the previous survey because these countries often export the same products to the same markets as Portugal; for example, cars to Germany. Comparable data on emerging Asia are less readily available.
4. The share of Angola in the export market indicator is the one of 2005.
5. Henceforth the current account balance is taken to comprise capital transfers, though these are classified in the so-called capital account.
6. Down from 82% in 2007 (IEA data). Energy dependence is computed as the difference between unity and primary energy production divided by total primary energy supply.
7. At the end of 2009, manufacturing accounted for only 12.9% of total loans granted to non-financial companies, which compares with 19.3% for construction and 19.7% for real estate activities (Banco de Portugal, 2010).
8. Assuming a steady state with an implicit interest rate on the international investment position of 5.5% (2008 and 2009 actual values were around 5%) and nominal GDP growth of 3.5%.

9. OECD (2004) considers Portugal as a "high-extension country". According to the European Industrial Relations Observatory Annual Review 2008 of Portugal, the number of extension decrees issued by the Labour Ministry has almost doubled from the previous year although this partly reflects some delays in the publication of these decrees.
10. The Portuguese shadow economy in 2007 is estimated by these authors at 19.2% of official GDP, against 13.9% for an unweighted average of 21 OECD countries.
11. There is of course great uncertainty regarding these estimates, so that these should be taken with great caution. However, they might give an idea of the upcoming challenges.
12. There are no quarterly comparative data on labour force participation rates so that this chapter has to rely on annual series, which are consistently available across countries.
13. This section relies on empirical work presented in OECD (2009a). For Portugal, furthermore, the empirical analysis could not allow investigating the relative business-cycle vulnerability of individuals of different educational attainment, due to lack of data: conclusions on this dimension are based on OECD area results.
14. Turnover costs depend on factors such as job tenure, type of employment contract and firm-specific skills. Importantly, turnover costs shift the burden of adjustment to changes in business-cycle conditions from so-called "insiders" (*i.e.* workers for whom turnover costs are relatively high) to "outsiders" (*i.e.* workers with relatively low levels of labour market experience or employment protection).
15. OECD Data from the *OECD Employment Outlook*, 2010 edition. Data from 2009Q1 have been used for comparative purposes because few countries have data for 2009Q2. For Portugal, for which data are available, the share of temporary employment in total employment was 18% in the second quarter of 2009.
16. Labour market volatility is measured by business-cycle volatility of total hours worked (summarised by calculating the percentage standard deviation of its cyclical component).
17. This topic might be discussed by the social partners under the Pact for Employment (*Pacto para o Emprego*).
18. One way to identify those workers is to use the Instituto Nacional de Estatística (INE) classification of contract service providers, bearing in mind however that not all self-employed contractors are "falsely self-employed". These individuals are independent workers, popularly known as "recibos verdes". It is notable that this group increased quite significantly since 1998. It went from 42 thousands to 81 thousands, hence from 1% to 2% of employment. This sub-group has also the pro-cyclical behaviour than one might expect from the atypical form of temporary employment. However, the false self-employed are not limited to this pool of workers, which makes this figure a lower bound estimate.
19. This estimate is based on the numbers of UB recipients provided in the OECD EC questionnaire of 2010 and the OECD *Main Economic Indicators Database* (harmonised unemployment level for the fourth quarter of 2009). It must be acknowledged, though, that the increase in the number of benefit recipients outpaced the growth in unemployment.
20. This section relies on the questionnaire on the employment and social policy responses to the current economic downturn distributed by the OECD and the European Commission in February 2009 and updated in early 2010. This material has been used in the 2009 and 2010 editions of the *OECD Employment Outlook* (OECD, 2009a, 2010c).
21. One important caveat of this analysis is that it presents average effects conditional on take-up and the size of the fall in output, while take-up and output falls are not the only factors that determine effectiveness. See OECD (2010c) for details on the methodology.
22. Portugal has high overtime premiums (average hourly overtime compensation as a percentage of normal hourly wage for an employee working an additional hour of overtime per day in five weekdays), and short averaging periods (the maximum number of weeks over which an increase in weekly hours of ten hours per week can be averaged), OECD, (2010c).
23. For further evidence, see Kluve (2006).
24. The government is indeed preparing a legislation that would require older unemployed individuals without secondary level of education to join the *Novas Oportunidades* centres.

Bibliography

Addison, M. Centeno and P. Portugal (2008), "Unemployment Benefits and Reservation Wages: Key Elasticities from a Stripped-Down Job Search Approach", *Economica*, London School of Economics and Political Science, Vol. 77(305), pp. 46-59.

Addison, M. Centeno and P. Portugal (2009), "Do Reservation Wages Really Decline? Some International Evidence on the Determinants of Reservation Wages", *Journal of Labor Research*, Vol. 30 (1), pp. 1-8.

Amador, J. (2010), "Energy Production and Consumption in Portugal: Stylized Facts", *Banco de Portugal Economic Bulletin*, Summer 2010, pp. 69-83.

Amador, J. and S. Cabral (2008), "The Portuguese Export Performance in Perspective: A Constant Market Share Analysis", *Banco de Portugal Economic Bulletin*, Autumn 2008, pp. 201-221.

Banco de Portugal (2010), *Relatório de Estabilidade Financeira*, Maio, Lisboa.

Bassanini and Duval (2006), "Employment Patterns in OECD Countries: Reassessing the Role of Policies and Institutions", *OECD Social, Employment and Migration Working Papers*, No. 35, OECD, Paris.

Blanchard (2007), "Adjustment Within the Euro: The Difficult Case of Portugal", *Portuguese Economic Journal*, Vol. 6, No. 1, pp. 1-21.

Boeri, T. (2010), "Institutional Reforms in European Labour Markets", mimeo draft.

Causa, O. (2008), "Explaining Differences in Hours Worked across OECD Countries: An Empirical Analysis", *OECD Economic Studies*, 2009.

Centeno, M. and A. Novo (2007), "The Regressivity of Unemployment Insurance: Identification of the Income Effect through the July 1999 Legislation", *Banco de Portugal Economic Bulletin*, Autumn 2007, pp. 127-143.

Centeno, M., C. Machado and A. Novo (2008), "The Anatomy of Employment Growth in Portuguese Firms", *Banco de Portugal Economic Bulletin*, Summer 2008, pp.65-89.

Centeno, M., J.R. Maria and A. Novo (2009a), "Unemployment: Supply, Demand, and Institutions", in Economics and Research Department, Banco de Portugal, *The Portuguese Economy in the Context of Economic, Financial and Monetary Integration*, Banco de Portugal.

Centeno, M., C. Machado and A. Novo (2009b), "Excess Turnover and Employment Growth: Firm and Match Heterogeneity", mimeo.

Feld, L.P. and F. Schneider (2010), "Survey on the Shadow Economy and Undeclared Earnings in OECD Countries", *German Economic Review*, Vol. 11, No. 2, pp. 109-149.

Kahn, L. (2007), "Employment Protection Reforms, Employment and the Incidence of Temporary Jobs in Europe: 1995-2001", *IZA Discussion Paper*, No. 3241, Bonn.

Kluve, J. (2006), "The Effectiveness of European Active Labour Market Policy", *IZA Discussion Paper*, No. 2018, Bonn.

Lamo, A., J.J. Perz and L. Schuknecht (2008), "Public and Private Sector Wages. Co-movement and Causality", *European Central Bank Working Paper Series* No. 963.

Lindbeck, A. and D.J. Snower (1988), *The Insider-Outsider Theory of Employment and Unemployment*, The MIT Press, Cambridge, Mass.

Lindbeck, A. and D.J. Snower (2001), "Insiders *Versus* Outsiders", *Journal of Economic Perspectives*, Vol. 15, No. 1, pp. 165-188.

Loureiro, J. (coord.), A. Pina, J. Catarino, P. Rodrigues, F. Barreiro, V. Fernandes with B. Anderson (2008), *Orçamentação por Programas*, Relatório Final da Comissão para a Orçamentação por Programas (nomeada pelo Despacho No. 3858-A/2007 do Ministro de Estado e das Finanças).

Machin, S. and A. Manning (1999), "The Causes and Consequences of Long-term Unemployment in Europe", in O.C. Ashenfelter and D. Card (eds.), *Handbook of Labor Economics*, Vol. 3C, North Holland.

Marques, C.R, F. Martins and P. Portugal (2009) "Price and Wage Setting in Portugal", in Economics and Research Department, Banco de Portugal, *The Portuguese Economy in the Context of Economic, Financial and Monetary Integration*, Banco de Portugal.

OECD (2004), "Wage setting Institutions and Outcomes", Chapter 3 in *OECD Employment Outlook* 2004, OECD, Paris.

OECD, (2007), "Activating the Unemployed: What Countries Do", Chapter 5 in *OECD Employment Outlook* 2007, OECD, Paris.

OECD (2008a), *OECD Economic Surveys: Portugal*, OECD, Paris.

OECD (2008b), *OECD Review of Budgeting in Portugal*, OECD, Paris.

OECD (2009a), *OECD Employment Outlook* 2009, OECD, Paris.

OECD (2009b), *OECD Economic Outlook* No. 86, OECD, Paris.

OECD (2009c), *International Migration Outlook* 2009, OECD, Paris.

OECD (2009d), "The Jobs Crisis: What are the Implications for Employment and Social Policy – Further Material", OECD Publishing, Paris, available online only at *www.oecd.org/employment/outlook*.

OECD (2010a), *OECD Economic Outlook* No. 87, OECD, Paris.

OECD (2010b), *Going for Growth*, OECD, Paris.

OECD (2010c), *OECD Employment Outlook 2010*, OECD, Paris.

Ottaviano, G., D. Taglioni and F. di Mauro (2009), "The Euro and the Competitiveness of European Firms", *Economic Policy*, January 2009 edition, pp. 6-53.

Portugal, P. and M. Centeno (2001), "Os Salários da Função Pública", *Boletim Económico do Banco de Portugal*, Setembro, pp. 91-100.

Portugal, P. (2006), "Wage Setting in the Portuguese Labour Market: A Microeconomic Approach", *Banco de Portugal Economic Bulletin*, Autumn 2006, pp. 89-100.

Portugal, P. (2008), "Unemployment Duration in the Portuguese Labour Market", *Banco de Portugal Economic Bulletin*, Winter 2008, pp. 55-71.

Traxler, F., S. Blaschke and B. Kittel (2001), "National Labour Relations in International Markets, A Comparative Study of Institutions, Change", and Performance, Oxford University Press, Oxford.

Vieira, J. Cabral, A. Menezes and P. Gabriel (2005), "Low Pay, Higher Pay and Job Quality: Evidence for Portugal", *Applied Economic Letters*, Vol. 12, pp. 505-511.

ANNEX 1.A1

Progress in structural reform

This annex reviews actions taken to follow policy recommendations made in the 2008 *OECD Economic Survey of Portugal* on fiscal consolidation and labour market issues. Recommendations that are new in this Survey are shown in the box at the end of the chapter.

Recommendations in previous *Survey*	Actions taken and current assessment
A. Securing further fiscal consolidation	
Public administration reform	
Ensure the full implementation of the new human resources system in the public administration. Introduce training for managers to enhance the human resource management ability required in the new performance based system.	Major reforms have been implemented in the areas of careers, staff mobility, performance assessment and progression schemes. Training for managers was introduced in 2006 and specific training programmes for every level of management were implemented. More than 7 500 public administration managers were involved.
Introduce programmes to assist employees in the mobility pool in finding new employment in the public or private sectors, *e.g.* through retraining and job search support, to increase the effectiveness of the pool.	A job training programme "*Programa MOBILIes*" was launched and is now in its 3rd edition. Agreements have been established to allocate employees in the mobility pool to social institutions.
Pensions	
Monitor and evaluate future developments and, if appropriate, take measures to ensure sustainability in the contributory pension schemes.	The March 2010 SGP envisages faster convergence of the civil servants pension scheme (CGA) to the general scheme.
Health	
Strengthen benchmarking across hospitals to improve efficiency and control of public expenditures on health. Ensure that hospitals are paid market level prices to help prevent that they make systematic losses that would compromise them in supply negotiations and/or lead to higher input prices.	No actions taken.
State-owned enterprises	
To improve governance of SOEs, consider separating the ownership interest (Minister of Finance) from regulation (Minister of the sector and/or sector regulators) to eliminate conflicts of interest. Make SOEs responsible to the Minister for achieving final objectives rather than intermediate targets such as cost cutting, to increase SOE manager autonomy.	Most SOEs managers have already signed management performance contracts with the shareholder establishing targets for both financial and operational objectives. Public service contracts based on performance regulation are being introduced in the public transportation sector (see Chapter 3).
Public accounts transparency	
Introduce further reporting to increase transparency, including reporting total government debt inclusive of total SOE debt (whether guaranteed by the state or not)and global expenditure on health inclusive of traditional expenditure items as well as tax expenditures.	Reports on total SOE debt and guaranteed debt are made available on a quarterly basis in the treasury's website (*www.dgtf.pt*). The SGP 2010 envisages a definition of thresholds on SOE indebtedness growth (the Ministry of Finance has announced these binding thresholds to be 7% to 4% from 2010 to 2013).

Recommendations in previous *Survey*	Actions taken and current assessment
Medium-term public finance management	
Introduce an expenditure rule to help maintain spending discipline and prevent a return to large fiscal deficits.	In 2010, a working group, reporting to the Minister of State and Finance, was set up with a remit to present a draft proposal for revising the Budget Framework Law. The aims are, among others: *i)* to define a multi-annual framework allowing for programme budgeting; *ii)* to define the set of public bodies to be included in the budgetary process, bringing that set as close as possible to national accounts criteria; *iii)* to define the timetable underlying the budget process; *iv)* to improve mechanisms for the supply of information.
B. Improving the functioning of the labour market	
Ease employment protection legislation both for temporary employment and for permanent contracts, particularly to facilitate individual dismissals, and simplify procedures, so as to encourage greater hiring and facilitate adjustment.	In 2008, the government introduced legislation to revise the labour code as well as measures to facilitate the application of the law. The new labour code came into force in 2009. The main changes include reducing procedural inconveniences for individual dismissal of employees on regular contracts and increasing hiring flexibility. This implies a substantial easing of EPL on regular contracts for 2009.
Enhance internal flexibility, regarding working time and the organisation of work.	The new labour code allows for greater flexibility in working time schemes at company level or by collective agreement.
Move ahead with the proposed reform of active labour market programmes when an agreement has been reached with the social partners; ensure full implementation, reducing the number of programmes and assessing costs and benefits, with a view to increasing the effectiveness of activation measures for the unemployed and other job seekers; put a strong focus on ensuring intensive contacts between job seekers and public employment services.	The government expanded spending on active labour policies as a result of the crisis (packages Iniciativa Emprego 2009 and 2010). It supported the set-up of new non-profit-making entities to support the unemployed ("Gabinetes de Inserção Profissional"). It expanded training and work experience for targeted groups of unemployed, such as the youth. Activation requirements were strengthened for recipients of unemployment benefits in May 2010.

ANNEX 1.A2

Fiscal consolidation measures[1]

	2010	2011	2012	2013
	% of GDP direct effects resulting from comparison with no policy changes scenario[1]			
DECREASE IN EXPENDITURE				
Compensation of employees				
Strong wage restraint (including reduction in work-related allowances and blocking of non-compulsory wage supplements), freezing of civil servants admission	0.11	0.36	0.58	0.84
Social expenditure				
Social benefits of the non-contributory Social Security schemes (nominal value freeze and compulsory means testing as eligibility condition for all the non-contributory benefits, ceiling for transfers from the State Budget); earlier phasing-out of anti-crisis measures	0.08	0.29	0.45	0.54
Management and control of health expenditure – internal control; implementation of public service contracts and incentive mechanisms in the National Healthcare Service; medicine policy, electronic prescriptions; and supplementary diagnostic and therapeutic services	0.00	0.20	0.30	0.39
Faster convergence of the civil servants pension scheme (CGA) with the Social Security general scheme, including the frontloading of the new rule to penalise early retirement and the full transition, already between 2012 and 2013, to the retirement age at 65	0.00	0.03	0.05	0.06
Intermediate consumption expenditure				
Reduction and rationalisation of operating expenditure, defining ceilings for outsourcing expenditure, with projects, studies, expert opinions and consultancy (EUR 90 million per year) and for military equipment expenditure (revision of the Military Funding Programme with a 40% reduction in the scheduled amounts for each year)	0.07	0.30	0.19	0.20
Subsidies				
Reduction of the transfer for the State-Owned Enterprises Sector, by adopting measures of rationalisation and financial sustainability	0.05	0.08	0.08	0.08
Interest expenditure				
Reduction of interest payments on general government debt as a result of privatisation operations	0.00	0.03	0.07	0.10
Capital expenditure				
Postponement for two years of the Lisbon-Porto and Porto-Vigo high-speed rail links, in order to avoid any financial impact until 2013	0.00	0.00	0.13	0.19
Other reductions in capital expenditure (including commitment to no new road infrastructure concessions, gradual return of investment to pre-crisis levels and reduction in transfers to Local Government and to State-owned Enterprises)	0.22	0.71	0.88	1.02
INCREASE IN REVENUE				
Reduction of tax allowances and benefits (tax expenditure)				
Capital gains on securities subject to 20% personal income tax (PIT) rate	0.00	0.14	0.14	0.14
Limitation of PIT allowances and benefits	0.00	0.26	0.26	0.26
Reduction of the specific PIT allowance for pensions exceeding EUR 22 500/year	0.00	0.06	0.06	0.06

	2010	2011	2012	2013
	% of GDP direct effects resulting from comparison with no policy changes scenario[1]			
Other measures to strengthen tax revenue				
Broadening and control of the Social Security contributory base, and temporary special (until 2013) PIT rate of 45% on incomes above EUR 150 000	0.04	0.17	0.27	0.37
Increase of all Value Added Tax (VAT) rates by 1 p.p.	0.27	0.66	0.64	0.62
Additional 1 p.p for up to the 3rd income bracket of PIT, and additional 1.5 p.p. for the 4th income bracket of PIT onwards. Additional 1.5 p.p. in the PIT withholding rates	0.23	0.44	0.43	0.41
Additional Corporate Income Tax of 2.5 p.p. to taxable profits exceeding EUR 2 million	0.09	0.23	0.22	0.21
Other revenue measures				
Introduction of tolls	0.00	0.11	0.11	0.11
TOTAL FISCAL SAVINGS (attributable to these measures)	**1.16**	**4.06**	**4.86**	**5.60**
Of which: attributable to the increase in revenue	0.63	2.06	2.13	2.18
Of which: attributable to the decrease in expenditure	0.53	2.00	2.73	3.41

1. March 2010 SGP and additional measures.
Source: Portuguese Ministry of Finance.

Chapter 2

Towards a less distortive and more efficient tax system

The process of fiscal consolidation and the need to step up the poor long term economic performance provide an opportunity to implement tax measures to improve efficiency and rebalance the economy. As consolidation progresses, switching taxes from labour to consumption and property offers an avenue to regain eroded competitiveness and to achieve employment gains, especially if the largest reductions of the labour tax wedge are targeted on low-wage workers. As the consumption tax base is particularly large in Portugal, such a shift could allow a sizeable cut in the tax wedge while still raising revenue, if needed. Productivity and welfare can be increased by simplifying the tax system, thus reducing the high compliance costs it imposes, especially on small and medium sized firms. Also, the tax system could be more environment-friendly by using it to further address transport-sector externalities, which are of particular concern in metropolitan areas. At the same time, the current tight budgetary pressures call for increased efficiency in tax collection. There is ample scope for base broadening through reduced tax expenditures in the major direct and indirect taxes, as well as in property taxation.

Taxes have far-reaching economic and social consequences. They finance public expenditure, play a role in income distribution and have short-term impacts on aggregate demand. The tax system can also be used to internalise environmental externalities, and therefore to encourage a shift towards green growth. Further, taxes span a full range of impacts on potential growth, since they are important determinants of both labour utilisation and labour productivity, which can be regarded as the two drivers of GDP per capita in the long run (Johansson *et al.,* 2008). Taxes on labour income and on consumption create a wedge between firms' real labour costs and workers' real net consumption wage, and therefore tend to exert a negative impact on labour utilisation, both at the extensive and intensive margins (employment and hours, respectively). Taxes on labour income, especially when strongly progressive, may also hamper the accumulation of human capital, whereas taxes on corporate and capital income deter investment in physical capital. The latter group of taxes are also the most detrimental to total factor productivity, which is further affected by a high degree of tax complexity. Taxes can also influence international competitiveness, through labour costs or foreign direct investment (FDI) attractiveness.

Tax reform is easier when there is room for decreasing the overall tax burden: one should cut the most distortive taxes (generally those on capital and labour income), especially when they are high by international comparison. Unfortunately, the tight budgetary pressures currently facing Portugal make tax reform less easy: any proposed package must be at least non-revenue-decreasing, which means that lowering some taxes will imply raising others. Besides the political difficulty of raising taxes, this will require a careful selection of taxes to be raised so as to minimise growth distortions. This chapter starts by outlining the main challenges of the Portuguese tax system, and then explores avenues to make the tax system more supportive to growth and competitiveness and to increase the efficiency of tax collection.

Main challenges of the Portuguese tax system

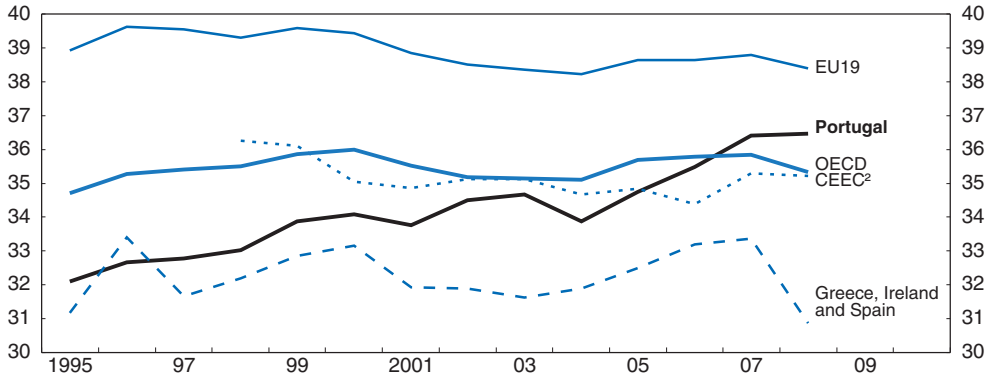
Consolidation needs have led to a higher tax burden…

Over the past decades, the Portuguese tax burden has been drifting upwards. This relative increase had initially been associated to the process of convergence towards higher income levels. In 2000, the final year of a period of strong economic performance, total tax revenue stood at 34.1% of GDP, more than 5 percentage points below the EU19 average and broadly in line with those countries closer to Portugal in terms of income levels (Figure 2.1).

However, the need for fiscal consolidation has led to a steep increase in the tax burden since 2000. Though Portugal cannot be described as a high-tax country, it has more than halved the gap to the EU19 – and has actually surpassed the OECD average – since 2000. As a consequence of the current economic and financial crisis, the need for fiscal consolidation in now greater, and – despite an appropriate emphasis on expenditure-reducing measures (Chapter 1) – the recent rise in rates of VAT, corporate and personal income tax will further increase the tax burden.

Figure 2.1. **Total tax revenue**[1]

As a percentage of GDP



1. Aggregates are unweighted averages. For aggregates in 2008, the last available year for Australia, Japan, The Netherlands and Poland is 2007.
2. Czech Republic, Hungary, Poland and Slovak Republic.

Source: OECD, *Revenue Statistics Database*.

StatLink http://dx.doi.org/10.1787/888932330764

On the revenue side, fiscal consolidation efforts pursued from 2002 to 2008 mainly relied on increases in statutory rates of indirect taxes, and on base broadening as regards direct taxes. The VAT standard rate was increased twice, from 17% to 19% in 2002 and then to 21% in 2005 (it was later reduced to 20% in 2008). Fuel and tobacco excises were also raised in several steps. Tax expenditures in personal and corporate direct taxes were somewhat reduced. As regards corporate taxes, this made it possible to essentially accommodate successive decreases in statutory rates (the corporate income tax statutory rate – excluding municipal surcharges – was brought down from 32% to 30% in 2002, and then to 25% in 2004). Progress in curbing tax fraud and evasion also contributed to higher revenues.

... without significant changes in the tax structure

The overall tax structure has broadly stabilised since the turn of the century (Figure 2.2). This relative stability is largely associated with the fact that, despite relentless legislative fine-tuning, major tax reforms since 2000 were few and did not concern the largest taxes (Box 2.1). The recent (2010) changes in the rates of VAT, personal and corporate income taxes also should not change much the tax structure.

In international comparison, the Portuguese tax mix tends to rely more on consumption taxes (Figure 2.3).[1] In 2008, taxes on goods and services accounted for 36.6% of total tax revenues, considerably above the corresponding shares for the EU19 or the OECD as a whole (respectively 30.8% and 31.3%, unweighted averages).

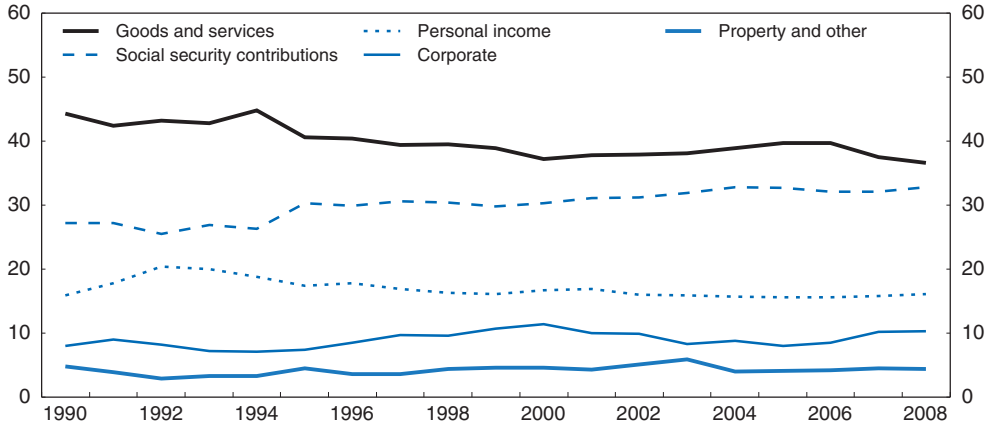
Taxation could move further away from labour towards less distortive taxes

Although relatively moderate, the tax wedge has been increasing recently

High indirect taxes are mainly mirrored in below-average personal income taxes (PIT) and social security contributions (SSC). As a consequence, the conventionally-defined labour tax wedge also stands at a comparatively moderate level (Figure 2.4). One should bear in mind, however, that the use of this conventional definition, which takes into account PIT and SSC but excludes consumption taxes, often rests more on data availability than on economic rationale. Since consumption taxes also account for the gap between

Figure 2.2. **Structure of tax revenues in Portugal**

As a percentage of total



Source: OECD, *Revenue Statistics Database*.

StatLink http://dx.doi.org/10.1787/888932330783

Box 2.1. **Major tax reforms since 2000 and the tax structure in more detail**

Since 2000, two major tax reforms have taken place, in 2003 and 2007. A third reform was legislated in 2009 and is still awaiting implementation.

- In 2003, property taxes were reformed. The new recurrent tax on immovable property (IMI, which replaced CA) aimed at a general updating of taxable values, to be achieved through two different methods: a formula-based value assessment, which mainly applies as property is transmitted, and inflation-based coefficients in the remaining cases. However, the inherently gradual nature of the former method, as well as the limited updating brought about by the latter, imply that taxable values often remain far below market prices. Changes to the real estate transaction tax (IMT, formerly Sisa) were mostly minor, as it continues to be levied every time a given property is sold.
- In 2007, car taxation was reformed. The new registration tax (ISV) introduced CO_2-based differentiation alongside cylinder capacity-based differentiation, with the former becoming gradually more important. Under the new circulation tax (IUC), those two criteria are also used to determine the annual amount to be paid by cars bought after the reform (for older cars the tax continues to be based on cylinder capacity and age). Further, relative to previous taxes, there has also been some shift of the tax burden from the purchase to the circulation phase.
- In 2009, social security contributions were reformed. The ensuing new Contributory Code – whose coming into force, initially scheduled for 2010, has been postponed by one year – enlarges the tax base for employees, bringing it closer to the corresponding PIT base, and makes the tax base for independent workers converge towards actual income (the self-employed can currently choose a conventional tax base, and often opt for the lowest possible value, only somewhat above the minimum wage). The Code also introduces a social contribution on firms purchasing services from self-employed workers.

Box 2.1. **Major tax reforms since 2000 and the tax structure in more detail** *(cont.)*

For ease of reference, Table 2.1 below presents a more detailed breakdown of the Portuguese tax structure, making it possible to identify the items which underwent the above reforms and others that will be referred to in the chapter.

Table 2.1. **The Portuguese tax structure in more detail**

As a percentage of total tax revenue

	2000	2007
Personal income tax (IRS)	16.7	15.8
Corporate income tax (IRC) – including local surcharge (*derrama*)	11.4	10.1
Social security contributions	30.3	32.1
On employers and employees	28.9	30.5
On the self-employed	1.4	1.5
Taxes on property	3.5	3.8
Real estate recurrent tax (CA/IMI)	1.2	1.7
Real estate transaction tax (Sisa/IMT)	1.6	1.6
Other	0.7	0.6
Taxes on goods and services	37.2	37.5
VAT	23.4	24.1
Tax on oil products (ISP)	4.7	5.6
Tax on motor vehicle sales (IA/ISV)	3.0	2.1
Other excises	3.1	2.3
Stamp duty (IS) on financial services[1]	2.0	2.4
Local tax on vehicles and road taxes (IUC)	0.3	0.4
Other	0.7	0.6
Other taxes	1.0	0.7

1. Stamp duty on financial services comprises bank transactions, debt related operations, interest and leasing of buildings, and insurance premiums.

Source: OECD, *Revenue Statistics Database*.

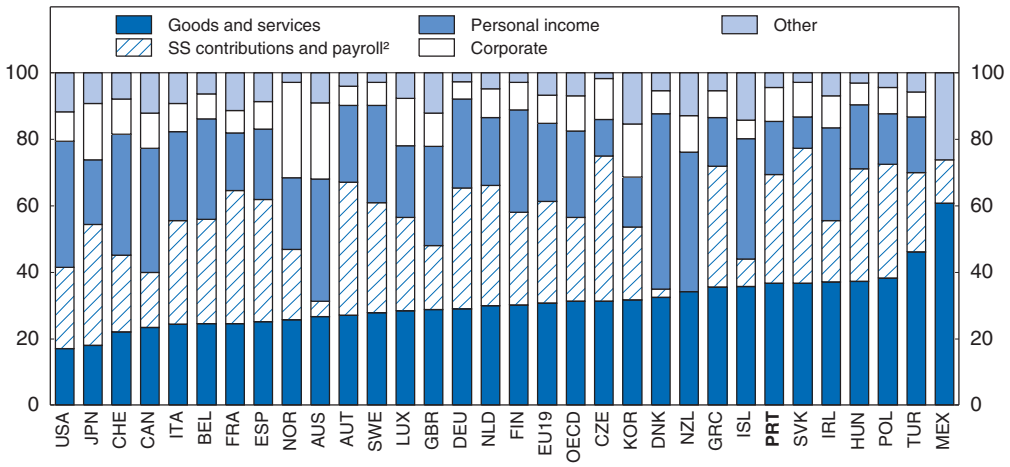
firms' real labour costs and workers' real consumption wages, they should arguably be included in tax wedge computations (OECD, 2009a). Doing so would tend to erode Portugal's tax wedge advantage relative to most other European countries. Besides, in contrast with downward adjustments in a majority of other countries (Figure 2.4, lower panel), the labour tax wedge has stabilised over the past decade. The recent decision (May 2010) to raise personal income tax rates (see Chapter 1) will increase the tax wedge.

High consumption-tax revenues are mainly the mirror of a sizeable share of final consumption in the economy

The larger weight of consumption taxes in Portugal is more a consequence of a sizeable share of private consumption in GDP than of high tax rates on consumption. In an accounting decomposition, the large tax base explains 45% of the gap in indirect tax reliance between Portugal and the EU19, whereas (implicit) tax rates are responsible for only 30% (Box 2.2). After edging up by around 3 percentage points over the past decade, the private consumption-to-GDP ratio is unlikely to rise any further. On the contrary, some decrease is to be expected as a counterpart to the eventual needed reduction of current account imbalances. This adjustment process may then exert downward pressure on the relative importance of indirect taxation.

Figure 2.3. **Structure of tax revenue in the OECD**

As a percentage of total, 2008[1]



1. Zone aggregates are unweighted averages. Data refer to 2007 for Australia, Greece, Japan, The Netherlands and Poland.
2. Social security contributions plus taxes on payroll and workforce.

Source: OECD, *Revenue Statistics Database*.

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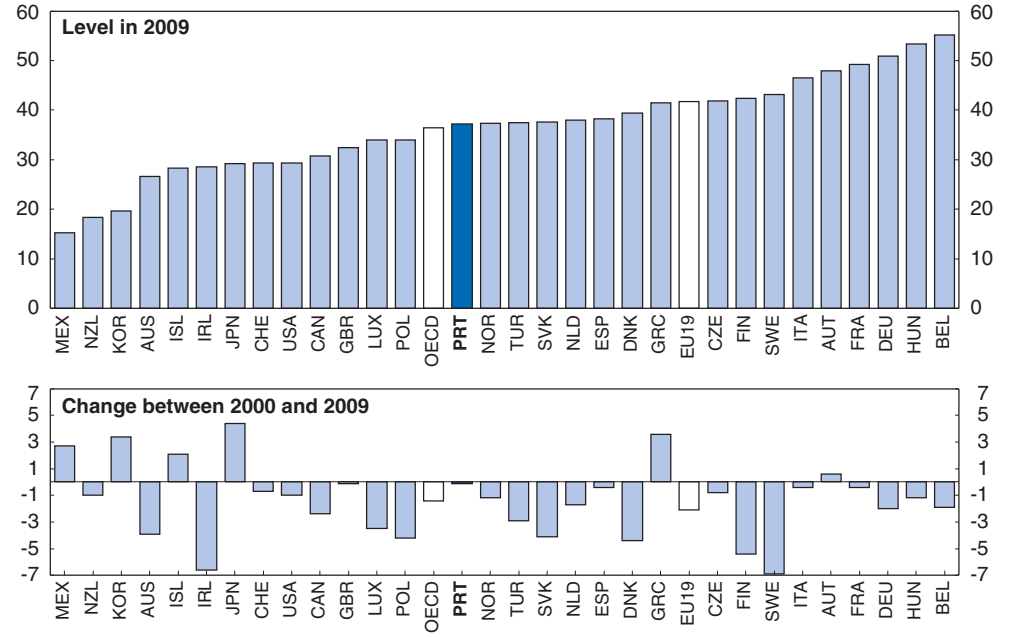
Figure 2.4. **Labour tax wedge**[1]

As a percentage of total labour costs



1. Income tax plus employee and employer contributions less cash benefits for a single person without children at the income level of the average worker. Zone aggregates are unweighted averages.

Source: OECD, *Taxing Wages* 2008-09.

StatLink http://dx.doi.org/10.1787/888932330821

Property taxation is both low and distortive

Despite a recent upward trend, property taxation in Portugal remains below the OECD average (Figure 2.5). Since this tax category tends to be regarded as the least detrimental to growth (Arnold, 2008), correcting its relatively small weight is in itself a margin for

Box 2.2. **Decomposing the relative importance of consumption taxes**

The share of consumption taxes (T_C) in total tax revenues (T) can be decomposed into the following three factors:

- the implicit tax rate on private consumption (T_C/C)
- the weight of private consumption in GDP (C/Y)
- total tax revenues as a percentage of GDP (T/Y)

Formally:

$$\frac{T_C}{T} = \frac{\frac{T_C}{C}\frac{C}{Y}}{\frac{T}{Y}}$$

The larger the first two factors are, the more reliant a country will be on consumption taxes. In contrast, the third factor works in the opposite direction: a higher overall tax burden tends to decrease the ratio of consumption taxes to total revenues through a denominator effect.

This decomposition can be applied to an international comparison of consumption tax shares, with the same three factors being defined in relative terms. Table 2.2 applies the analysis to Portugal *versus* the EU19 in 2007. It can be observed that the sharpest difference lies in the private consumption-to-GDP ratio, which is 8 p.p. higher in Portugal. In turn, the Portuguese implicit tax rate on private consumption is only somewhat above the EU19 average. Thus, relatively larger private consumption accounts for 45% of the difference in the importance of consumption taxes; the higher EU19 tax burden explains 24.5%; and implicit tax rates the remaining 30.5%. The underlying equation is

$$log\left[\frac{\frac{T_C^P}{T^P}}{\frac{T_C^{EU}}{T^{EU}}}\right] = log\left[\frac{\frac{T_C^P}{C^P}}{\frac{T_C^{EU}}{C^{EU}}}\right] + log\left[\frac{\frac{C^P}{Y^P}}{\frac{C^{EU}}{Y^{EU}}}\right] + log\left[\frac{\frac{T^{EU}}{Y^{EU}}}{\frac{T^P}{Y^P}}\right]$$

where superscripts *P* and *EU* denote Portugal and the EU19, respectively.

Suggestive as the results are, the accounting nature of the decomposition calls for some prudence in drawing causal interpretations. One should also bear in mind that private consumption is a stylised representation of the actual incidence base of taxes on goods and services.

Table 2.2. **Accounting for the importance of consumption taxes**[1]

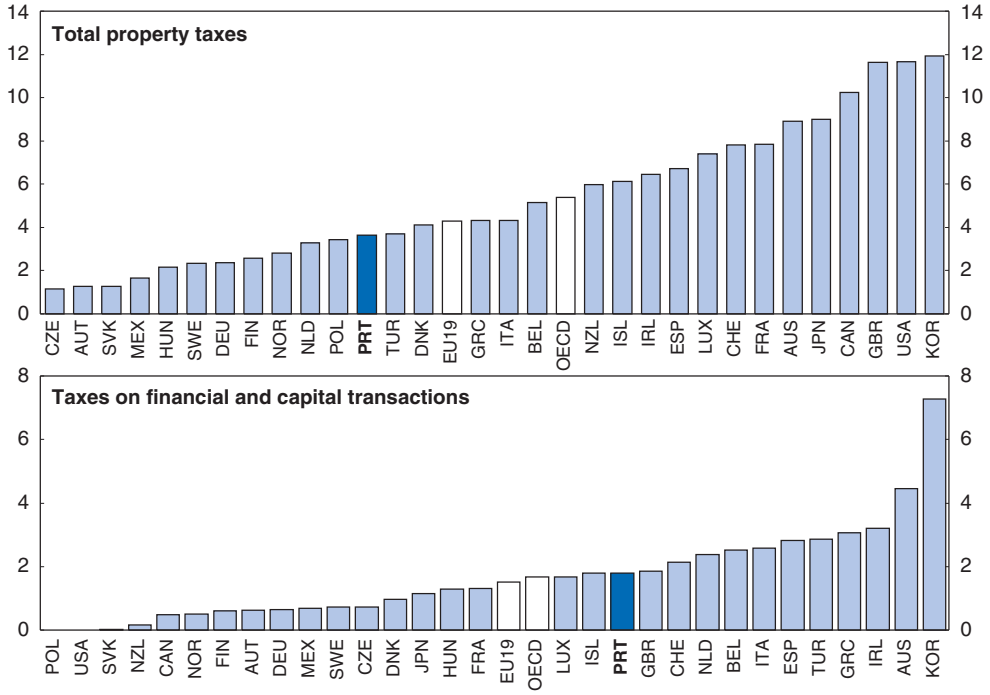
2007

	Units	Portugal	EU19[1]
Taxes on goods and services	% of total tax revenue	37.5	28.0
Taxes on goods and services	% of private consumption	21.0	19.2
Private consumption	% of GDP	65.0	57.1
Total tax revenues	% of GDP	36.4	39.1

1. National accounts data and definitions refer to base 2000, and are hence prior to the recent updating to base 2006.
2. Variables for the EU19 are constructed by summing across the relevant countries, and are therefore slightly different from unweighted averages.

Source: OECD, *Revenue Statistics* and *OECD Economic Outlook Databases*.

Figure 2.5. **Property taxes**
As a percentage of total, 2008[1]



1. Zone aggregates are unweighted averages. Data refer to 2007 for Australia, Belgium, Greece, Iceland, Japan, Mexico, The Netherlands and Poland.

Source: OECD, *Revenue Statistics Database*.

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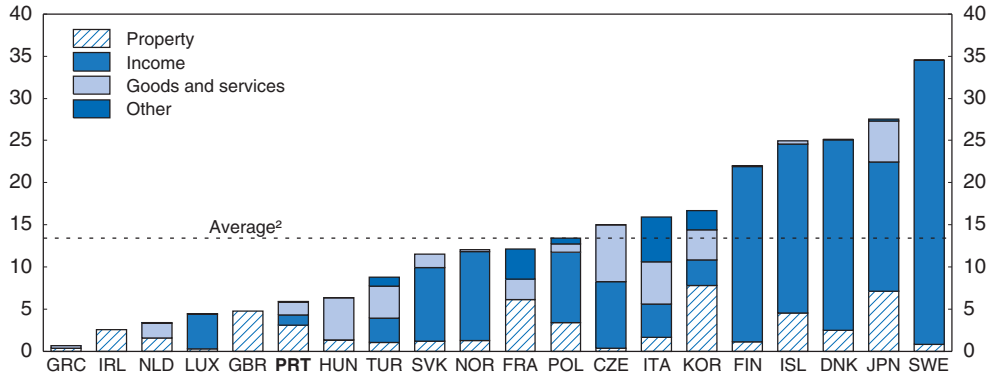
improvement of the Portuguese tax structure. Further, the composition of property taxation also matters. Portugal's overall low reliance only extends to the least distortive components: recurrent taxes on immovable property carry below-average weight, and recurrent net wealth taxes or inheritance and gift taxes virtually do not exist. In contrast, the highly distortive real estate transaction taxes present a somewhat above-average weight (Figure 2.5, lower panel), with negative impacts on revenue volatility and on the performance of the housing market.

The tax system remains highly centralized

The Portuguese tax system is highly centralized, even by the standards of unitary countries (Figure 2.6). Though the role of sub-central governments in total public expenditure is also modest, the share of grants in their total revenues is somewhat above-average (Blochliger and Petzold, 2009). Better aligning taxes and expenditures at the local level would help improve the efficiency of local public services. In 2009, a modest step towards greater local government accountability in income taxation was implemented: municipalities are now entitled to claim up to 5% of the PIT paid by local residents and, should a lower percentage be claimed, the difference accrues to those residents (as a tax credit), rather than to the State. Nevertheless, municipalities' main taxing decisions continue to lie in recurrent taxes on real estate, where they can set the rate within centrally-defined bands. In contrast, local governments have no authority over the tax rate schedule of the real estate transaction tax, though they are also entitled to its proceeds.

Figure 2.6. **Local government tax revenue**[1]

As a percentage of total tax revenue, 2008



1. For unitary countries only. Data refer to 2007 for Greece, Japan, The Netherlands and Poland.
2. Unweighted average.

Source: OECD, *Revenue Statistics Database*.

StatLink http://dx.doi.org/10.1787/888932330859

Local governments have an above-average reliance on property taxation (Figure 2.6), a feature which has recently been reinforced by the strong growth of IMI revenues in the wake of the 2003 reform (Box 2.1). That reliance is generally perceived in Portugal as excessive, creating incentives for urban sprawl, especially if zoning law is not properly defined and strictly enforced. However, perverse incentives for favouring new buildings over renovation are likely to stem from distortive features of property taxes, rather than from reliance on property taxation *per se*. Those features include the high weight of real estate transaction taxes and the fact that taxable values of old buildings often remain outdated, as will be discussed below.

Making the tax system more supportive to growth and competitiveness

Rebalancing the tax system from labour to consumption and property

Promoting employment

Rebalancing taxes from labour to consumption should make the composition of tax revenues more growth-friendly, since the latter forms of taxation have a less distortive impact on employment (Johansson *et al.*, 2008). As a tax on consumption effectively falls not only on salaries but also on income from other sources (*e.g.* social transfers, part of capital income), tax rebalancing can be regarded as a base broadening reform, making it possible to reduce the wedge between firms' real labour costs and the real net consumption wage of workers (European Commission, 2008; Gauthier, 2009). In Portugal, the base broadening argument is reinforced by the sizeable share of consumption in the economy (Chapter 1). If property taxes also take part in financing lower labour taxation, the reduction in the labour tax wedge will be magnified. Further, lowering firms' labour costs will deliver gains in international competitiveness, at least in the short run, which has particular relevance for Portugal. Even though nominal wages should gradually absorb the cut in labour taxes in the long run, higher net wages will stimulate labour supply, and positive impacts on employment and the capital stock are expected.

Considering the currently weak fiscal position (Chapter 1), any tax shift should be at least revenue-neutral, and may even have to raise more revenue. The base broadening argument implies that it should be possible to reduce the tax wedge without losing budget

revenue. Therefore, as fiscal consolidation progresses, the authorities should be able to create a margin to reduce employers' SSC by raising VAT and property taxes. In 1998, Denmark implemented a reform along these lines. More recently, Germany (2007) and Hungary (2009) have increased VAT rates to finance partly or fully cuts in social security contributions and personal income tax. In the case of Hungary, the revenues raised by a 5 percentage point increase in the VAT were expected to be high enough to finance a cut by 5 percentage points of social security contributions combined with a cut in personal income taxes and some other taxes. The experience of the Hungarian and other countries' tax reforms in times of crisis is further discussed in Box 2.3.

Box 2.3. **Tax reform in times of crisis**

Economic crises often make structural weaknesses more visible, and thus may provide incentives for pursuing difficult reforms, for example of labour and product market regulation (Høj *et al.*, 2006) and of the tax system (Brys, 2010). In the latter area, both Canada and Sweden implemented major tax reforms in crisis-ridden 1991, though preparatory work had started before. Hungary's recent tax shifting, prepared and adopted in 2009, offers a more recent illustration. If successful, tax reform could in itself increase confidence in the economy and its public finances. For example, tax reforms pursuing base broadening and a shift from direct to indirect taxation make the economy more efficient in the long run, which economic agents may take into account. Also, broad tax reform could reduce the risk that lobby groups succeed in focusing discussion on specific aspects taken in isolation (Brys, 2010).

Nonetheless, implementing a tax reform during crisis times remains difficult and requires caution. In the current context, it is essential to ensure that tax reforms are consistent, and are seen to be consistent, with the pressing need for fiscal consolidation. Reforms inevitably entail some degree of revenue uncertainty, and any occurrence of a revenue shortfall could undermine confidence. In times of crisis, revenue uncertainty can be compounded by factors such as the volatile behaviour of durable goods consumption, or a surge in company insolvencies. Thus, it could be best if any tax cuts were gradually phased-in, as Hungary did with the reduction in employers' social security contributions (OECD, 2010a). In this way, tax increases precede accompanying tax cuts.

The short-run macroeconomic impacts of tax changes are also hard to assess. For example, on the one hand, the short-run benefits in terms of improved competitiveness of a switch from employers' social contributions to consumption taxes (*e.g.* VAT) may be higher at a time of crisis because inflationary pressure which might undo these effects is more likely to be subdued. On the other hand, such a reform may hurt domestic consumption and aggravate activity further before the benefits of improved competitiveness and a less distortive tax system kick in. Reform of the tax on housing could also have short-run costs despite their long-term benefits. In Sweden, for example, higher taxes on housing brought about by the 1991 reform may have worsened the 1991-93 recession by depressing real estate prices and reducing demand for new construction, after several years of housing sector growth (Agell *et al.*, 1996).

Finally, the political acceptability of reform may be enhanced if the authorities commit to well-specified *ex-post* evaluation mechanisms, as was the case with the 2001 reform in the Netherlands (Brys, 2010). *Ex-post* evaluation promotes transparency and offers an opportunity to introduce tax reform adjustments. The Swedish 1991 reform was also the object of a major evaluation exercise (Agell *et al.*, 1996). Further systematic monitoring and external evaluation of reforms, in the tax system and elsewhere, is in itself highly desirable in Portugal.

Targeting the largest reductions of employers' SSC on low-wage workers is likely to maximise the employment gain of a revenue-neutral tax shift (Gauthier, 2009). This is mainly because those workers tend to have a more elastic labour supply. A way to implement such targeting would be to make employers' contributions progressive in the level of wages, for instance by moving from the current flat rate of 23.75% to a progressive schedule with two brackets, where the cut relative to the current rate would take place in the lower bracket.[2] Larger SSC cuts for low-wage workers would also be useful in reducing informality and in counteracting the regressive impact of a rise in consumption taxes.

The proposed tax rebalancing has much wider breadth than existing provisions on reduced SSC rates. The cut in contributions should apply across the board, even if cuts are larger for low-wage workers, whereas current reduced rates mainly concern vulnerable labour market groups (around 200 000 workers in 2008, less than 4% of total employment). Further, it should be permanent and unconditional, in contrast with the reductions in employers' SSC adopted as a response to the current crisis – which were temporary and often subject to net hiring requirements.[3] Finally, it should be sizeable (see below), unlike the small magnitude of some existing reductions (for instance, 1 percentage point – in 2010 only – for workers earning the minimum wage).

Back-of-the-envelope computations show that a substantial cut in social contributions is achievable. Bringing property taxes as a percentage of GDP to the OECD average – *i.e.,* from 1.4% to 1.9% (2007 values) – can finance an across-the-board cut in employers' SSC of roughly 2.5 percentage points. In turn, the scope for shifting to VAT is enhanced by the high proportion of goods enjoying reduced rates and the large size of private consumption. Even if pensions and civil servant wages were fully indexed to higher prices,[4] a 1 percentage point rise in all VAT rates (standard and reduced) could still make room for a budgetary-neutral SSC cut of approximately 2 percentage points. Roughly the same would be achievable by applying the standard VAT rate to those goods and services currently taxed at the 13% intermediate rate, and potentially more if the scope of the 6% rate were restricted as well. Restricting the list of goods and services enjoying reduced rates would cut administrative and compliance costs, and make it possible to finance larger SSC cuts and/or rise less the standard VAT rate.

Reducing labour costs is key to recover lost competitiveness

Portugal has suffered a substantial cumulative loss of cost competitiveness, which has not been reversed so far and has been accompanied by successive losses in market shares (Chapter 1). Further, uncompetitive labour costs also deter FDI inflows, which have significant productivity-enhancing effects through technology transfers.

Although wage moderation is key to ensure a long-lasting reduction of unit labour costs, it can deliver competitiveness gains only gradually. Thus, reducing non-wage labour costs can be an effective strategy to regain competitiveness in the short and medium term as a cut in employers' SSC can smooth the adjustment, complementing the emphasis on raising educational levels as a tool for higher productivity in the long run (Chapter 3). Competitiveness gains can arise both in domestic and foreign markets. In the domestic market, local producers gain competitiveness because imported goods face the VAT increase although importers do not benefit from labour cost cuts. In foreign markets, exporters improve their competitiveness thanks to lower labour costs. In Portugal, firms in tradable sectors would also stand to gain if the reduction in employers' social contributions were tilted towards lower wages, as wages in those sectors are often much lower than the economy-wide average (Table 2.3).

Table 2.3. **Labour costs per employee per sector**

		2006	
	ISIC Rev. 3 code	Compensation per employee (EUR)	Number of employees (thousand)
Total		18 643	4 172
Agriculture, hunting, forestry and fishing	01-05	8 733	96
Mining and quarrying	10-14	16 555	15
Manufacturing	15-37	14 459	847
Low technology manufactures	15-22, 36-37	12 079	517
Medium-low technology manufactures	23, 25-28	15 955	184
High and medium-high technology manufactures	24, 29-35	21 016	146
Electricity, gas and water supply	40-41	41 938	22
Construction	45	14 657	427
Wholesale and retail trade[1]	50-52	15 267	753
Hotels and restaurants	55	10 876	268
Other business services	60-74	25 917	550
Community, social and personal services	75-95	23 941	1 194

1. Includes repair of motor vehicles and household goods.
Source: OECD, *Annual National Accounts Database*.

Tax rebalancing does not endanger social security sustainability

Concerns about the sustainability of the social security system are a common objection against any large-scale reduction in social contributions. They may be grounded on the current financing arrangements of social security in Portugal, by which social benefits which replace labour income (*e.g.* pensions and unemployment benefits, among others) should be essentially financed by contributions. Lowering the latter, it is argued, would therefore create a revenue shortfall.

Yet those concerns are misplaced, as they regard social security in isolation from the rest of general government. Sustainability issues should be addressed on a general government basis, as is the case with the regular assessments of the impact of ageing on public finances (*e.g.* European Commission, 2009). There would simply be the need to adjust social security financing, making it less reliant on contributions and more on general revenues. Tax rebalancing from labour to property would also have implications for local government financing, which are dealt with below.

Enhancing incentives for green growth

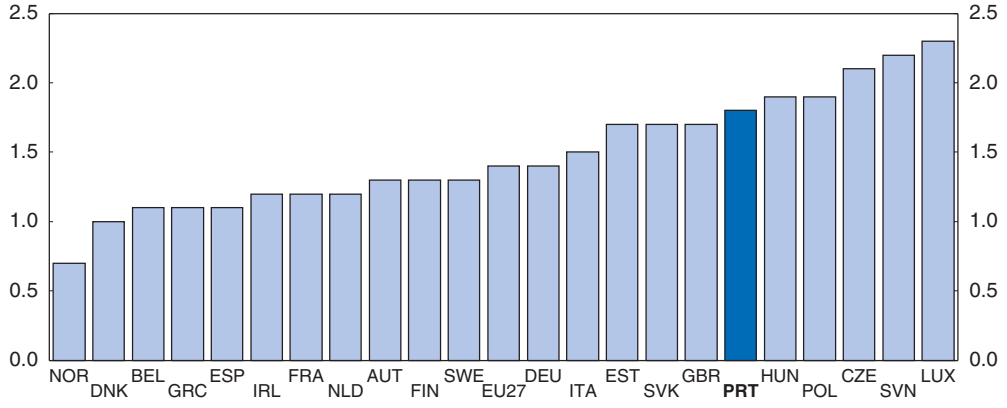
The transport sector generates significant external costs in Portugal (Annex 2.A1), which weigh on productivity, the environment and welfare. GHG emissions from this sector increased around 90% from 1990 to 2007, and account for a larger share of total GHG emissions than in the EU27 as a whole (23.8% *versus* 19.5% in 2007).[5] Despite some slight decrease over the past few years, transportation emissions continue to pose a challenge to compliance with targets under the Kyoto Protocol (2008-12) and beyond. Congestion, perceived as an important problem in the Lisbon and Oporto metropolitan areas, hurts productivity by increasing travel time and travel time uncertainty, and reducing the scope for agglomeration benefits (Crafts, 2009). Further, transport-induced noise and air pollution pose a threat to human health in those two metropolitan areas. Road transportation accounts for the lion's share of the above externalities.

Tax instruments can play a useful role in the internalisation of such external costs. Economic theory suggests that, as a first-best solution, fuel taxes should be used to address CO_2 emissions, and distance charges to target other external impacts, such as air pollution or congestion (OECD, 2009b). As regards emissions, CO_2-based differentiation in motor vehicle taxes can be a valuable second best in a recession context, if one wishes to change incentives without increasing the overall level of transport taxation (OECD, 2009b).[6] However, with a similar degree of CO_2-based differentiation, a wide-ranging road pricing scheme should outperform vehicle taxes, since the latter are further away from the actual car usage. By further differentiating based on driving conditions, road pricing may come very close to the efficiency of fuel taxes in internalising the costs of emissions,[7] while preserving the potential to address other externalities as well (as for example the Dutch road pricing scheme currently under discussion, OECD, 2010b).

Portugal has made an active use of taxes on fuels and vehicles to address GHG emissions from the transport sector, which partly explains why they have recently slowed down. Car taxation was reformed in 2007 (Box 2.1) and its differentiation according to CO_2 emissions ranks among the strongest in the OECD (OECD, 2009c). A car scrapping scheme, taking the form of a credit in the registration tax of the new car purchased, has been in place since 2000, and has also been given CO_2-based differentiation since 2009.[8] Further, the tax system has also fostered the use of biofuels through an exemption from fuel taxes. The latter underwent significant increases over the past few years, as a result of which the diesel rate has essentially caught up to the EU average, and the petrol rate has surpassed it. As a consequence of these increases and of a heavy reliance on road transportation, Portugal collects more fuel taxes as a percentage of GDP than most other European countries (Figure 2.7). Besides this already high level of taxation, the perception of a strong (if unquantified) degree of tank tourism in Spain concerning freight transportation also limits the scope for further increases in diesel taxation, at least as long as Spain keeps a low rate. When regarded as a tool to help defray infrastructure costs, the effectiveness of fuel taxes also faces erosion from the expected increase in the use of vehicles powered by alternative energy sources, such as electricity.

Figure 2.7. **Transport fuel taxes in EU countries**[1]

As a percentage of GDP, 2008



1. Aggregates are GDP-weighted averages.

Source: European Commission (2010), "Taxation trends in the European Union: Data for the EU Member States, Iceland and Norway".

StatLink http://dx.doi.org/10.1787/888932330878

In contrast with fuel and car taxation, the Portuguese reliance on user charges to curb road transport external costs is only at its infancy, implying that virtually no price-based instruments are currently geared to internalize non-emission costs. Though the highly developed motorway network generates significant revenues from tolls, these are only differentiated by vehicle type, and not by location,[9] time or vehicle environmental efficiency. Parking fees are widely used in urban areas, but their degree of differentiation is again modest; they do not respond to parameters such as traffic congestion or the level of parking saturation, while urban tolls do not exist. As a consequence, the potential for user charges to address GHG emissions and other transport externalities remains unexploited.

Stylised simulation results show that CO_2-based differentiation in user charges provides strong incentives to improve the fleet's environmental performance, and thus can be highly effective in curbing GHG emissions. A nation-wide, CO_2-differentiated road pricing scheme could even outperform fuel taxes in this domain (Table 2.4 and Annex 2.A1). At least in metropolitan areas, differentiation should also take into account other externalities, such as congestion, and hence foster modal shift away from private cars. Portugal should make a more extensive use of road pricing schemes, with embedded differentiation to tackle external costs. If authorities wish to keep the overall level of transport taxation broadly unchanged, then they should compensate for higher road pricing through a decrease in the car registration tax, rather than in fuel taxes. Shifting from car taxes to user charges would bring taxation closer to the point of use, and thus provide stronger incentives for modal shift.

Table 2.4. **Simulation of changes in transport sector taxation**[1]

Scenarios	Details	GHG emissions	Road tax revenues	Modal Split		Vehicle environmental performance (CO_2 g/km)	
				Passenger (private)	Freight (road)	Passenger	Freight
A. Increase in fuel tax	10% increase in both petrol and diesel taxes	94.8	104.1	97.4	99.8	97.1	98.8
B. Increase and differentiation of user charges	90% increase of user charges,[2] with 50% differentiation based on vehicle environmental performance	94.7	104.3	97.7	99.9	96.6	99.3

1. All results are relative to a baseline scenario (= 100) of unchanged policy and refer to impacts after 10 years.
2. User charges are calibrated so as to yield a tax revenue increase close to scenario A. Half of the charges amount undergoes CO_2-based differentiation along the lines currently used for the car registration tax (ISV).

Source: Study commissioned by the OECD and carried out by TIS.

More extensive and differentiated forms of road pricing will have to be implemented in a gradual way. As a first step, authorities should introduce more differentiation in existing motorway tolls, and extend the application of road pricing to the rest of the motorway network. Other main roads could be progressively covered by the scheme as well. In the event of a shift from the car registration tax to user charges, equity considerations would also call for gradualism, in the sense of first applying road pricing to new cars (as these would have benefitted from the reduced registration tax). In any case, a very high number of subscribers (over 2 million) to *Via Verde*, the present electronic toll collection (ETC) system, should lower technological and cultural implementation barriers.

In urban and metropolitan areas, implementation issues become more complex, but also more pressing, since transport-related externalities have increased relevance. Differentiated parking fees can be a valuable instrument, and have more public

acceptability than urban tolls and a well-defined administrative level of implementation (municipalities). However, their inherent second-best nature (due, for instance, to a tenuous relation to the distances travelled) makes it advisable to introduce urban tolls and congestion charges. While the latter will require inter-municipal coordination, where the newly-created Lisbon and Oporto metropolitan transport authorities can play a useful role, they also offer the prospect of providing a new source of municipal revenue, as parking fees do. Finally, more and better supply of public transportation in metropolitan areas must be provided in tandem with the above demand-side instruments (see Chapter 3), and with a high degree of priority. Otherwise, the modal shift potential of the latter will not fully materialize, and user charges may produce adverse equity impacts on those having to commute the longest distances.

Reducing complexity and compliance costs

Tax complexity hampers growth

A major problem with the Portuguese tax system is its high complexity, which hampers productivity and growth in a variety of ways. Voluminous and unstable tax rules act as a deterrent to entrepreneurship and investment. Companies and individuals have to allocate more time and resources to tax compliance activities and less to the production of goods and services. Those compliance costs can be thought of as an additional implicit tax, strongly regressive relative to firm size (European Commission, 2004). To the extent that it encourages informality and tax evasion (Lopes, 2009), complexity leads to base narrowing and thus also imposes higher explicit tax rates on complying private agents.

Despite recent progress, day-to-day compliance costs are still substantial…

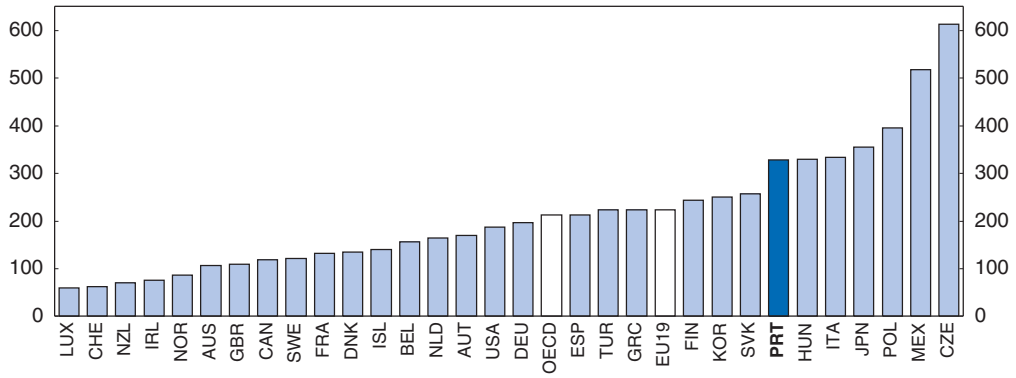
Available international comparisons point to above-average compliance costs in Portugal, in particular for small and medium-sized enterprises (SME). According to the *Paying Taxes 2010* study (World Bank *et al*., 2009), a Portuguese SME spends a total of 328 hours per year complying with tax obligations, almost 50% more than in the EU19 average (Figure 2.8). An even bigger gap is suggested in Lopes (2009), who finds that compliance costs amount to 5.27% of SME sales, against 2.60% for the European Union reported in European Commission (2004).[10]

In recent years, the authorities have taken important steps to tackle this problem. Considerable progress has been achieved in the use of electronic communications between taxpayers and revenue bodies: Portugal performs well in the number-of-payments indicator (Figure 2.9), which takes into account the extent of on-line filing and payment.[11] Investment in this area should continue, as the scope for further progress is far from exhausted. For instance, some services are still not available on-line, and traditional payment methods are still widely used (OECD, 2009d). The timeliness of tax refunds, which is a further dimension of compliance costs, has also substantially improved – VAT refunds to exporters took an average of 23 days in 2009, down from 62 days in 2005.[12]

While filing and payment were made easy, the preparation of tax returns often remains burdensome, accounting for the bulk of total compliance time. Progress on this front must go beyond the expansion of electronic communications and explore the scope for enhanced co-operation between different revenue agencies and for reducing reporting requirements (especially for SMEs). Increased coordination between tax and social security

Figure 2.8. **Hours spent preparing, filing and paying taxes**

Per year, 2008[1]



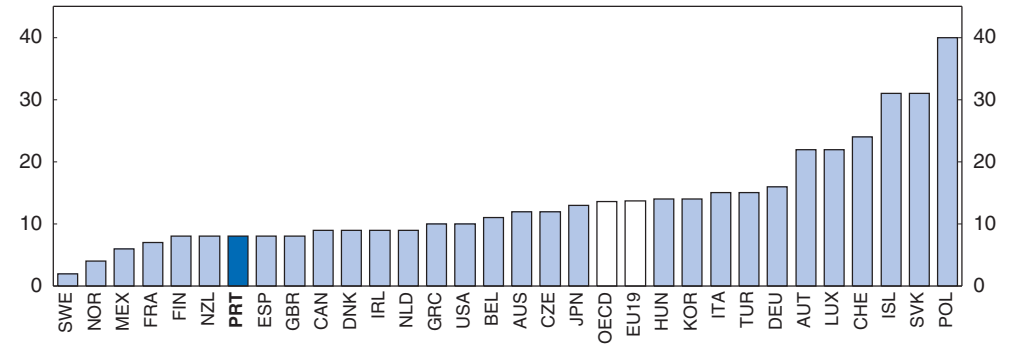
1. For small and medium-sized enterprises. Aggregates are unweighted averages.

Source: World Bank, IFC and PwC (2009), *Paying Taxes 2010: The Global Picture*, World Bank, International Finance Corporation and PricewaterhouseCoopers, *www.doingbusiness.org*.

StatLink http://dx.doi.org/10.1787/888932330897

Figure 2.9. **Number of tax payments**

Per year, 2008[1]



1. For small and medium-sized enterprises. Aggregates are unweighted averages.

Source: World Bank, IFC and PwC (2009), *Paying Taxes 2010: The Global Picture*, World Bank, International Finance Corporation and PricewaterhouseCoopers, *www.doingbusiness.org*.

StatLink http://dx.doi.org/10.1787/888932330916

agencies should be pursued. Ultimately, the most effective route to cut compliance costs consists in streamlining tax legislation, often by curbing targeted special provisions.

Companies currently file separate monthly returns for social security contributions and for personal income tax withheld from employees' pay. The convergence in tax bases brought about by the new Contributory Code (Box 2.1) should be carried further, as employees' taxable income for social contributions remains narrower than under PIT. This convergence should also be used as an opportunity to adopt unified reporting, both as regards employees and in what concerns the new contributions to be paid on services purchased from independent workers. Building on the recent improvements in the exchange of information between the tax and social security agencies, unified reporting would be accompanied by systematic integration and sharing of databases, yielding efficiency gains through avoided duplication of efforts and better fraud and evasion detection. Closer coordination, as proposed, does not necessarily imply moving towards a

unified revenue agency for direct taxes and social contributions, but the authorities could consider doing so (Barrand *et al.*, 2004).

Reporting requirements for small businesses should be made less frequent, thus alleviating the competitive distortion suffered by smaller companies due to the regressive nature of compliance costs (fixed-costs). Currently, this only applies to the VAT, where small operators can opt for quarterly – rather than monthly – filing and payment. As in some other countries, such as Ireland (OECD, 2009d, 2009e), differentiation in reporting requirements should be extended to social contributions and withheld PIT – together with the reporting unification advocated above. If less frequent payments are seen as problematic for cash flow or tax evasion reasons, authorities could consider dissociating reporting from payment: information on contributions and withheld PIT for each individual employee could be reported only once a year, even if payments remained monthly.[13] Compliance and administrative costs can also be reduced by significantly raising the threshold (now at a mere 50 euros) for compulsory advance PIT payments by independent workers.

... and so are those in case of disputes and litigation

Administrative review mechanisms to tackle tax disputes have traditionally been slow and ineffective, thus contributing to higher court litigation. As recently as in 2007, the average time to make a decision in the framework of taxpayers' initial complaint mechanism (*reclamação graciosa*) was still close to 6 months, and delays in the appeal mechanism (*recurso hierárquico*) could be even longer. Responses to private ruling requests, which can be seen as a way to dissipate tax law uncertainty and thus preclude future disputes, could easily take more than 6 months. Further, the tax administration is often perceived as reluctant to change its own decisions (when assessing an appeal), and, more generally, to decide in favour of the taxpayer, even in instances where his or her case is fairly straightforward and can be seen as upheld by pre-existing court decisions.

There are encouraging signs that things are changing. The average time of response to *reclamações graciosas* has been reduced in 2009 to just over 1 month. As from September 2009, private ruling requests have been responded to within 90 days, the limit being reduced to 60 days in urgent cases, which benefit from a "silence is consent" clause. Authorities should secure this progress and extend it to other areas, such as faster decisions on *recursos hierárquicos* (appeals). They should also strive to further promote cultural change within the tax administration, including greater openness to reverse a previous decision when assessing an appeal.

The enduring slowness of tax courts – and of justice in general – remains a major hindrance for companies and investors. Though reforms in this area clearly go beyond the taxation sphere, better dispute resolution through administrative review would lead to fewer cases being brought to court, and hence to smaller delays. A similar contribution can be expected from recently announced plans to introduce binding arbitration as an alternative to tax courts. However, authorities should be prudent in implementing arbitration, since the international experience to draw on is very scant, and adverse selection problems might arise (taxpayers opting for arbitration might be those most likely to lose cases in courts). A possibility to be considered is to initially restrict access to arbitration to cases below a certain threshold (small cases clog tax courts the most), and in any case closely monitor the results.

Fewer special provisions are the key to simpler and more stable legislation

Complex and unstable tax laws place a lower bound on compliance costs, no matter how efficient other arrangements are. In turn, complexity and instability largely follow from the proliferation of special tax provisions, also known as tax expenditures, which often arise from an activist use of taxation as a tool for sectoral policies. Tax expenditures often end up creating vicious circles whereby targeted provisions are legislated, loopholes open, and even more complex laws are passed – sometimes barring intended beneficiaries from access to incentives, or straining to the limit the administration's capacity. Authorities should in general refrain from introducing new tax expenditures, and should roll back many existing ones – as discussed below in more detail. A more stable tax system would also allow time for better law making, including clearer drafting, extensive consultation of experts and an ex-ante assessment of the impact on compliance costs.

Avenues for raising the efficiency of tax collection

Raising the efficiency of tax collection is important for several reasons. First, it could be a way to facilitate fiscal consolidation. Second, it could reduce distortions in resource allocation, which often stem from tax expenditures. In certain cases, the latter also give rise to adverse equity impacts, the correction of which would provide a third motivation. Finally, the high administrative costs incurred by revenue agencies (Box 2.4) would decrease, allowing them to devote more human resources to compliance functions.

Box 2.4. **Administrative costs of tax collection**

A complex and unstable tax system makes tax collection itself more difficult. The extent of the burden involved can be proxied by the cost of collection ratio, defined as the total administrative costs of a revenue body as a percentage of its net revenue collection. In 2007, this ratio stood at 1.41% for Portugal, on a declining trend but still clearly above an unweighted average of 1.10% for the EU19 (OECD, 2009d, pp. 87-88).* It is well known that any international comparisons of this ratio are inherently precarious, due to factors such as lighter or heavier tax burdens, differences in the range of taxes collected *(e.g.* whether they include SSC) and methodological discrepancies. These caveats notwithstanding, the indicator suggests that Portugal probably faces higher-than-average administrative costs.

The functional allocation of the revenue agency staff may also point to burdensome operational procedures. In 2007, only 33.5% of the Portuguese staff carried out compliance functions (audit, investigation and verification, and enforced debt collection), which compares with a simple average of 46.3% for the fourteen EU19 countries for which a breakdown is available (OECD, 2009d, pp. 95-96). Tax simplification is a promising avenue to free up more human resources for compliance functions.

* The value for Greece refers to 2004, the latest available year.

Reforming property taxes

The real estate recurrent tax (IMI) should be streamlined and increased

Portugal should increase its reliance on recurrent taxes on immovable property, which are among the least harmful to growth (Arnold, 2008). This should primarily stem from base broadening, through regularly updating property values and removing most tax expenditures. However, an increase in tax rates is also likely to prove necessary, especially

to rebalance the tax system. In this context, potential interactions of property tax reform with the rental housing market and housing prices should be taken into account.

Many dwellings still have outdated taxable values, very often far below market prices. To date the formula-based value assessment brought about by the 2003 reform (Box 2.1) has been applied to only roughly one third of urban properties. The average taxable value of the remaining two thirds, which underwent adjustment through inflation-based coefficients, is nearly three times lower than those assessed post-reform (Santos and Martins, 2009). Though 2013 remains the official deadline for completing the formula-based assessment of all urban properties, no concrete steps have been taken to that effect, and the process has been actually slowed down by excluding (as from 2009) most transmissions by bequest from the formula-based updating. Arrangements should be made to complete this updating soon, without waiting for properties to be sold. The current dual method of taxable value determination is an important source of inequities – for instance, similar flats in the same building can pay vastly different IMI amounts depending on when they were last sold. It also gives rise to revenue losses. Though municipalities set rates within different bands for the two groups of buildings – currently 0.2-0.4% for formula-based assessments and 0.4-0.7% for the others – the difference in rates does not fully compensate the gap in taxable values. The fact that old buildings tend to yield less revenue worsens the bias towards new construction and urban sprawl.

Substantial revenue losses also stem from an extensive array of IMI exemptions. Most principal owner-occupied dwellings (POODs) enjoy a temporary exemption: for transactions having taken place after the 2003 reform, the exemption duration was set at 3 or 6 years (depending on taxable values), and has recently been extended to 4 or 8 years in the context of the measures taken in Autumn 2008 to alleviate the impact of higher mortgage interest payments on households. Other exemptions – sometimes permanent – apply *inter alia* to public bodies, non-profit-making organisations, tourism and other investment projects, and urban renewal. As a result, in 2008 more than 30% of the overall taxable value benefitted from some form of exemption. Most IMI exemptions should be abolished, with any possible exceptions restricted to the very specific cases where they play an important role in attracting investment or to low-value property belonging to poor households.[14] The less frequent case of high-value property occupied by income-poor owners, often put forward as an objection to increases in real estate recurrent taxes, could be dealt with by limiting the IMI payment for those owners.

The real estate transaction tax (IMT) should be streamlined and restricted to first transactions

The IMT should be levied only on the initial transactions of property. Under current rules, this tax is due every time a given property is sold, according to a central-government-set schedule of progressive average rates reaching up to 6% of the total value of dwellings. As a result, housing prices are inflated and geographical mobility discouraged. Many IMT tax expenditures – which resemble the non-POOD IMI exemptions – should also be abolished, thus helping to compensate for lost revenue on second and subsequent transactions.

While replacing IMT by VAT would be a desirable goal in the longer term, substantial problems need to be overcome. According to current EU rules, most newly-constructed buildings would have to be taxed at the VAT standard rate, which is much higher than IMT rates. A major impact on prices would therefore be expected, as inputs with recoverable

VAT account for a limited share of total costs. Relative to IMT, the risks of tax evasion would also increase: as elsewhere, VAT would be levied on invoiced amounts, whereas IMT generally falls on whichever is largest between those amounts and the value resulting from the formula-based property assessments.

Local government financing needs to be reconsidered

Any major changes to property taxes have important implications for the financing of local governments, as they are currently entitled to the whole IMI and IMT revenues. In the near term, arrangements should aim at stabilising overall municipal proceeds, both in terms of preserving the current level of resources and of reducing revenue volatility. Restricting the scope of IMT will contribute to the latter goal (as the respective revenue tends to be highly volatile and procyclical), but will also probably create some revenue shortfall, to be compensated through IMI. However, it is not desirable that higher total property taxation (as the increase in IMI proceeds should exceed the fall in IMT's) translates into more resources for municipalities. This would fuel spending at the local level rather than help to create budgetary room for a reduction in social contributions. Additional revenue from property taxes could accrue to the State, possibly through a national-wide IMI surcharge. Alternatively, municipalities would remain fully entitled to property taxes and revenue-neutrality would be ensured through smaller grants from central government.

In the medium term, the goal of better aligning local taxation with local expenditures could also be pursued by diversifying the municipal revenue base. An avenue for achieving this would be to resort to some forms of transport taxation, like user charges, as discussed above. In this regard, one should note that several transport-induced externalities have a localised nature, and instruments like parking fees or urban tolls are well suited as sources of revenue for municipalities, due to their link to public infrastructure and services at the local level.

Reducing tax expenditures

Tax expenditures abound and are often detrimental to growth and equity

The Portuguese tax system is characterised by the extensive use of special provisions, or tax expenditures. These effectively narrow tax bases and hence require higher-than-otherwise tax rates. They also hamper growth through the same channels of complexity – of which they are a major source – and generate deadweight losses by encouraging and rewarding rent-seeking or tax-planning behaviour.[15] Further, administrative costs increase, as tax collection becomes more burdensome (Box 2.4). Finally, though many special provisions are motivated by equity goals, defective targeting often makes them a costly way to pursue those objectives, and may even induce regressive impacts.

Commendably, the Portuguese authorities have introduced a five-year limit on some tax incentives (those under the *Estatuto dos Benefícios Fiscais*); they will expire at the end of 2011. It is important that this rule is adhered to, and taken advantage of as a device for base broadening. However, the official definition of tax expenditures is more restrictive than in most other countries. The 2010 State Budget report estimates the revenue forgone due to tax expenditures (*despesa fiscal*) in 2008, for all taxes, at 1 278.5 million euros, or 0.7% of GDP, which contrasts with an average of 4.2% of GDP for a sample of 7 countries[16] considered in OECD (2010c). Although international comparisons are inherently difficult in this area, most other countries have more streamlined tax benchmarks, and hence a wider

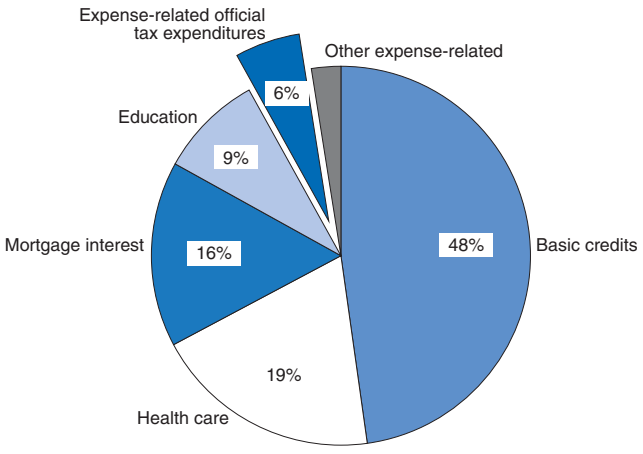
definition of what constitutes a special provision. For example, unlike in Portugal, housing tax credits or some reduced rates of VAT are usually included among tax expenditures. If added to the official estimate above, revenue losses from all VAT reduced rates and from the education, health care and housing PIT tax credits would total around 4.5% of GDP. Therefore, as several examples below illustrate, base broadening in Portugal can and should go beyond the current official definition of tax expenditures.

Personal income tax (PIT) tax expenditures are inequitable and distort capital allocation

Expense-related PIT credits reach substantial amounts (roughly 1% of GDP, or 17% of PIT revenue, in 2007 – Figure 2.10) and are often inequitable or distortive. Credits for health care and education are two of the three largest items, and both allow the taxpayer to deduct 30% of the amounts spent, subject to a ceiling in the case of education but with no limit for health expenses (a very generous provision in international comparison). The impact on income distribution is widely perceived as regressive. The same percentage (30%, up to a ceiling) applies to mortgage interest payments. Higher ceilings for households in low tax brackets, in force since 2008, make regressivity less of a concern. However, as in some other countries, interest deductibility combined with no imputed rental income taxation distorts the allocation of capital towards the housing sector. Further, it provides incentives for increased indebtedness of households (a major issue in Portugal, as analysed in Chapter 1), making the economy less resilient to shocks. In this context, Portugal's housing market is characterised by an above-average owner occupation rate (see Figure 2.11). Tax credits for education, health care and mortgage interest payments should be eliminated and, if not, at least reduced.[17] The same holds for a variety of smaller expense-related relief – for instance, amounts invested in retirement savings plans or spent on life or health insurance *premia*. Expense-related tax credits aptly illustrate the narrow definition retained in official classifications of tax expenditures – none of the three largest items are included (Figure 2.10). Encouragingly, the authorities have announced in their recent Stability Programme the intention to curb PIT tax expenditures, though the envisaged reduction is still to be fully specified.

Figure 2.10. **Personal income tax credits**[1]

As a percentage, 2007



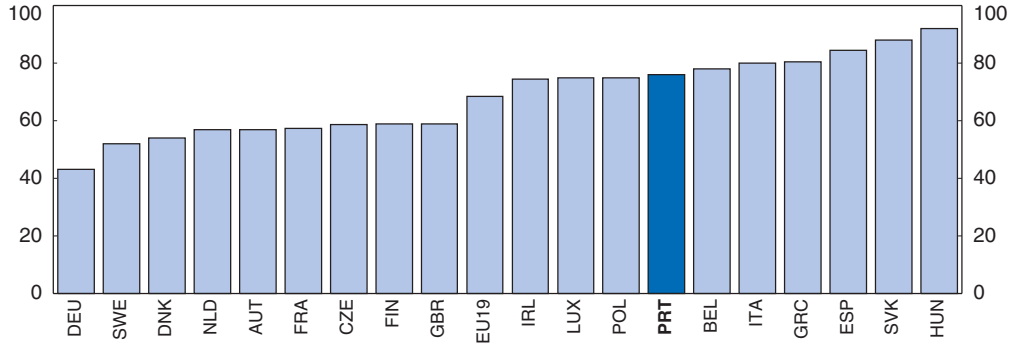
1. Total credits amount to EUR 3 145.

Source: Ministry of Finance (2008), "Descrição Estatísticas de IR", *Portal das Finanças*, November.

StatLink http://dx.doi.org/10.1787/888932330935

Figure 2.11. **Owner occupation rates in EU countries**[1]

As a percentage



1. The latest available data is 2002 for Germany, 2003 for Austria and Hungary, 2004 for Poland, 2007 for Sweden, France, Finland, Czech Republic, Portugal and Belgium, 2008 for Denmark, The Netherlands, Greece, United-Kingdom, Ireland, Luxembourg, Slovak Republic and Spain. The EU19 aggregate is an unweighted average.

Source: European Mortgage Federation, "Hypostat 2008: A review of Europe's mortgage and housing markets".

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Basic PIT credits do not raise equity concerns, because they correspond to fixed amounts (per taxpayer, dependent child or dependent parent) and therefore have in general a progressive impact (though their wastable character may blur this for low incomes). However, the implied revenue cost has been rising, due to their indexation to the minimum wage, which has been the object of sustained increases. This indexation should be abolished, and replaced by an inflation-based alternative – for instance the IAS (*indexante dos apoios sociais*), an index already in use for updating social transfers.

Differential taxation across sources of capital income can also have negative impacts on equity and efficient resource allocation. Until 2009, a case in point concerned capital gains on financial investments, which were virtually exempt from PIT in Portugal: in broad terms, gains on equity shares held for more than 12 months and on bonds were tax-free, whereas gains on equity shares held for a shorter period enjoyed a special rate of only 10%. This tax regime could be expected to be strongly regressive, and stood out as one of the most concessionary among OECD countries (Johansson *et al.*, 2008). In a welcome recent development, these capital gains are now in general taxed at a flat rate of 20%, which is already levied on other forms of capital income, such as interest and dividends. Authorities should also tax rental income at the same flat rate, rather than at the marginal ordinary PIT rates which now apply (in 2010, in the range of 35 to 43% for middle-class landlords).[18] This would alleviate distortions stemming from differential taxation of alternative savings vehicles, and would also contribute to a better-functioning housing rental market.

Further examples of differential taxation concern pensioners and the self-employed, both of whom tend to pay less PIT than dependent workers. These differences are detrimental from an equity point of view and induce revenue losses. Though some convergence has been taking place, pensions still often enjoy a more generous allowance than salaries (in most cases, 6 000 *versus* 4 104 euros, 2010 values). This gap leads to lower average tax rates for pensioners and mainly benefits those who are better off.[19] Therefore, plans for greater convergence of allowances, as envisaged by the authorities in their fiscal consolidation strategy, are welcome and should actually be strengthened: allowances for pensions and salaries should be equalised, which would not affect poor pensioners, who would still not pay any tax. As for the self-employed, they continue to pay fairly modest

amounts of income tax. Though in 2007 they accounted for 23.0% of total employment, income from self-employment was only 10.8% of total gross income from both forms of employment (dependent and independent) in PIT tax returns.[20] Efforts at fighting fraud and evasion in this area should be stepped up, since the payoff will not be limited to PIT revenue but will also extend to social contributions (as from 2011, the SSC tax base for the self-employed will converge towards actual income – recall Box 2.1).

Corporate income taxation should be streamlined

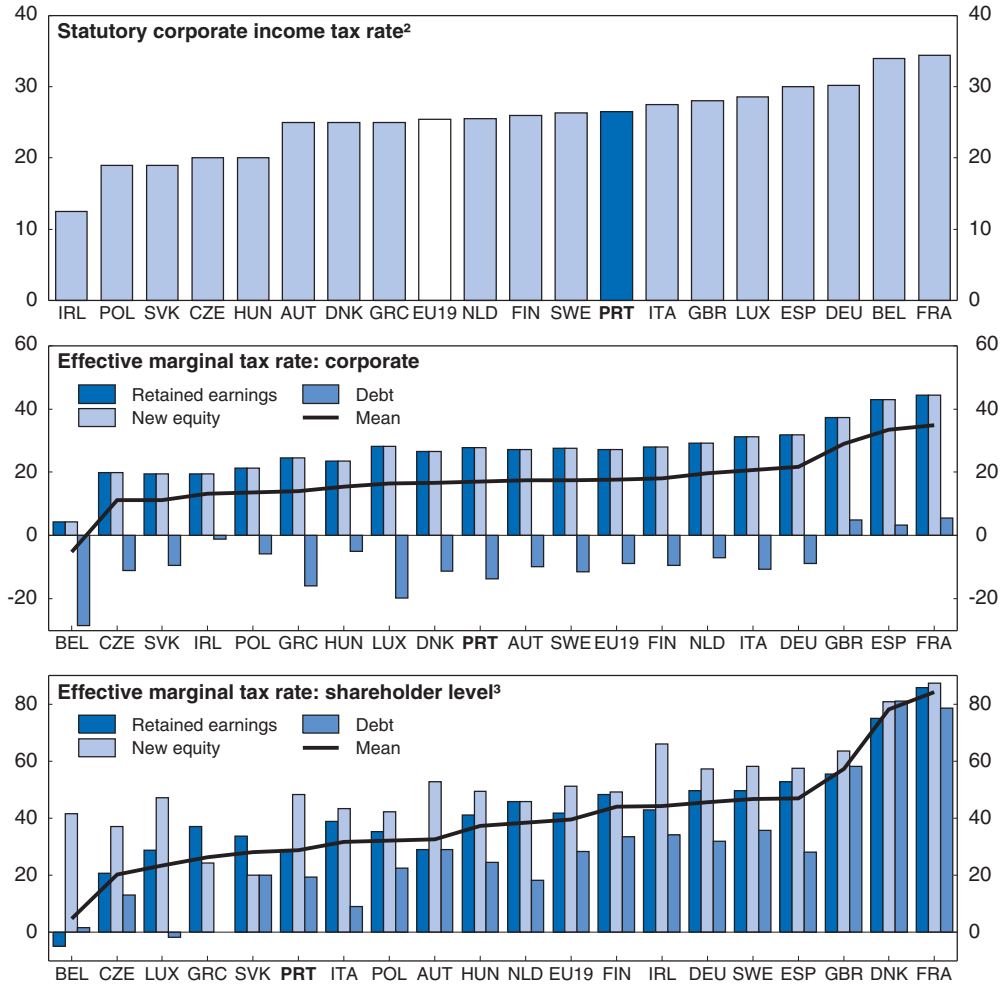
The main statutory rate of the Portuguese corporate income tax (CIT) – which stands above the EU19 average (Figure 2.12) – is a misleading indicator of the severity of corporate taxation, as it does not reflect the existence of numerous base narrowing provisions. Some of these are captured by stylised indicators of effective tax rates, based on models which analyse the impact of taxation on returns from investment projects (Devereux *et al.*, 2008). For instance, generous capital allowances for machinery and industrial buildings, often exceeding true economic depreciation, reduce effective rates at the corporate level. Moreover, a lenient taxation of capital income under PIT brings effective rates at the shareholder level further down in comparative terms (Figure 2.12) – a feature which still holds, though by a smaller margin, if account is taken of the abovementioned recent reform of capital gains taxation. Other base narrowing provisions are encapsulated in more detailed features of the tax code *(e.g.* different forms of tax incentives) and thus elude the above indicators. They can nonetheless be taken into account by simpler definitions of effective or implicit rates, computed as tax revenues over some accounting or macroeconomic proxy of the tax base. Though international comparisons become more difficult, available evidence suggests a somewhat below-average implicit rate in Portugal (European Commission, 2010).[21]

However, extensive use of tax expenditures is not the best way to alleviate the tax burden, as productivity growth is impaired through several channels. Besides increased administrative and compliance costs, productivity can also be negatively affected by the dispersion of effective tax rates (Johansson *et al.*, 2008, p. 37), stemming *inter alia* from lower rates for certain regions or from a more favourable treatment of SMEs. The associated tax incentives are often poorly targeted, distorting investment patterns and inducing wasteful revenue losses. Recent developments in Portugal may have worsened these problems. Besides long-standing regional-based differentiation of statutory rates, in 2008 authorities introduced a reduced rate of 12.5% for the initial 12 500 euros of taxable income, thereby lowering effective rates for small firms. At the other end of the spectrum, the largest firms also often pay CIT at below-average effective rates, which may suggest a more intensive use of special provisions (Rodrigues, 2009). A prominent example consists in the full deductibility of dividends from most qualified participations, as well as of the financial costs stemming from their acquisition. Authorities should therefore considerably streamline CIT provisions, abolishing inefficient and distortive tax expenditures and promoting base broadening. The statutory rate, which retains some importance for investment decisions due to its high visibility, could then be decreased and brought closer to effective rates. It follows that the recent decision to increase the statutory rate for large companies by 2.5 percentage points, though helpful to ensure rapid progress in fiscal consolidation (Chapter 1), should be reversed when circumstances permit.

Some tax expenditures should nonetheless be retained or reformed. A case in point is the recent (2008) introduction of an allowance for corporate equity (ACE), which alleviates the

Figure 2.12. **Statutory and effective corporate tax rates**

As a percentage, 2009[1]



1. Effective rates are simple averages over five different assets and refer to domestic (as opposed to cross-border) investments. Portugal's ranking remains broadly similar if one considers other kinds of shareholders, or effective *average* (instead of *marginal*) tax rates. The effective marginal tax rate refers to an incremental investment and is defined as the proportionate difference between the pre-tax and the post-tax real rates of return. The effective average tax rate considers discrete choices for investment and measures taxes paid as a proportion of total income. See Devereux *et al.* (2008) for further methodological details. Data refer to 2009, and hence do not take into account the recent increase by 2.5 percentage points of the CIT rate for large companies in Portugal. The EU19 aggregate is an unweighted average.
2. Basic combined central and sub-central rate.
3. Top-rate non-qualified shareholder.

Source: OECD (2010), "Taxation of Corporate and Capital Income", *OECD Tax Database*, *www.oecd.org/ctp/taxdatabase*, March and M.P Devereux *et al.* (2010), "Effective Tax Levels Using the Devereux/Griffith Methodology", Project for the EU Commission, TAXUD/2008/CC/099, Intermediate Report, Center for European Economic Research (ZEW).

StatLink http://dx.doi.org/10.1787/888932330973

debt bias in financing decisions. Besides potentially discouraging saving by companies and promoting their excessive indebtedness (problems associated to high external deficits in Portugal, as discussed in Chapter 1), this debt bias may also harm productivity growth by diverting investment away from small innovative firms or knowledge-based industries, since these are forced to rely more on equity. The Portuguese ACE has been defined in marginal terms (*i.e.* it applies to equity *increases*), which is welcome as it limits tax revenue losses while

still addressing the debt bias, and authorities have expressed the intention to keep it in force beyond the original deadline (2010). A case can also be made to preserve the current system of R&D tax credits (SIFIDE, first applied in 2006 and stepped up in 2009 and 2010), which is regarded as instrumental in the recent surge of business expenditure in R&D (0.73% of GDP in 2008, up from 0.30% in 2005).[22] Yet another example concerns contractual investment tax credits, seen as an important tool for attracting FDI and therefore in securing the ensuing benefits as regards knowledge spillovers and productivity growth.

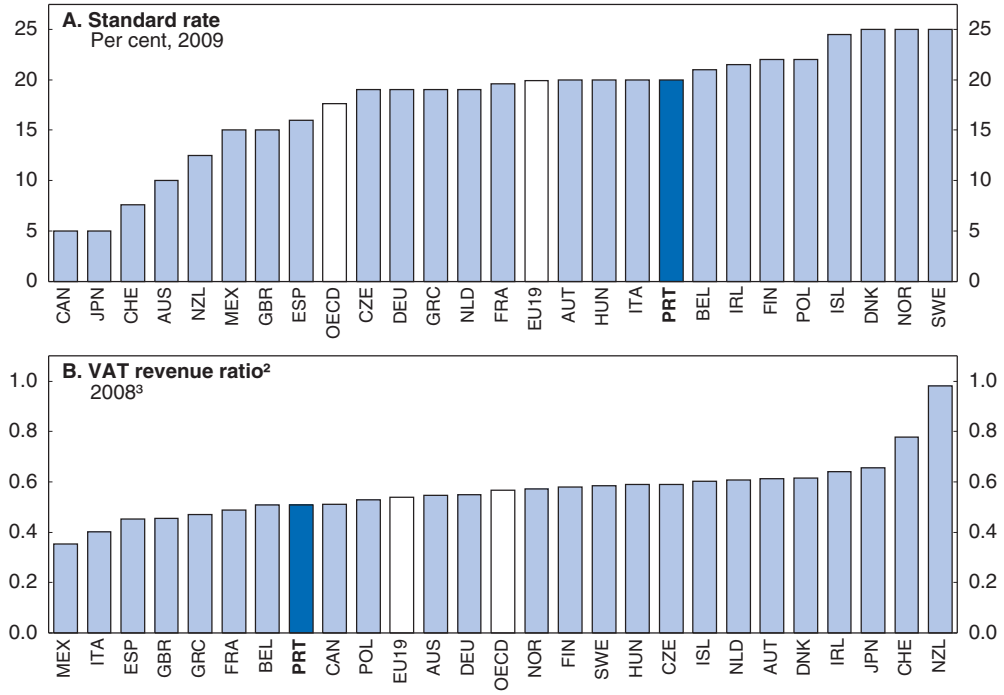
Curbing tax fraud and evasion is particularly important in corporate taxation, as the standard base broadening arguments are supplemented by efficiency gains stemming from the promotion of a level playing field for companies and the reduction of informality. Though significant progress has been made on this front (Braz *et al.*, 2009), several indicators suggest that the scope for increasing tax compliance is far from exhausted, and efforts in this area should therefore be maintained and stepped up. For instance, a long-standing feature of the Portuguese CIT is that a small number of companies accounts for a large share of total revenues (Bronchi and Gomes-Santos, 2001). The latest available data conform to this pattern: in 2007, 0.8% of the firms with positive assessed CIT (*IRC liquidado*) paid around 57% of total assessed tax revenue (Rodrigues, 2009). Further, also in 2007, 64% of firms had negative assessed tax and 20% did not pay any CIT (*ibidem*). One should note that this last figure would have increased to 34% in the absence of the Special Advance Payment (*Pagamento Especial por Conta*) – in practice, a minimum compulsory CIT payment, due even if losses are reported – implying that the latter may help to curb tax evasion.[23]

Reduced VAT rates should be curbed

Portugal's extensive use of reduced rates is the main driving force behind the below-average efficiency in VAT collection (Figure 2.13).[24] A reduced rate of 6% is applied to no less than 28% of the tax base,[25] including essential foodstuff, medicine, hotels, electricity and natural gas, and renovation and repairing of private dwellings.[26] A further 12% of the tax base, including restaurant services and some other foodstuff, is subject to VAT at 13%. The revenue losses are among the highest in the EU (Copenhagen Economics, 2007).

Pursuing equity or efficiency objectives through reduced VAT rates is generally hampered by severe targeting problems. VAT in Portugal is slightly progressive relative to expenditure (Braz and Cunha, 2009), as poorer households tend to devote a higher share of their total spending to reduced-rate goods and services like essential foodstuffs, utilities or health care, even if richer households receive most of the absolute benefits of the reduced rates. Applying reduced rates to some sectors with a high incidence of low-skilled employment, such as the hospitality industry, tends to be regressive (richer households spend relatively more on these services) and is a poor way of targeting low skill workers, who still account for most of the Portuguese workforce. Also, applying a reduced VAT on restaurants is generally considered an inefficient instrument to create jobs, because demand for restaurants is relatively inelastic to prices. Authorities should then substantially extend the scope of application of the VAT standard rate, with accompanying measures to compensate for adverse equity impacts – namely, enhanced income support to poor households.

Figure 2.13. **Value added tax**[1]



1. Zone aggregates are unweighted averages.
2. The VAT revenue ratio (VRR) is defined as the ratio between the actual value added tax (VAT) revenue collected and the revenue that would theoretically be raised if VAT were applied at the standard rate to all final consumption. This ratio gives an indication of the efficiency of the VAT regime in a country compared to a standard norm. It is calculated as: VRR = VAT revenue/([consumption -VAT revenue] x standard VAT rate).
3. 2007 for Australia, Belgium, Greece, Iceland, Ireland, Netherlands, Poland. OECD and EU19 aggregates exclude Korea, Luxembourg, Slovak Republic and Turkey.

Source: OECD, *Annual National Accounts* and *Revenue Statistics Databases*; and *OECD Tax Database*, *www.oecd.org/ctp/taxdatabase*.

StatLink http://dx.doi.org/10.1787/888932330992

Box 2.5. **Summary of recommendations on reforming the tax system**

Making the tax system more supportive to growth and competitiveness

- As fiscal consolidation progresses, reduce employers' social security contributions (SSC) in a (at least) revenue-neutral way by raising property taxes and VAT. In this context, make social security financing less reliant on contributions and more on general revenues, and ensure that additional revenue from property taxes does not translate into higher overall resources for municipalities.
- Target the largest reductions of employers' SSC on low-wage workers. For this purpose, consider making employers' contributions progressive in the level of wages.
- Address transport sector externalities through extended infrastructure use charges, differentiated by vehicle environmental performance, location and time. If an overall increase in transport taxation is deemed undesirable, decrease the car registration tax to compensate. Improve the supply and governance of metropolitan public transportation.
- Complete the convergence in labour income tax bases between SSC and personal income tax (PIT).

Box 2.5. **Summary of recommendations on reforming the tax system** *(cont.)*

- Increase coordination between tax and social security agencies: unify firms' tax returns for SSC and withheld PIT, and integrate agencies' databases. In the longer term, consider moving towards a single agency.
- Reduce tax reporting requirements for small businesses, possibly by dissociating reporting from payment.
- Further improve administrative review mechanisms through faster response to appeals and, in assessing them, greater openness to reverse previous decisions.
- Explore the potential of binding arbitration as an alternative to courts, starting with small cases.

Avenues for raising the efficiency of tax collection

- To help create a margin to reduce employers' SSC, substantially increase IMI (the real estate recurrent tax) revenues. Broaden the tax base and, if needed, increase tax rates.
- Levy IMT (the real estate transaction tax) only on the initial transactions of property, and abolish many of its tax expenditures. In the longer term, consider replacing it by VAT.
- Eliminate, or at least substantially reduce, PIT credits for health care, mortgage interest payments and education, as well as for a variety of smaller expense-related items.
- Tax rental income under PIT at a flat rate of 20%, as other forms of capital income.
- Set pensions' PIT allowance at the same level as for salary income.
- Step up tax audit of independent workers to avoid significant losses in PIT and SSC.
- Streamline corporate income tax (CIT) provisions, abolishing distortive tax expenditures. Further broaden the CIT base through fighting fraud and evasion. Consider decreasing the CIT statutory rate when fiscal conditions permit.
- Preserve contractual investment tax credits when relevant for FDI attraction. Carefully-designed tax credits for R&D may also be of value.
- Substantially extend the scope of application of the VAT standard rate, accompanied – to the extent that basic essentials are concerned – by enhanced income support to poor households.

Notes

1. The terms "consumption taxes", "indirect taxes" and "taxes on goods and services" will be used interchangeably.
2. Relative to the current situation, this would imply the same marginal rate for the upper bracket, and a decrease in average rates for all wage levels.
3. There is evidence that reductions in non-wage labour costs tend to generate stronger net employment effects among low-skilled workers when they are not temporary or very tightly targeted. Among other reasons, this is because labour demand for vulnerable labour market groups, such as the long-term unemployed, is often less elastic (Immervoll and Pearson, 2009).
4. It should be emphasised that an *ex ante* budgetary neutral tax shift is not necessarily budgetary neutral *ex post*. While revenue collection may be positively affected by more dynamic prices and job creation, public intermediate consumption will rise (as it is subject to VAT) as well as all public expenditures potentially indexed to prices, such as wages, pensions and other social transfers. Hence, the authorities may wish to reduce the degree of indexation of some spending items (*e.g.*, through a freeze of nominal wages and certain social transfers) in order to allow a bigger cut in social contributions while keeping budgetary neutrality *ex post*.

5. Excluding LULUCF (Land Use, Land-Use Change and Forestry) emissions and international bunkers (European Commission, 2010).
6. Or if myopic consumers tend to under-value fuel economy savings.
7. Without taking driving conditions into account, road pricing only emulates fuel taxes under constant (average) fuel consumption, yielding for each vehicle a constant amount of CO_2 per km.
8. The tax credit is only granted if the new car emits less than 130 g of CO_2 per km (2010 values).
9. The price per km is virtually uniform, and does not depend on driving conditions (*e.g.* congestion).
10. In the case of large companies, figures from the same sources are 0.05% (Portugal) and 0.02% (European Union). Though both studies use broadly similar methodologies, comparisons should be made with some prudence.
11. When for a given tax full electronic payment and filing is allowed and generalised, only one payment per year is counted, even if actual payments are more frequent (World Bank *et al*., 2009, p. 49).
12. These figures refer to the so-called 30-day payment term, applicable mainly to exporters who fulfil a number of additional criteria. As for the more general 90-day payment term, the average delay decreased from 150 days in 2005 to 92 days in 2009, and the legal limit has recently been lowered to 60 days (thus becoming a 60-day payment term).
13. Some countries make reporting less frequent than payment for all companies, and not just SMEs (OECD, 2009d, pp. 180-183).
14. The case for exempting public bodies is much weaker, since full accounting of operating costs (including those from the use of buildings) tends to be conducive to a more efficient management.
15. In some cases tax expenditures can themselves be efficiency-enhancing, by alleviating tax-induced distortions (*e.g.* the possibility to deduct notional interest on equity, to offset the well-known debt bias problem), or by lowering administrative and compliance costs (as is the case of exempting from VAT some financial services).
16. Unweighted average of values reported for the latest actual year available by Canada, Germany, Korea, the Netherlands, Spain, the United Kingdom and the United States.
17. To ensure broad access to higher education, the current system of income-contingent grants and of student loans with mutual guarantee underwritten by the State should be maintained.
18. These rates reflect the additional consolidation measures decided in May 2010, with the 1.5 p.p. increase in the marginal rates for the relevant income brackets being scaled by a factor of 7/12 (the proportion of remaining months from June onwards). The exact range is from 34.88% to 42.88%.
19. The more generous allowance is one of the reasons why net pension replacement rates in Portugal are higher than the OECD average for above-average earnings (OECD, 2009f, p. 121).
20. The latter figure, however, is somewhat lowered by the fact that gross income for the self-employed – but not for dependent workers – is taken net of allowances (Source: Ministry of Finance, "Estatísticas de IR", *Portal das Finanças*). The employment figure comes from INE, Estatísticas do Emprego.
21. This study reports values for implicit tax rates on corporate income, defined as taxes on the income or profits of corporations over a national accounts-based proxy of the tax base. Portugal had a 22.6% rate in the most recent available year (2006), against a 23.1% average for seventeen EU19 countries.
22. However, it should be acknowledged that the literature is somewhat sceptical of a large impact of tax incentives on R&D expenditure (Jaumotte and Pain, 2005a and 2005b), and that no formal studies document the Portuguese case.
23. The Special Advance Payment (SAP) is in general computed as a fraction of turnover, with a minimum limit of 1 000 euros per year. If a company reports losses, the amount paid is only recoverable by undergoing a tax audit procedure. Source: Ministry of Finance, "Estatísticas de IR", *Portal das Finanças*, November.
24. Besides an extensive use of reduced rates, a low efficiency in collection can also be due to a high VAT gap, reflecting *inter alia* tax evasion or unpaid VAT due to insolvencies. However, Portugal's VAT gap in 2006 was estimated to be among the lowest in the EU (Reckon LLP, 2009).
25. Ministério das Finanças e da Administração Pública (2010). In this source the reduced VAT rate was still 5% (and the intermediate rate 12%).
26. With a limit on materials used.

Bibliography

Agell, J., P. Englund and J. Sodersten (1996), "Tax Reform of the Century – The Swedish Experiment", *National Tax Journal*, Vol. 49, No. 4, pp. 643-664.

Arnold, J. (2008), "Do Tax Structures Affect Aggregate Economic Growth? Empirical Evidence From a Panel of OECD Countries", *OECD Economics Department Working Papers* No. 643, OECD, Paris.

Barrand, P., S. Ross and G. Harrison (2004), "Integrating a Unified Revenue Administration for Tax and Social Contribution Collections: Experiences of Central and Eastern European Countries", *IMF Working Paper WP/04/237*, International Monetary Fund.

Blochliger, H. and O. Petzold (2009), "Taxes or Grants: What Revenue Source for Sub-Central Governments?", *OECD Economics Department Working Papers* No. 706, OECD, Paris.

Braz, C. and J.C. Cunha (2009), "The Redistributive Effects of VAT in Portugal", *Banco de Portugal Economic Bulletin*, Winter, pp. 71-86.

Braz, C., M.M. Campos, J.C. Cunha, S. Moreira and M.C. Pereira (2009), "Public Finances in Portugal: Trends and Challenges", in Economics and Research Department, Banco de Portugal, *The Portuguese Economy in the Context of Economic, Financial and Monetary Integration*, Banco de Portugal.

Brys, B. (2010), "Making Fundamental Tax Reform Happen", in OECD (2010), *Making Reform Happen. Lessons from OECD Countries*, OECD, Paris.

Bronchi, C. and J.C. Gomes-Santos (2001), "Reforming the Tax System in Portugal", *OECD Economics Department Working Papers* No. 302, OECD, Paris.

Copenhagen Economics (2007), Study on reduced VAT applied to goods and services in the Member States of the European Union,. *Final Report*, 21 June.

Crafts, N. (2009), "Transport Infrastructure Investment: Implications for Growth and Productivity", *Oxford Review of Economic Policy*, Vol. 25, No. 3, pp. 327-343.

Devereux, M., C. Elschner, D. Endres, J. Heckemeyer, M. Overesch, U. Schreiber and C. Spengel (2008), "Final Report: Project for the EU Commission TAXUD/2005/DE/3 10", Mannheim and Oxford, September.

European Commission (2004), "European Tax Survey", *Taxation Papers, Working Paper* No. 3/2004, Directorate-General Taxation and Customs Union.

European Commission (2008), "Public Finances in EMU – 2008", *European Economy*, Directorate-General for Economic and Financial Affairs.

European Commission (2009), "Sustainability Report – 2009", *European Economy*, 9/2009, Directorate-General for Economic and Financial Affairs.

European Commission (2010), *Taxation trends in the European Union: Data for the EU Member States, Iceland and Norway*, Directorate-General for Taxation and Customs Union and Eurostat.

Gauthier, S. (2009), "Un exercice de TVA sociale", *Économie et Prévision*, No. 187, Ministry of Economy, Finance and Industry, Paris.

Høj, J., V. Galasso, G. Nicoletti and T.-T. Dang (2006), "The Political Economy of Structural Reform: Empirical Evidence from OECD Countries", *OECD Economics Department Working Papers* No. 501, OECD, Paris.

Immervoll, H. and M. Pearson (2009), "A Good Time for Making Work Pay? Taking Stock of In-Work Benefits and Related Measures Across the OECD", *OECD Social, Employment and Migration Working Papers* No. 81, OECD, Paris.

Jaumotte, F. and N. Pain (2005a), "From Ideas to Development: The Determinants of R&D and Patenting", *OECD Economics Department Working Papers* No. 457, OECD, Paris.

Jaumotte, F. and N. Pain (2005b), "Innovation in the Business Sector", *OECD Economics Department Working Papers* No. 459, OECD, Paris.

Johansson, A., C. Heady, J. Arnold, B. Brys and L. Vartia (2008), "Tax and Economic Growth", *OECD Economics Department Working Papers* No. 620, OECD, Paris.

Lopes, C. (2009), "Os custos de cumprimento das obrigações tributárias das pequenas e médias empresas (PME) em Portugal", paper presented at the *IV Conferência Internacional sobre os Problemas Contabilísticos e Fiscais das PME*.

Ministério das Finanças e da Administração Pública (2010), *Relatório Anual IVA* 2008, Lisboa (internal working document).

OECD (2009a), *Taxing Wages* 2007-08, OECD, Paris.

OECD (2009b), "The Scope for CO_2-Based Differentiation in Motor Vehicle Taxes – In Equilibrium and in the Context of the Current Global Recession", 9 October, ENV/EPOC/WPNEP/T(2009)1/FINAL, OECD, Paris.

OECD (2009c), *Incentives for CO_2 Emission Reductions in Current Motor Vehicle Taxes*, 3 September, ENV/EPOC/WPNEP/T(2009)2/FINAL, OECD, Paris.

OECD (2009d), "Tax Administration in OECD and Selected Non-OECD Countries: Comparative Information Series" (2008), OECD, Paris.

OECD (2009e), *Taxation of SMEs. Key Issues and Policy Considerations*, OECD, Paris.

OECD (2009f), *Pensions at a Glance 2009. Retirement-income systems in OECD countries*, OECD, Paris.

OECD (2010a), *OECD Economic Surveys: Hungary*, OECD, Paris.

OECD (2010b), *OECD Economic Surveys: Netherlands*, OECD, Paris.

OECD (2010c), *Tax Expenditures in OECD Countries*, OECD, Paris.

Reckon LLP (2009), "Study to Quantify and Analyse the VAT Gap in the EU25 Member States", 21 September.

Rodrigues, C. (2009), "Comentários às Estatísticas dos Impostos sobre o Rendimento", *Ciência e Técnica Fiscal*, No. 423, pp. 155-180, Centro de Estudos Fiscais, Direcção-Geral dos Impostos.

Santos, A. C. and A.M.F. Martins, coordinators (2009), *Relatório do Grupo para o Estudo da Política Fiscal. Competitividade, Eficiência e Justiça do Sistema Fiscal*, Ministério das Finanças e da Administração Pública.

World Bank, IFC and PwC (2009), *Paying Taxes 2010: The Global Picture*, World Bank, International Finance Corporation and Pricewaterhouse Coopers.

ANNEX 2.A1

Transport externalities and road pricing

This annex provides more detailed information on transport sector externalities in Portugal. It also gives some technical background on the simulation exercise performed to illustrate the potential impact of road pricing schemes.[1]

Main transport externalities in Portugal

GHG emissions from the transport sector pose a major challenge for compliance with international commitments, not only under the Kyoto Protocol (for 2008-12) but also in the 2020 horizon, when Portugal is bound to record a maximum increase of 1% in non-ETS sectors relative to 2005 levels. A recovery in economic activity and international trade in the coming years has the potential to reverse the slight decline in transport emissions observed in the recent past, especially if one takes into account the trend towards a growing importance of the road mode in international freight transport activity. Though projections for transport emissions in Portugal by 2020 are not yet available, scenarios at the European level show that further increases from the sector can be expected (Rijkee and van Essen, 2010).

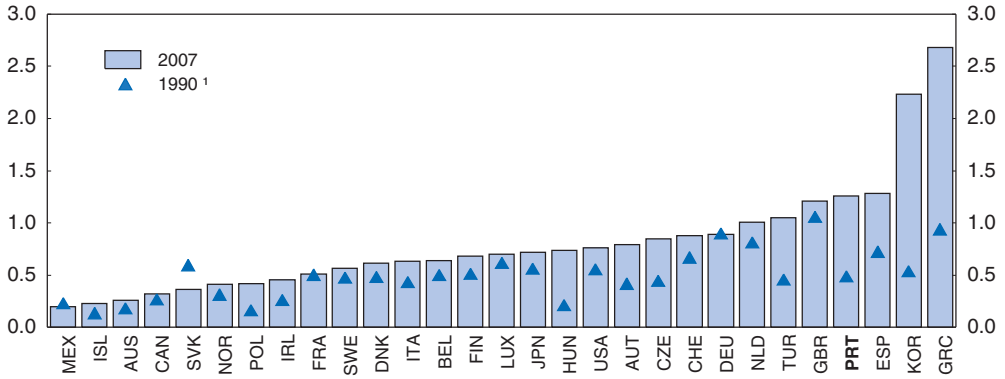
In the EU15 context, congestion is by far the most important component of the external costs of road transport, accounting for roughly half of their total money amount (Persson and Song, 2010). However, the estimation and international comparisons of road congestion costs in Portugal face severe data limitations.[2] Bearing in mind this caveat, available evidence suggests that the degree of congestion is relatively low in the country as a whole (Crafts, 2009) but could be on an upward trend, since Portugal has recorded strong increases in the intensity of road network utilisation (Figure 2.A1.1 and Chapter 3). Congestion becomes a significant concern in the two main metropolitan areas (as acknowledged, for instance, in Ministério das Obras Públicas, Transportes e Comunicações, 2009), weighing on commuting time. In the 2010 Eurotest inspection of local public transport systems, Lisbon came only 22nd out of 23 European cities as regards travel time.[3]

Air pollution, noise and accidents are also important transport sector externalities. In the Lisbon and Oporto metropolitan areas local concentrations of particles (PM10) and nitrogen oxides (NO), originating mainly from road transportation, often exceed the legal limits. The transport sector also accounts for almost half (45% in 2007) of the overall Portuguese NO_X emissions (regulated under the NEC Directive), whose levels in 2007, though on a downward trend, were still slightly above the ceiling set for 2010.

Information on exposure to noise from transport activity is very limited in Portugal – for instance, no systematic data exists even for the Lisbon and Oporto agglomerations.

Figure 2.A1.1. **Road network utilisation**

Million vehicle-kilometres per kilometre of roads



1. Data refer to 1991 for Germany and to 1992 for Slovak Republic.

Source: Based on *OECD Environmental data* and OECD estimations.

StatLink http://dx.doi.org/10.1787/888932331011

However, it is estimated that in 2000 between 41% and 52% of the Portuguese population was exposed to road traffic noise above 55dB(A), which compares with a value of 44% for the EU as a whole (CE Delft, 2007).[4] Road accidents continue to take a heavy toll in Portugal, despite very significant progress over the past two decades. In 2008, road fatalities relative to the volume of passenger transport activity was still almost 25% above the EU27 average (European Commission, 2010).

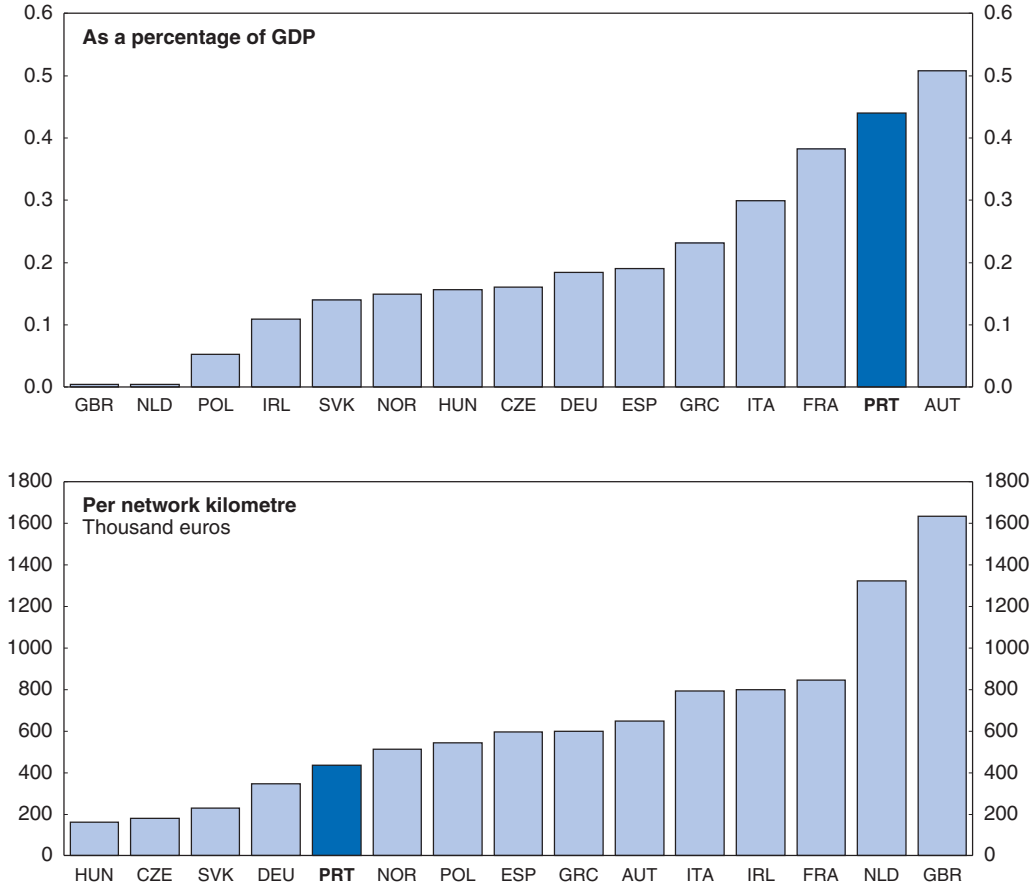
The optimal use of economic instruments to deal with transport externalities

Economic theory suggests that optimal taxation of the transport sector consists in using fuel taxes to internalize CO_2 emissions and differentiated road charges to tackle other important external costs, such as congestion, local pollution or noise (OECD, 2009). In contrast, vehicle taxes (either of registration or circulation types) are in general a less efficient instrument to address externalities, as they are not related to actual car use. There is a widespread perception that in many OECD countries the current levels of transport taxation are below the gap between social and private costs (OECD, 2009; Persson and Song, 2010). Further, despite the prominence of congestion costs, road charges are still much less developed than taxes on fuels or cars. Therefore, an increase in overall transport taxation could be justified from an efficiency point of view, and should probably rely on higher and more differentiated road pricing.

Revenue from fuel taxes as a percentage of GDP is comparatively high in Portugal (Figure 2.7). Tax rates recorded several increases over the past decade, as a result of which the rate on petrol is already above the EU19 average. Though the rate on diesel is still below-average, tank tourism in Spain acts as a deterrent to further increases. Portugal is therefore in relatively unfavourable circumstances to raise fuel taxes significantly. The country is also among those where revenue from motorway tolls is highest as a percentage of GDP, but this mainly reflects its extensive motorway network: the level of revenue per kilometre is relatively low, suggesting room to increase toll revenues further (Figure 2.A1.2). More broadly, as argued above, road pricing is generally underdeveloped across the OECD, and Portugal is not an exception as regards the case for stronger reliance on this form of transport taxation. Furthermore, tolls in Portugal are only differentiated by vehicle type, and hence have very low effectiveness in addressing externalities. In cities, parking fees

Figure 2.A1.2. **Toll revenues**[1]

2009



1. Net revenues. Preliminary value for Austria and provisional figure for France.

Source: Statistical Bulletin (2010) of "Association européenne des concessionnaires d'autoroutes et d'ouvrages à péage" (ASECAP) and OECD, *OECD Economic Outlook Database*.

StatLink http://dx.doi.org/10.1787/888932331030

are the only existing form of road pricing. Although in use in many municipalities, their degree of differentiation is modest, as are the amounts collected. Data on total revenue from parking fees at the national level is not available. However, in Lisbon, despite strong growth over the past decade, parking fees amounted to only EUR 20 million in 2007. Hence, there is scope in Portugal for higher and more differentiated road user charges.

Simulating the impact on GHG emissions and traffic structure of a road pricing scheme

The expected impact of road pricing on different variables, compared with that of fuel taxes, has been simulated by using a stylised analytical model of traffic flows in Portugal. The model focuses on road transportation for both passengers and freight (though allowing for shifting to non-road modes). For comparability, increases in fuel taxes and user charges have been calibrated to raise roughly the same amount of fiscal revenues *ex post*. The simulation shows how the increase in taxes affects GHG emissions through impacts on modal split and vehicle environmental efficiency.

Traffic volumes are taken at the level of the whole country, which precludes an explicit examination of local impacts, such as congestion, air pollution and noise: for instance, user charges are modelled as a national-wide additional cost per km travelled. The model has been calibrated with elasticity values taken from international studies (see Box 2.A1.1); while their plausibility for the Portuguese case has been assessed, simulation outcomes should be regarded as illustrative.

Box 2.A1.1. **Key elasticities applied in the simulations**

- Car sales w.r.t. fuel tax and road charging: an elasticity of –0.2 was applied, based on the comparison of short-term (–0.08) and long-term elasticities (–0.25).
- Vehicle environmental performance w.r.t. fuel tax and road charging (environmental component only): an elasticity of –0.5 was applied, based on a literature review.
- For the modal split effects of the various taxes and charges a parameter was calibrated, taking into account the elasticities observed in the literature. A reference short-term elasticity of private transport demand w.r.t. circulation costs of –0.3 was used.
- The main source of information concerning elasticities was Goodwin *et al.* (2004), while other studies were also consulted (*e.g.* Litman, 2004).

Simulation results, summarised in Table 2.4, show that an increase in fuel taxes or in user charges bring almost identical results in terms of the reduction in GHG emissions. In that sense, they are almost perfect substitutes. The main difference relates to the improvement of the vehicle fleet. This is explained by the fact that user charge differentiation based on vehicle environmental performance provides stronger incentives for a continuous improvement of fleet efficiency, as charge parameters become more demanding over time, while raising fuel taxes has a stronger impact in terms of a reduced use of private cars (modal split). On this count, user charges also entail higher circulation costs, and hence lead to some modal shift away from private transport. This higher use of public transportation should have beneficial impacts in terms of reduced congestion, which would be reinforced if congestion were added as a criterion for charge differentiation. On the other hand, it should be noted that a user charge scheme is more costly to operate (which is not taken into account in the above simulation), which may reduce its efficiency from a fiscal point of view.

Notes

1. The simulation exercise has been carried out for the OECD by a Portuguese consulting company, TIS.
2. The most reliable study to date (Macário *et al.*, 2003) only considered congested traffic in the Lisbon and Oporto metropolitan areas, with 1998 as the most recent observation.
3. Results available at *www.eurotestmobility.com*. One should bear in mind that public transport speed is also affected by variables other than congestion, such as the distance between stops or the technical features of different vehicles.
4. This source compiled data from previous studies. Estimates for Portugal were presented in absolute terms (No. of people).

Bibliography

CE Delft (2007), "Traffic Noise Reduction in Europe. Health Effects, Social Costs and Technical and Policy Options to Reduce Road and Rail Traffic Noise", CE Delft, the Netherlands.

Crafts, N. (2009), "Transport Infrastructure Investment: Implications for Growth and Productivity", *Oxford Review of Economic Policy*, Vol. 25, No. 3, pp. 327-343.

European Commission (2010), *EU Energy and Transport in Figures* – Statistical Pocketbook 2010.

Goodwin, P., J. Dargay and M. Hanly (2004), "Elasticities of Road Traffic and Fuel Consumption with Respect to Price and Income: A Review", *Transport Reviews*, Vol. 24, No. 3, pp. 275-292.

Litman, T. (2004), "Transit Price Elasticities and Cross-Elasticities", *Journal of Public Transportation*, Vol. 7, No. 2, pp. 37-58.

Macário, R., M. Carmona, G. Caiado, A. Rodrigues, P. Martins, H. Link, L. Stewart, P. Bickel, C. Doll, with contributions from partners (2003), *Unification of accounts and marginal costs for Transport Efficiency (UNITE) – Deliverable 12, Annex 7*, The Pilot Accounts for Portugal. Funded by the European Commission 5th Framework – Transport RTD. TIS.PT. Portugal.

Ministério das Obras Públicas, Transportes e Comunicações (2009), *Plano Estratégico de Transportes 2008-2020*, Maio.

OECD (2009), "The Scope for CO_2-Based Differentiation in Motor Vehicle Taxes – In Equilibrium and in the Context of the Current Global Recession", 9 October, ENV/EPOC/WPNEP/T(2009)1/FINAL, OECD, Paris.

Persson, J. and D. Song (2010), "The Land Transport Sector – Policy and Performance", *OECD Economics Department Working Papers*, OECD, Paris, forthcoming.

Rijkee, A.G. and H.P. van Essen (2010), *Review of Projections and Scenarios for Transport in 2050,* Task 9, Report V, produced as part of contract ENV.C.3/SER/2008/0053 between European Commission Directorate-General Environment and AEA Technology plc; see website *www.eutransportghg2050.eu*.

Chapter 3

Policy priorities to restore productivity growth

Portugal saw a stagnation of its convergence process over the 2000s and the great recession is likely to hold back potential growth over the coming years. Weak productivity gains across most sectors of the economy have been at the origin of slow growth. Productivity growth needs to be boosted by an improved business environment, notably through further easing licensing procedures at the local level and reducing the length of the judicial process. In the medium run, improving transport infrastructure is fundamental to achieving higher competitiveness. The government should play a proactive role, but investment decisions should be selective and based on transparent cost-benefit analysis. In the long run, the key issue is to close the educational gap, by enhancing educational outcomes and by promoting equity in educational opportunities. The authorities should expand the vocational education and training reform and reinforce the professional content of the training programmes.

After joining the EU in 1986, Portugal undertook a wide range of reforms which contributed to economic growth and allowed the country's living standards to rise towards those in richer OECD countries. GDP per capita rose from below 60% the OECD average in 1986 to close to 70% in 2000. However, the early 2000s saw a stagnation of GDP growth in Portugal compared to other OECD countries, and a subsequent reversal of convergence. More recently, the country was hit hard by the global economic crisis, which is likely to lower its potential growth over the medium term. To foster potential growth, Portugal needs to improve its labour market policies (Chapter 1) and promote reforms to restore productivity growth, which is the topic of this chapter.

Restoring productivity growth

An economy-wide slowdown in productivity growth

Portugal's slowdown in growth is due to a marked deterioration in trend productivity. Productivity growth fell to 0.8% on average between 2001 and 2006 from 2.0% between 1995 and 2000 (Table 3.1). Among mediterranean European countries, Italy and Spain experienced similarly weak performances. In contrast, eastern European countries exhibited high and accelerating labour productivity growth between 1995 and 2006, and rapidly caught up with Portugal's income levels.[1]

A shift-share analysis (see Box 3.1 for details on the methodology) shows that structural change was the main force behind labour productivity growth at the beginning of the 1990s, as labour moved to high productivity sectors (see Table 3.1 and Table 3.A1.1 for detailed results). This process decelerated markedly from 1995 on, despite the fact that Portugal had clearly not yet completed the structural change process. During 1995-2000, the within-sector growth rate picked-up, which compensated for the decline in productivity gains arising from structural change. However, since 2000, productivity growth within sectors also slowed.

Productivity growth in agriculture has been particularly low, pointing to margin for stronger aggregate performance in the future while Portugal achieves the agricultural transition. The country is still lagging behind its European neighbours in this respect. Indeed, employment in agriculture, hunting, forestry and fishing still represented 11.8% of total employment in 2006, which compares to 4.2% in Italy and 4.7% in Spain. While the expansion of the services sector over the second half of the 1990s was accompanied by strong productivity gains, the contribution of services declined after 2000. Notably, the contribution of the distribution, hotels, and restaurants sector became negative over the period 2001-06 (see Table 3.A1.1). Weak performance was mostly due to negative within-sector productivity growth over the latest period. While the share of non-tradable services in value added declined only slightly over the last two decades, its share in employment increased markedly. In 2006, the distribution, hotels, and restaurants sector accounted for 23.5% of total employment, the highest proportion among the considered countries, except for Greece.

Table 3.1. **Decomposition of annual productivity growth**

As a percentage and year-on-year

	Labour productivity growth	Within-sector effect	Structural effect	Cross effect
	1990-1995 average[1]			
Hungary	5.4	1.7	1.6	–0.3
Italy	1.8	1.2	0.6	0.0
Portugal	**2.6**	**0.0**	**3.5**	**–0.8**
Spain	1.1	0.5	0.6	–0.1
	1995-2000 average			
Czech Republic	2.1	1.5	0.4	*0.0*
Greece	2.5	1.5	0.8	–0.1
Hungary	2.9	1.6	1.2	–0.2
Italy	1.1	0.3	0.9	–0.1
Poland	4.6	3.5	1.2	–0.1
Portugal	**2.0**	**1.6**	**0.4**	**0.0**
Slovak republic	4.2	3.6	0.9	–0.3
Spain	0.2	–0.1	0.3	0.0
	2001-2006 average			
Czech Republic	3.9	3.6	0.3	0.0
Greece	2.5	1.7	1.0	–0.1
Hungary	3.9	3.3	0.7	–0.2
Italy	–0.3	–0.5	0.2	–0.1
Poland	4.3	4.1	0.3	–0.1
Portugal	**0.8**	**0.4**	**0.4**	**0.0**
Slovak Republic	4.7	4.6	0.2	–0.3
Spain	–0.1	–0.3	0.2	0.0

1. Data for 1990-95 are missing for the Czech Republic, Greece, the Slovak Republic, and Poland.

Source: OECD calculations based on *Structural Analysis (STAN) Database*.

Box 3.1. **Productivity growth in Portugal: a shift-share analysis**

The change in productivity can be broken down in its components in order to isolate the effects of structural change due to changes in the sectoral employment structure, following the so called shift-share technique. This chapter uses the methodology presented in Antipa (2008). The first component of productivity growth (henceforth the *within-sector effect*), is obtained by calculating productivity growth rate holding sectoral employment shares constant; more precisely, this component is the sum of sectoral productivity growth rates weighted by the share of each sector in total value added in the previous period. The second component of productivity growth (henceforth the *structural effect*) corresponds to the impact of a change in the sectoral employment structure; it is calculated as the sum in variations in sectoral employment shares, weighted by the relative productivity rate of each sector in the previous period. Even in the absence of productivity gains in each sector of the economy, economy-wide productivity growth may increase if employment shares shift from the least productive sectors to the most productive sectors. The third and last component is a *cross effect* computed as the product of the latter two. This component is generally negligible in size. Data at the industry level are available for a subset of countries through the latest version of the Structural Analysis (STAN) database for industrial analysis.*

* The data on which the productivity analysis relies have been extracted in December 2009. For further information on this database, see *www.oecd/org/sti/stan*.

Weaker labour productivity growth in industry since 2000 has also contributed to Portugal's poor performance, as in other southern European countries.[2] This can be explained by a particularly high degree of deindustrialisation over the recent period. eastern European countries experienced similar reductions in the share of industry in total employment but the latter contributed to the strong labour productivity performance of these countries, potentially because the reorganisation of industry along with the growth in FDI was accompanied by significant productivity gains – as reflected in the concomitant high within-sector effect in these countries.

A three-layer strategy to restore productivity growth

Portugal's disappointing growth performance in the last decade is broadly attributable to a shift of resources towards low productivity industries, in particular non-tradable services, along with a deterioration of Portugal's performance in traditional manufacturing industries. Portugal also displayed negative growth in labour productivity in the market services sector over the last period for which data are available, which contributed to the decline in aggregate labour productivity growth. Against this background, policies can be effective at delivering productivity growth in medium to long term.

- In the short-medium term, there are significant margins to increase productivity by encouraging the entry of efficient firms and the exit of inefficient firms in the services sector, in particular in wholesale and retail trade, hotels and restaurants.
- In the medium term, further productivity gains can be achieved by climbing the value-added chain in the traditional exporting industries, notably those that have been hard hit by competition from eastern European countries and Asian countries. The textile sector remains the largest manufacturing employer. Portugal needs to achieve stronger productivity by specialising in higher quality products. The automotive sector has been at the core of Portugal's export and FDI strategy, and Portugal should be able to remain an attractive place for automotive FDI. Portugal should also pursue efforts to promote itself as a higher quality destination for tourism.
- In the long run, structural policies should favour the reallocation of resources to the high productivity growth sectors such as the skill and technology intensive industries. The current small size of these industries reflects in part the country's substantial educational gap. Hence, this strategy will be effective only over the long run, because it will take some time for reforms to education to translate into stronger growth performance.

Portugal remains one of the poorest OECD countries. Despite the existence of a number of modern productive sectors, the industrial structure is still characterized by a large primary sector. The economy is segmented and it exhibits a dichotomy between a minority of small scale highly productive modern sectors and a majority of low-skill and low-productivity activities. Even within sectors, there is a substantial degree of heterogeneity between firms. This economic structure is reflected in a two-tier labour market, characterised by strong mobility barriers between segments (Vieira *et al.*, 2005).

Given the country's stage of development and notwithstanding the role of the market as the fundamental mechanism for resource allocation, the government can play an active, facilitating role in upgrading industry and infrastructure (Lin, 2010). Against this

conceptual background, this chapter focuses on appropriate growth policies for the Portuguese economy, over the short, medium and long term horizons:

- Portugal has engaged in important *business environment* reforms over the last five years: efforts need to be pursued and implementation issues need to be addressed in order to reap the benefits of structural reforms.
- *Transport infrastructure* is as an important factor for a catching-up economy, especially for a small peripheral country that needs to attract FDI and achieve higher competitiveness. Cost-effective investment in infrastructure can deliver substantial economic returns while at the same time addressing environmental issues.
- *Education* is the most important bottleneck to restore productivity growth in Portugal. The government has been very proactive in reforming the education system to up-skill the labour force. Nonetheless, raising educational levels in the labour force should go along with promoting equality of educational opportunities. Reducing dropout rates and increasing the share of the population with basic skills should be on top of the policy agenda.

Improving the business environment

The manufacturing sector: climbing the value-added chain

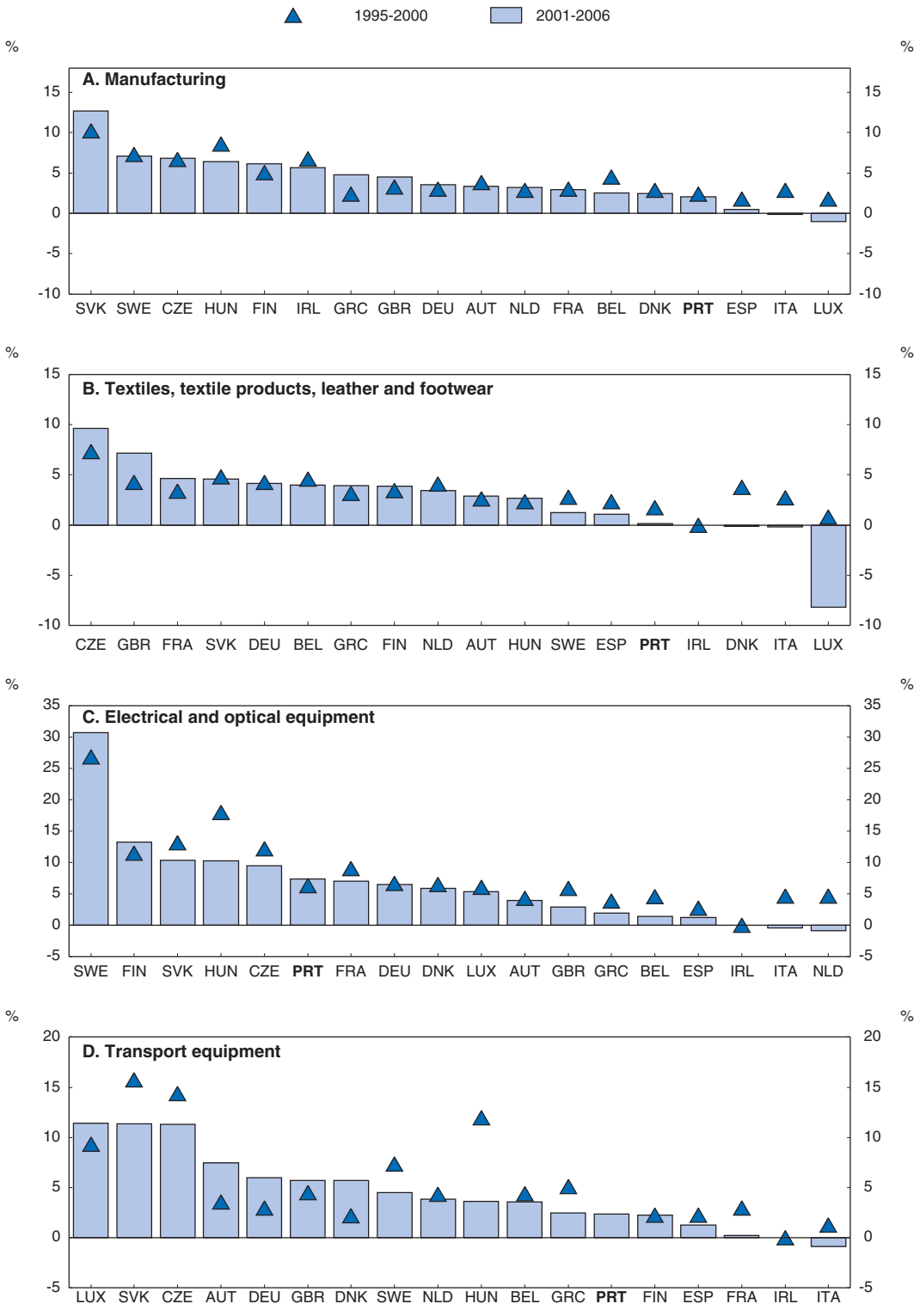
Portugal's aggregate productivity growth was mainly driven by the manufacturing sector, but it experienced a relatively low performance over the recent period in a comparative perspective. Labour productivity growth in manufacturing was particularly low compared to eastern European countries (Figure 3.1). High and medium-high technology industries, in particular electrical and optical equipment, have typically experienced relatively high rates of productivity growth over the recent periods: Portugal's performance has been on par with that of other European countries in that respect. However, given the low weight of this fast-growing sector in manufacturing, this relatively good performance has not contributed significantly to the overall picture.

The sector of textile has exerted a major drag on Portugal's manufacturing productivity growth over the recent period. The industry absorbs a high yet declining share of employment and value added. It is still the first employer in manufacturing (textiles, leather and footwear represented 29% of manufacturing employment in 2006 *versus* 7.8% in the EU19; textiles alone represented 23% of manufacturing employment *versus* 6.6% in the EU19). Productivity growth was generally low and strongly negative in Portugal as in Southern European countries (Spain, Greece and Italy). Other traditional textile exporters, such as France, managed to attain relatively high rates of productivity growth while also facing competition from lower income countries.

Portugal's textile sector is not profitable compared to other European countries (Figure 3.2).[3] Portuguese firms have been progressively squeezed by foreign competition and exports have experienced a steady decline.[4] Still, the country can improve its competitive position by achieving higher productivity growth: one way forward is that of upgrading the quality and marketing content of Portuguese products. There is evidence that this process is already taking place: many of the (remaining) textile firms are innovative and focus on high value added products. Even more than the clothing industry, the exporting footwear industry is a relevant example of successful quality upgrading strategy: it has been able to climb the value added chain by specialising in niche and luxury products, as described in the following Box 3.2.[5] Portugal should build on this promising

Figure 3.1. **Productivity growth in manufacturing**

Five-year average of annual growth rates



Source: OECD, *Structural Analysis (STAN) Database.*

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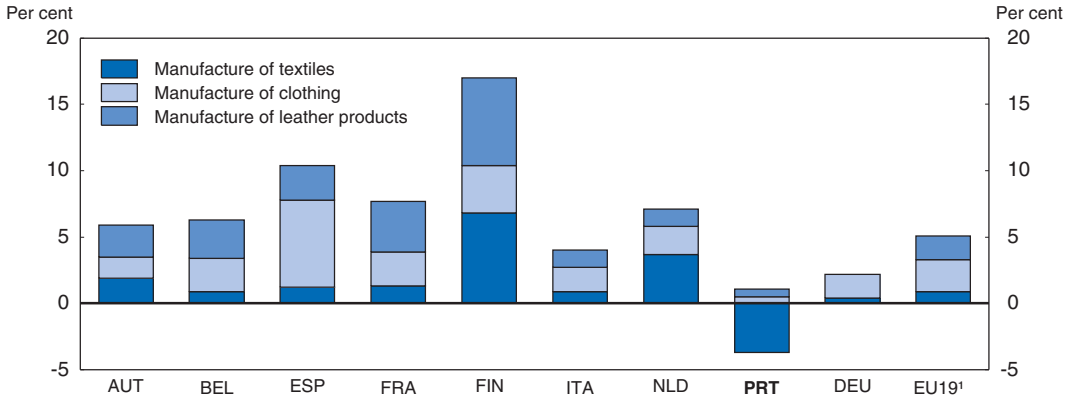
Figure 3.2. **Average net profit margin in the textile sector**

1995-2005



1. Simple average.

Source: European Commission (2009), "Sectoral growth drivers and competitiveness in the European Union".

StatLink http://dx.doi.org/10.1787/888932331068

Box 3.2. **Climbing-up the value added chain: the example of the footwear industry***

The Portuguese footwear industry is a useful example of the possibility of modernising the economy by upgrading traditional industries. The underlying strategy can be summarised by three main pillars: national support, local knowledge sharing and proactive benchmarking.

The Portuguese footwear industry was one of the industries most exposed to globalisation, mainly because of its reliance on unskilled labour. During 2000-06, the central government ran the PRIME programme (*Programa de Incentivos à Modernização da Economia*) to modernise the economy by upgrading traditional industries, among other strategic axes. The programme was recognised as being particularly efficient in the case of the footwear industry because it put in place a comprehensive scheme of incentives that mostly supported the overall business environment (56% of the incentives) compared with direct support to enterprises (44% of the incentives).

A key partner for the implementation of this programme was the national footwear association (APICCAPS). This association used the programme to help firms upgrade the skills of their workforce, for example by running an industry-specific training centre and conducting large-scale R&D projects that would benefit a wide array of member firms due to the economies of scale. It promoted benchmarking by supporting visits to international fairs and exhibitions and it encouraged firms to develop a close relationship with customers, suppliers, competitors and institutions, thereby allowing the constant introduction of changes in processes and products.

The industry is strongly oriented towards international markets and, despite of the exit of many multinational companies (in 2008 foreign-capital companies contributed 11% of total Portuguese exports, against 39% in 2000), the Portuguese footwear industry managed to increase its export capacity. In 2008, exports were 95.5% of Portuguese production *versus* 87% in 2000.

Portugal succeeded in strengthening the industry's position internationally by shifting towards those market segments of greatest added-value and by trying to differentiate its products. Moreover, there was a clear strategy of market diversification, focusing on high

Box 3.2. **Climbing-up the value added chain: the example of the footwear industry*** *(cont.)*

growth markets (Brazil, China, United Arab Emirates, USA, Greece, Japan, Poland and Russia). The Portuguese footwear industry is currently specialised in leather footwear (88% of total production in 2008). Many companies successfully created their own brands based on local know-how. Recent intellectual property statistics reflect this process. Between 2002 and 2008, the number of requests for the registration of brands and logotypes grew from 6 to 32, and the number of applications for the registration of styles increased from 8 to 229. Furthermore, Portugal is becoming relatively strong in women's footwear. In 2008 women's footwear represented half of leather footwear production. This new approach also reflects the shift towards higher-value market segments. Recent trade data suggest that climbing up the value added chain is reflected by significant growth of the average price per pair of exported footwear in Portugal.

* This box is based on the *OECD territorial review of Portugal* (OECD, 2008a) and on APICCAPS (2009a, 2009b).

experience to expand industrial clusters developed around local stakeholders such as business associations.

In transport equipment, Portugal's productivity is growing in line with the productivity of larger European countries, although substantially less than eastern European countries (Figure 3.1). The sector represents a small share of domestic activity (around 4% of manufacturing employment and 6% of manufacturing value added in 2006); however, the automotive industry has been virtually at the core of Portugal's growth strategy, due to its export content and to the important presence of FDI. The development of an FDI-led automotive cluster in Portugal has been recognized as a success story because it has been generating international transfer of technologies and regional spillover effects. Given the benefits from foreign direct investment (FDI) in this sector and the growing international competition – in particular from eastern European economies – Portugal needs to maintain its attractiveness for international investors. The country displays a number of comparative advantages in this sector, such as a stable and secure legal environment and an experienced workforce. The government has been launching a strategy to develop the sector, in particular by promoting co-operation between firms and the R&D sector (for example, it launched specific R&D co-operation programmes with the US Massachusetts Institute of Technology and the German Frauenhofer Institute). Programmes to develop co-operation between firms and the R&D sector should be expanded. The authorities should also assess the performance of these programmes and their cost-effectiveness.

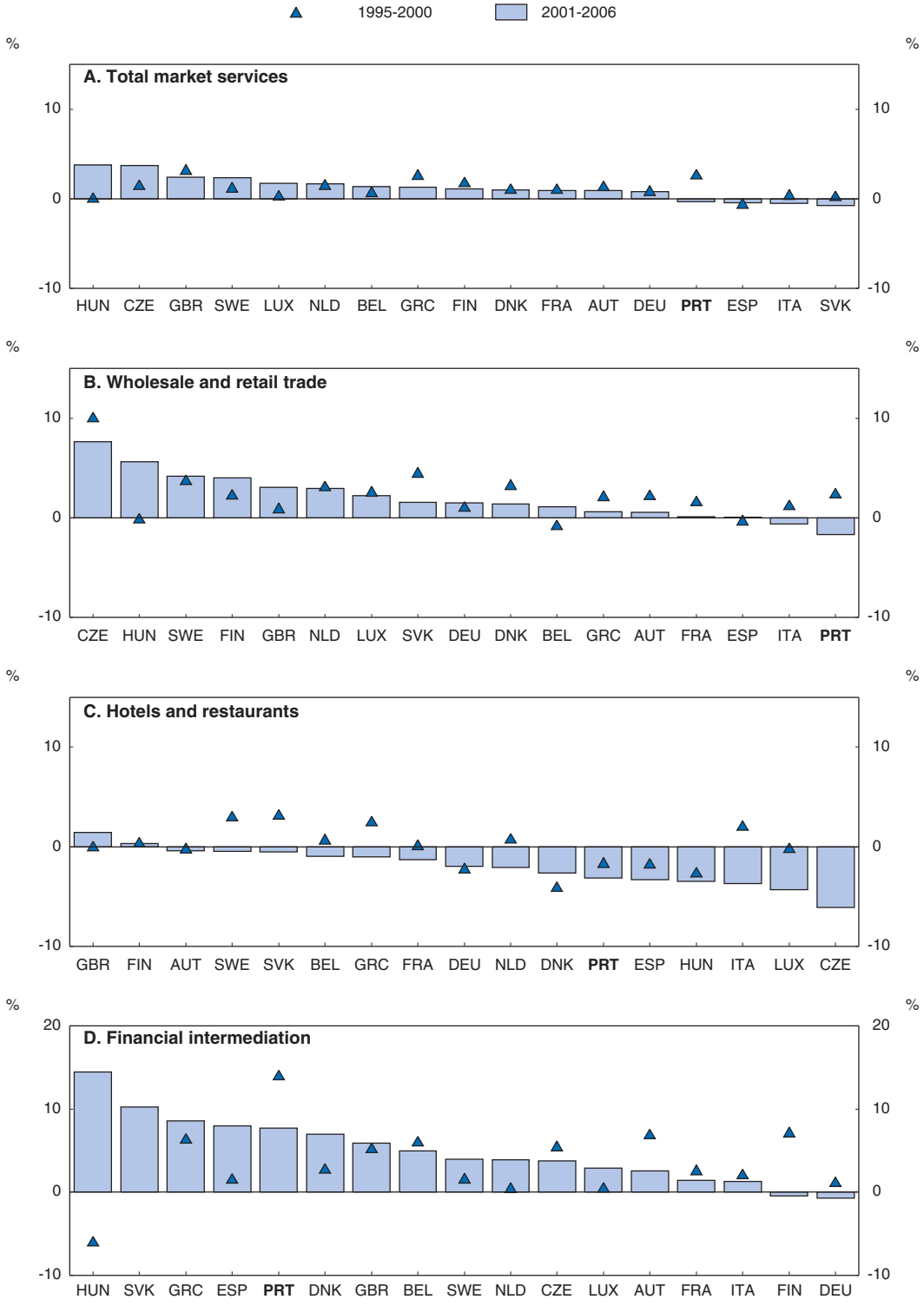
The services sector: addressing inefficiencies and favouring firms' reallocation

Labour productivity growth in services has been negative since the beginning of the current decade while at the same time the weight of the service sector in the overall economy has risen. The expansion of the non-tradable sector and the concomitant real exchange overvaluation after euro accession has been at the centre of Portugal's anaemic performance (Blanchard, 2007). Other countries experiencing structural change reached relatively high productivity growth in the service sector, such as the Czech Republic and Hungary (Figure 3.3).[6]

Against this background, it is essential that Portugal achieves higher productivity in services. Despite their low skill content, non-tradable services can be an important source of

Figure 3.3. **Productivity growth in market services**[1]

Five-year average of annual growth rates



1. Business sector services (ISIC Rev. 3, 50-74).

Source: OECD, *Structural Analysis (STAN) Database*.

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productivity growth. International experience shows that stronger performance has been associated with the modernisation of the sector, and in particular the introduction of cost-reducing technologies, which help to enhance logistics and inventory (Wölfl, 2003). According to recent data published by the European Commission (European Commission, 2009), the wholesale and retail trade sector accounts for approximately three quarters of the US lead in productivity growth over the EU25 over the period 1995-2004. Lack of competition in the distribution sector in Europe has historically favoured small inefficient firms. This is particularly relevant for Portugal and other Southern European countries that have a relatively high number of micro enterprises and a substantial proportion of informality.

Wholesale and retail trade along with the hotels and restaurants sector played a major role in shaping labour productivity dynamics in Portugal (Figure 3.3). Labour productivity gains have been particularly weak and even negative over the last period for which data are available. Yet, these sectors account for more than half of employment in market services. As with the manufacturing sector, labour productivity growth in high skill service sectors has been relatively strong, as can be seen in financial intermediation. However, this fast growing sector has a limited potential to contribute to Portugal's overall performance: the finance sector (which includes financial intermediation, insurance, real estate and the business services) represented around 8% of total employment in Portugal in 2006, as opposed to 14.4% in the EU19. According to data from the National Statistics Institute, financial intermediation represented 1.6% of total employment, 0.3 percentage points lower than Spain and half the proportion observed in Germany.

Diversifying and up scaling the tourism sector

The finding of a substantial productivity gap in non-tradable services is not new (Blanchard, 2007). McKinsey Global Institute sectoral case studies (McKinsey Global Institute, 2003) estimated that productivity in tourism (hotels) was only 44% of the level in the benchmark country (France). Achieving higher productivity growth in tourism is a priority for Portugal to restore productivity growth. It is one of the few sectors where the country has clear competitive advantages at a global scale. The government and tourism stakeholders are currently making a major commitment to developing the sector. Portugal's strategy is reflected in the actual National Strategic Plan for Tourism (PENT) launched in 2005. The plan formulated strategic development lines and objectives for the sector and supported the implementation of specific projects, including interventions in zones of tourism interest, development of distinctive and innovative content, events coordination, access and brand development. There have also been recent improvements in tourism business environment, notably the computerisation of new licensing procedures for touristic projects in 2009.

Portugal should climb the value added chain in tourism by focusing on targeted segments. The government is being proactive in this respect and there are encouraging signs of improvement in the country's tourist offering. A significant number of quality hotels are now available in order to assure an adequate answer to the level of demand. Through the past 4 years, more than 160 new hotels (between 3 and 5 stars) have been launched and opened. Various premier projects have been launched in traditional zones. New high-quality destinations are emerging, such as the Litoral Alentejano area, the Oeste zone, Porto Santo and the Douro. As a result, tourism in Portugal has recently experienced a boom period (from 2005 to 2008). Building on this successful experience, Portugal should consolidate the diversification and the up scaling of the country's supply of tourism

services. One further avenue for developing tourism was advocated by Blanchard (2007), who suggested that Portugal could become an attractive destination for pensioners, along the lines of the "Florida model".

The tourism sector is also a potential recipient of FDI. Portugal displays a relatively small proportion of foreign affiliate employment in the hotels and restaurants sector compared to other European countries (European Commission, 2009). Moreover, comparing the export specialisation in tourism with the relatively small flows to this sector suggests that the economy is not yet really reaping the complementarities between trade and FDI (OECD, 2008b). Increasing Portugal's attractiveness for foreign direct investors could boost the country's unexploited potential in tourism.[7] Reforms aimed at improving cost competitiveness and enhancing the business environment should contribute to raising FDI. To exploit Portugal's competitive potential in tourism, the government should also reduce barriers to FDI in the air sector by increasing competition, as discussed in this chapter and in the previous Survey of Portugal (OECD, 2008b).

Addressing market structure inefficiencies in services: the case of the distribution industry

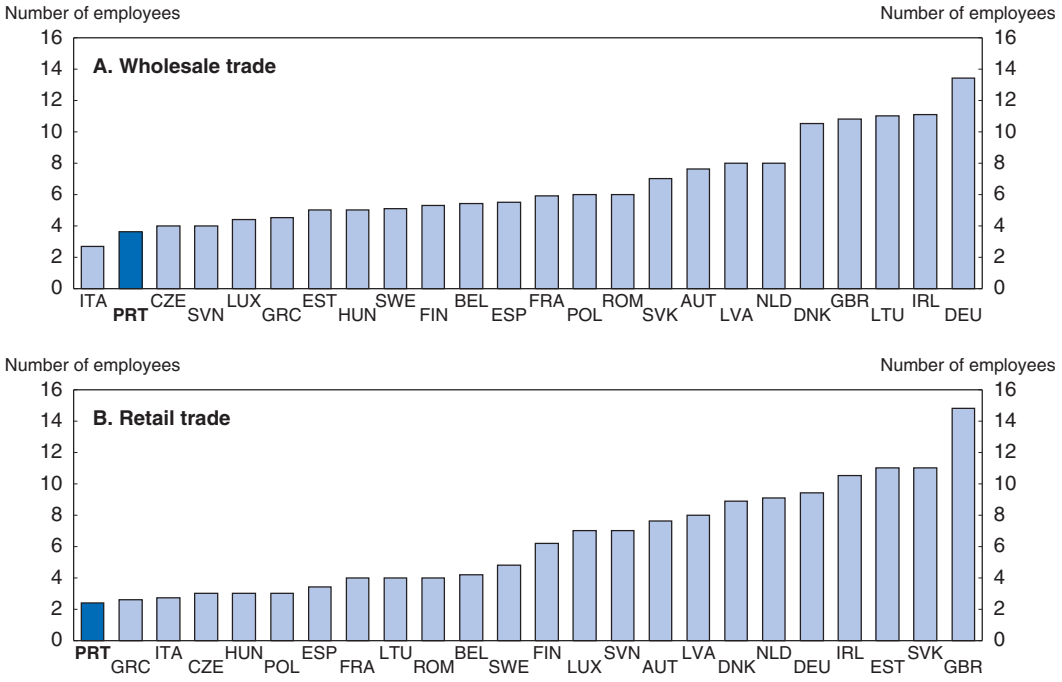
The services industries are broadly characterised by specific inefficiencies that can be amenable to market structure features, in particular the size distribution of firms. Analysis of the distribution sector provides a useful picture of some specificities of the non-tradable services industry in Portugal. This sector accounts for almost half of the registered firms and almost a third of new registered firms, much more than on average in Europe.[8] According to Eurostat data, small firms (1 to 9 employees) represent more than 96% of total firms in this sector in 2006, and almost 56% of employees.[9] In both wholesale and retail trade, the average firm size is well below that of the EU27 (Figure 3.4).

The Portuguese distribution industry is characterised by two different business models, which reflects the dualism of the economy. One model is large retail businesses or chain stores with business in Portugal and/or abroad, and having international connections with production and logistic operators. They are usually highly competitive and innovative firms. The bulk of the sector, however, is composed of the traditional businesses, very often of a small size, having no external connections besides suppliers and tending to be less innovative. There is evidence that firm dynamics are hampered by barriers to exit in the traditional segment. This includes old contracts that under-price the rental value of space and an old workforce with low opportunity cost. Informality is another characteristic, although there is evidence that it is declining. Despite recent liberalisation, concentration indexes suggest that competition in this sector remains weak.[10]

Weak productivity growth in the distribution industry reflects different performance across the wholesale and retail trade segments. Indeed, according to *Instituto Nacional de Estatística* (INE) data, while productivity growth in retail trade has stagnated, productivity growth in wholesale trade declined. Recent policy initiatives might help achieving higher productivity growth in wholesale trade. The reforms have been introduced in the major supply markets ("mercados abastecedores") and in the logistic infrastructure. The main operators are still in a process of adaptation of their logistic structures to the new framework, under the National Strategic Reference Framework (NSRF). Financial support is mainly oriented towards the introduction of technology and the acquisition of new equipments and of updated information systems. The government should continue to promote the modernisation of non-tradable industries, helping firms to exploit economies of scale and

Figure 3.4. **Average firm size**

2006



Source: Eurostat.

StatLink http://dx.doi.org/10.1787/888932331106

thereby growing in size. In order to increase productivity and consumer welfare, the authorities should also boost competition in the retail and wholesale trade industries.

Broad-based reforms to improve the business environment

One of the most notable and relevant recent reform processes in Portugal has been the reduction of administrative burdens on businesses, in particular to small and medium enterprises. Easing of the license and permits system and better communication and simplification of regulations has led to a dramatic reduction in regulatory and administrative opacity over the last 6 years.[11] Those reforms were carried out within the Portuguese Legislative and Administrative Programme, known as SIMPLEX.

Despite the dramatic improvement in business conditions, there are binding implementation issues at the local level. In principle, SIMPLEX includes initiatives to simplify permits regulations and procedures, such as the industrial facilities licensing regime and the simplification of local authority building permits. However, in practice, licensing is still very cumbersome at the local level, particularly so for industrial activities, and particularly so in relation to environmental concerns. In Portugal it takes 287 days to build a warehouse, including obtaining necessary licenses and permits, completing required notifications and inspections, and obtaining utility connections, according to the World Bank Doing Business indicators.[12] The OECD average is 157 days. Also, according to OECD Product Market Indicators, administrative burdens for sole proprietor firms are high in Portugal compared to most of OECD countries.[13] In order to make recent simplification reforms more effective, the articulation between national and local licensing procedures needs to be more effective, as recognized by the government. The 2009-10 edition of

Simplex Autárquico programme promotes collaboration in some licensing procedures between central government and a small but growing number of municipalities. Because municipalities are partly financed through licensing fees, this implies that the reform process in this area must go along with a reconsideration of the current framework for financing the municipalities.

The lengths of the judicial process, as well as the instability of the tax system (Chapter 2), create regulatory uncertainty in Portugal, which weights on economic activity and FDI. The level of compliance costs is particularly high, as detailed in Chapter 2. On average, it takes a medium-size company 328 hours per year to pay taxes and mandatory contributions in Portugal; the average across OECD countries is 213 hours per year.[14] The recent simplification of administrative procedures will be more effective if there is a concomitant improvement in the judicial system. As in other areas, Portugal needs to address major implementation issues when it comes to reap the benefits of structural reform. Specific policy recommendations to reduce compliance costs are discussed in Chapter 2.

Portugal has launched an ambitious competitiveness agenda and faces a narrow window of opportunity to implement it. The government's pledge to endorse structural reforms and the concomitant implementation of the 2007-13 EU Structural Funds programming period offer Portugal an opportunity to take a qualitative leap. Investment in long-term assets for competitiveness must be pursued via differentiated strategies building on the specific potential of each region (ranging from high-end skills to landscapes and biodiversity). The government should build better linkages between innovation and regional policy, combining national leadership and regional interfaces. The "Competitiveness and Technology Hubs" initiative is a promising approach and should be pursued further. Portugal should establish appropriate mechanisms to better exploit regional knowledge in order to stimulate development dynamics driven by inter-firm networks: the example of the footwear cluster in the Norte region suggests that this is a promising strategy to climb the productivity ladder. Portugal has no elected regional level of government that could reflect bottom-up views. More should be done to integrate the specific knowledge of local and regional actors in the policy-making process. One way forward to achieve this objective would be to clarify the role of the commissions for regional coordination and development as promoters of policy coherence and facilitators of collaboration (OECD, 2008a).

Addressing infrastructure bottlenecks

Modernising transport infrastructure to reap the benefits of globalisation

There is cross-country evidence that infrastructure investment boosts economic growth beyond its direct impact on the capital stock (Sutherland *et al.*, 2009). This can come about through facilitating the division of labour, competition in markets, diffusion of technology, adoption of new organisational practices, or through providing access to new markets, resources or intermediate inputs. The government can play a proactive role in facilitating timely improvements of infrastructure in the process of structural change (Lin, 2010). Transport infrastructure is special in that it potentially has impacts on productivity that are not characteristic of other public-capital investments. Most obviously, transport improvements have benefits in the form of time savings which comprise a major part of the welfare gains in cost-benefit studies of transport projects and which accrue partly from reductions in congestion. There are also distinctive wider economic benefits of cheaper

transport. Reductions in transport stimulate trade, with positive implications for productivity (Frankel and Romer, 1999, Limao and Venables, 2001). Transport improvements have implications for the location of industry through changing access to markets, and also increase the size of agglomerations with attendant productivity gains (Combes *et al.*, 2008).

The main channel through which infrastructure affects productivity and competitiveness in a small trade-dependent economy like Portugal is that of trade costs associated with transport infrastructure, hence by stimulating trade and FDI. More generally, a good transport infrastructure can help to restore productivity not only in the tradable industrial sectors but also in the low-productivity non-tradable services sectors: if transport improvements lead to greater integration of the market, this can improve productivity through the impact of potential entry on the productive efficiency of firms with organisational slack or through stimulating innovation to protect economic rents. Strong evidence has emerged of productivity gains from agglomeration effects, especially so in the service sector (Crafts, 2009). Increased market size is also a stimulus to innovation.

However investment needs to be undertaken within a policy framework that is conducive to growth and ensures the appropriate use of infrastructure. Central aspects of this framework are robust decision making, improving the selection of investment projects, the introduction of competitive pressure, and the application of incentive regulation (Sutherland *et al.* 2009). Moreover, given the current pressure on Portuguese public finances and the associated consolidation process, public investment has to be very selective. Finally, the government should pay attention to improved efficiency and increased profitability of SOEs, particularly so in railways. Hence, the authorities should ensure effective implementation of the new performance monitoring regulation in railways and expand it to other sectors.[15] Improving governance arrangements would also help increase efficiency. Profit maximisation rather than intermediate targets should be the objective of the SOEs as this allows managers greater discretion to achieve the State's objectives.

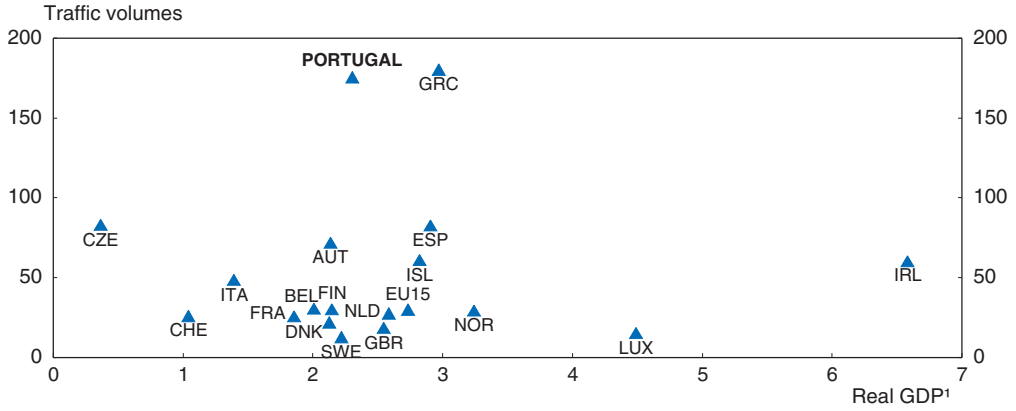
The government announced in the context of its Stability Programme for 2010-13 a number of measures aimed to reduce primary expenditure through the rationalisation of the state-owned enterprises (SOEs). These developments go along with an important privatisation process, part of which has been postponed due to financial markets turbulence. The specific measures aimed at curbing SOEs financial needs include greater selectivity in investment and the establishment of indebtedness thresholds ceilings, public service contracts, and wage restraints. The government is currently preparing the execution of the public service contracts with all SOEs in the transport sector. As soon as financial markets conditions stabilise, Portugal should further reduce the scope of the public enterprise sector, which remains extremely high in a comparative perspective (Wölfl *et al.*, 2009).

Rebalancing the transport mode

Policy initiatives in transport infrastructure should reflect the imbalance of Portugal's current setting. While massive investment in motorways allowed different parts of the country to be connected, there has been a clear imbalance in favour of road investments, particularly so in motorways. Over the 1995-2004 period, there was an increase of 528% in the length of motorways. Passenger transport relies massively on private cars. During the past 15 years, the numbers of cars in circulation increased by 135% (IEA, 2009). Indicators of traffic volumes point to 175% increase of passenger cars between 1995 and 2004 in Portugal (Figure 3.5), as opposed to 30% for the EU15, despite the concomitant increase in

Figure 3.5. **Traffic volumes *versus* GDP growth**

Percentage growth, 1990-2004



1. Compound annual growth rate.

Source: OECD, *Environmental data*, 2007 and *OECD Economic Outlook Database*.

StatLink http://dx.doi.org/10.1787/888932331125

fuel prices (see Chapter 2). Congestion is an important issue in urban areas, where more could be done to increase public transport.[16]

The environmental implications of these patterns are dramatic. Road transport has accounted for the largest increase in CO_2 emissions between 1990 and 2007 (93%), or 57% of all emission increases, reflecting the growing prosperity of Portuguese consumers but also the high levels of state investment in transport infrastructure. Road transportation represents 87% of transport-related emissions in Portugal (the EU15 average is 83%) and fuel consumption associated to private vehicles accounts for over half of such emissions. Against this background, there is an obvious need to promote alternative transport modes, increase the demand for public transport and restrict the circulation of private vehicles for passengers and freight.[17] It has to be recognised that the transport sector is not the only source of emission: environment-friendly growth policies need to cover other important sectors such as energy and agriculture, which will not be dealt with here. Portugal has been proactive in this respect, in particular through ambitious renewable energy policies and important measures aimed at promoting energy efficiency (IEA, 2009), as well as through the reform of the registration tax (ISV) in 2007 to differentiate vehicles according to CO_2 emissions (see Chapter 2).

Developing inter-modality in a European perspective: the role of the rail and sea sectors

The need to reduce the reliance on road transportation has been acknowledged by the authorities, who have developed an ambitious integrated approach in railway and port platforms. One of the main aims has been that of enhancing the connections with Spain through both high-speed and conventional railway developments along with intermodal platform development and a connection between the Portuguese sea ports and the Spanish borders. This strategy aims at reducing the costs associated with Portugal's geographical location by increasing the connections with the rest of the EU and also by promoting Portugal's sea ports as alternative logistic hubs for main inland Spanish cities. Much emphasis is put on the articulation and integration between conventional and high-speed networks, ports and logistic systems, as well as logistic interoperability, so as to promote

railway as a privileged means of transportation, both at the national and at the international level, for both freight and passengers transport. This strategy is appropriate to boost Portugal's productivity and competitiveness and the government should be able to develop it in the medium term. However, current budgetary pressures imply that public investment has to be selective.

Public-private partnerships are being launched for the high-speed railways projects infrastructure. More precisely, the design, building, financing, and maintenance of the infrastructure and signalling and telecommunications systems will be run through different PPPs. Currently, two tenders have been launched for the infrastructure PPP regarding the Lisbon-Madrid axis. Portugal has accumulated considerable experience in using PPPs, and PPP policy settings generally look favourable (Sutherland *et al*., 2009). Indeed, the selected business model for high speed railway infrastructure seems relatively well designed to ensure that appropriate investment incentives are in place. The authorities have relied on external cost-benefit analysis (CBA) for assessing the economic impact of the construction and operation of the high speed network. But the results of the CBA point to very different rates of return across the different projects, with some of them exhibiting relatively low expected return. The government has recently announced that it will focus on the Lisbon-Madrid axis and consider the remaining projects once the public finances have reached a sustainable position.[18] The authorities should take the occasion of the current postponement of the infrastructure investments to carefully and transparently question the economic relevance of each of the high-speed railway axes before any further decision is taken.

Portugal should account for the long-term fiscal implications of the high-speed railway PPPs in government accounts. Given the widespread use of PPPs and concessions in Portugal, the fiscal implications of pluriannual contractual spending commitments should be fully transparent. In the high-speed railway system, there is a contractual agreement under which the government is committed to pay the concessionaire during the concession period. The private partner is rewarded based on the availability and state of the infrastructure. The contract also stipulates that 2% of the private partner's revenues are related to traffic levels. This follows a recommendation from the Portuguese Court of Auditors against transferring demand risk to private sector. Even when part of the demand risks are transferred to the private sector, the government still entails a significant risk as the provider of last resort, due to its interest in guaranteeing service provision. Given the threat of service interruption, the government can be forced to make unanticipated transfers to the operators. This would arise if PPPs projects relied on overly optimistic demand assumptions. Historically, unrealistic demand forecasts have been at the origin of government bailouts of private contractors, for instance in the UK rail sector (Araujo and Sutherland, 2010). Portugal's own experience suggests that poor PPP performance can be related to demand risks. In the case of the Fertagus suburban rail passenger service, the initial contract formally transferred demand risk to the concessionaire, but established that the government would assume the debt if traffic remained below the lower traffic-band level for several years. This event materialised, and contract renegotiation took place, with the government being in a relatively weak position (Monteiro, 2005). Against this background, Portugal should consider accounting for demand risk among contingent liabilities in government accounts, such as done in a number of OECD countries.[19]

A correct assessment of the implications would discourage using PPPs in shifting spending off government's balance sheet. This is important, as the treatment of PPPs does not always reveal the extent to which PPPs are being used and the associated potential

burden to future generations. For example, Eurostat classifies the assets of PPP projects based on 3 types of risk: construction, availability and demand risk. The government bears most of the construction risk if payments to the private partner are not linked to the state of the asset; the government bears most of the availability risk if payments are independent of service delivery; if the government makes payments to the private sector independently from the demand level, the government bears most of the demand risk. According to this rule, the assets that result from the PPP are classified as government assets if the public sector retains most of the risk. This will result in the high speed train investments being classified as private as the contractor bears construction and availability risk (Corbacho and Schwartz, 2008). The government bears other risks, even if the PPP is treated as a private investment. Moreover, it does not encourage efficient risk sharing, and can create moral hazard, as governments, faced with tight public budgets, will be tempted to choose an allocation that passes the Eurostat test of classifying a PPP as private.

The final model for the railway operation will be defined after 2010. The government is considering two possible scenarios. In one case, the state would purchase the rolling stock directly and lease it back to the operator(s), while in the other scenario, the operator(s) would be responsible for supplying its own rolling stock. An unbundled model would raise some well known concerns associated with market structure in the railroad industry. Contrary to other network industries such as gas and electricity, the problems created by vertical separation in railways can be severe. In particular, the network operator – not benefiting from higher revenue from train operators – has little incentive to improve its services. One way to ensure that the network operator maintains infrastructure quality is to allow a greater say to users on investment. Portugal should ensure that regulatory tools are in place in the PPP contracts to allow railway operating firms to monitor investment and maintenance of the railway network. The authorities should not wait until the final model for train operation is developed to establish those clauses because the network operator needs to fully internalize the associated costs throughout the contract period.

The PPP business model does not fully address to so-called "hold up potential", according to which the concessionaire can under-invest when the concession is approaching renewal. The current high-speed railway model contain rules aimed at guaranteeing the availability and good condition of the infrastructure, with payments to the private partner dependent on infrastructure availability. At the end of the contract, although the assets have a predefined residual life, they revert to the government. To ensure that the contractor keeps investing, the contract should also contain rules to guide the definition of the asset residual value and the contractor should be compensated fully for the residual value of the assets. Another approach to mitigate this problem is to require reinvestment of profits, as is done in some OECD countries such as Belgium and Mexico (Sutherland *et al.*, 2009).

Portuguese experience suggests that regulatory risk can affect PPPs (Monteiro, 2005). Most PPPs experienced cost overruns and delays, first because of changing environmental regulations and second because projects were tendered without prior environmental licensing. Changes in environmental regulation are difficult to avoid altogether, and it is clearly the public sector that has to bear their consequences. The current PPP law does not allow for a tender to be launched before all environmental licenses have been obtained. Portugal should consider allowing environmental impact studies to be carried out and initial licenses obtained before PPPs are tendered so that bidders know all the environmental constraints and the mitigating measures they should include in their proposals.

Since 2007, the government has been promoting competition in railway transport operation, by granting access to new operators in the freight market. This is a welcome initiative to improve efficiency, by putting pressure on the national operator. The railway freight network is now open to any company in Portugal that meets the financial and technical requirements necessary to be issued a license by the Regulator. This process requires careful design of a transparent price setting mechanism: there is no international consensus of an optimal access fee pricing in this respect. The central challenge is to ensure that it encourages efficient use of scarce network capacity while at the same time preserving incentives to maintain quality and expand capacity when appropriate. The government should ensure, though, that access prices are set in a clear and transparent way; moreover, total costs of the track operator could be benchmarked internationally to ensure that the subsidy payment is not too high, in case the access fee is set below full recovery cost. The government has also announced the partial privatisation of freight services in the context of the 2010-13 privatisation process. Going further in the gradual liberalisation of the railways, Portugal is now ready to consider establishing free entry (upon access fees) in the passenger transport activities, which would help to boost productive efficiency along with consumer well-being.

Portugal has an ambitious approach to develop port platforms along with interconnections between ports and railways, in the logic of interoperability. Important steps are also being taken to dematerialize and streamline procedures, such as the creation of the "ports single window" which is expected to evolve into an overall "logistic single window". The government has launched "Portugal Logistico" in 2006, an important plan to develop and restructure the Portuguese ports logistic system. The plan establishes a National Logistic Platform Network (RNPL) comprising 12 platforms and complemented by two air cargo centres in Lisbon and Oporto. The 12 logistic platforms are grouped in 4 separate categories: national urban platforms, port platforms, trans-border platforms, and regional platforms. The plan is based essentially on partnerships with the private sector. The projects are sometimes very large, and, more importantly, they are numerous. While some projects are being concluded, others are under way or in design.

Project selection should be based on transparent CBA. There are signs that some of the planned investments might not be profitable. This might be inferred *ex post* from the fact that development of some platforms is not attracting private investors.[20] This is the case of the Maia/Trofa logistic platform, where there was a single bidder that finally withdrew. This is also the case of Area B of Sines logistic platform, where the Port Administration has not been able yet to find private investors and promoters wishing to share the risk of the project. Project selection should also be based on a consistent assessment of the country's overall transportation networks architecture. It might be appropriate to choose a limited number of clearly profitable projects. In the case of port development, the authorities could consider rationalising the projects in case where two planned ports are very close to each other, such as Aveiro and Porto. Without clear economic benefits of having the two ports, consideration could be given to integrate them in order to achieve economies of scale. It is also essential to monitor the effectiveness of these initiatives by measuring associated changes in cargo and logistic costs.

As well as improving physical infrastructure and processes, the authorities should encourage greater competition in the ports sector. It is important to actually implement the new Port Law after parliamentary approval. The government has reformed the Portuguese Institute for Ports and Maritime Transport (IPTM), which provides common

technical regulations and guidelines as well as economic regulation of ports. During a transitory period, it is in charge of the management of some secondary ports. Port management and pricing at major ports are now conducted independently by each port administration. In the present framework, the IPTM has a dual role as policy adviser to the government and sector regulator. It is important that future regulation is focused on promoting internal competition between the Portuguese ports to increase port efficiency, including the provision of transparent information on port charging across ports to promote yardstick competition. Promoting internal competition is complementary to the increased integration of the port and railway network that is expected to make it easier for customers to choose between different ports.

Modernising the air sector

Efficient airline and airport services for passengers and cargo are important for trade, in both goods and services, particularly so for tourism. There has been growing recognition of airport infrastructure bottlenecks in Portugal, in the face of rising demand; in particular, the main airport infrastructure bottleneck is in Lisbon, where rapid growth in passenger demand is absorbing available capacity. Progress has been made in upgrading the current airport, Portela, and opening a new terminal. The Portuguese government has launched an ambitious programme to build a new airport in Lisbon, away from the centre of the city, in the location of Alcochete, currently a military shooting range at 40 kilometres east of the city. The underlying strategy is that of promoting Lisbon as a European hub for intercontinental flights, notably to Brazil and Western Africa. The strategic objective behind the new airport construction is clear and justified.

Due to budgetary pressures, the government announced in May 2010 that the airport construction will be postponed. While this is understandable given fiscal pressure, the authorities should resume the new airport project when the fiscal position has improved, due to its strategic relevance as a tool to increase productivity and competitiveness. The Portela airport will close with the beginning of the operation of the new airport, which was, prior to the latest postponement, expected in 2017. The planning process associated with the development of the new Lisbon airport is supported by a Reference Master Plan, based on aviation activity forecasts until 2050. There is yet no available CBA for assessing the economic return of the Alcochete project, although the authorities expect high internal rates of return, in the area of 10%.[21] Decisions should be made more transparent, for instance by relying on external CBA.

There has been no transparent assessment of the long-term fiscal implications of the airport investment. Consideration should be given to consider the long-term fiscal implications of the new airport in government accounts, because the State remains the provider of last resort, given its interest in guaranteeing service provision. In principle, demand risk under the concession is transferred to the private sector, but in practice the government still retains a significant risk as the provider of last resort. This situation would occur if the aviation activity forecasts of the Portela Airport Master Plan proved to be overly optimistic. Yet, one concern with the demand forecast is that it should not underestimate the competitive advantage of the Madrid airport as a hub for intercontinental flights to non-Brazil Latin America. Lisbon would hardly be able to compete with Madrid in this respect because of lock-in effects associated with Madrid's first mover advantage. Against this background, Portugal should ensure that demand forecasts are on the cautious side.

Despite Portugal's experience in introducing private provisions through concessions and PPPs, the current design of the airport project investment raises some regulatory issues. The proposed financing arrangements for constructing the new airport would create a private monopoly in Lisbon and in all other Portuguese cities where Aeroportos de Portugal (ANA) operates airports as well, which would in turn have to be regulated to prevent monopoly pricing. Portugal should ensure effective regulation is implemented to monitor the new monopoly in the airport sector. Increasing competition in airline services should also be considered. The national airline, Transporte Aéreos Portugueses (TAP), has a virtual monopoly on domestic flights in mainland Portugal.[22] The government recently announced (update of the Stability and Growth Programme for 2010-13) its intention to unlock TAP's capital to a strategic partner in parallel with the ANA privatisation process, in the context of the 2010-13 privatisation process. Details are not known yet although it is clear that the privatisation will be partial, as in the case of ANA. The government still entails golden shares in ANA and TAP, which it can exercise in merger and acquisitions by another company. Portugal should take the occasion of the air sector privatisations to consider giving up the state special voting rights in ANA and TAP. Given the potential substantial gains associated with tourism development in Portugal, lowering barriers to competition in the air sector would be particularly effective in promoting growth.

Addressing public transport bottlenecks in the context of climate change

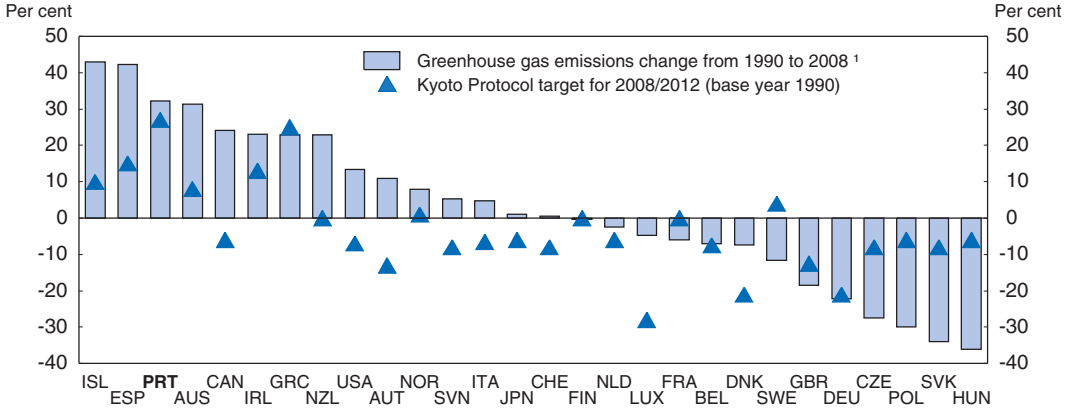
As part of the initiatives to enhance public transport infrastructure and reduce transport-related emissions, many projects have been launched with the explicit aim to increase the availability, the quality and finally the demand for public transport in metropolitan areas. In principle this is a welcome initiative not only from a broad environmental perspective, but also, in the short run, from a pure economic perspective, given the recognition of substantial congestion costs in Portuguese metropolitan areas. The 2010 Eurotest inspection of local public transport systems ranks Lisbon at the 18th position out of 23 capitals, which can be mainly attributed to the length of travel time.[23] Portuguese initiatives to enhance the effectiveness of public transport in cities have been developed in the broader context of the National Programme for Climate Change (PNAC 2006), which formulated specific measures, responsible authorities, and associated numeric targets for 2010. Notable projects include the expansion of the Lisbon Metro, the construction of Metro Sul do Tejo, and the construction of the Oporto Metro. PNAC 2006 also includes the creation of the metropolitan transport authorities of Lisbon and Oporto, whose purpose is to plan and coordinate the provision of collective transportation. Associated numerical targets include the transfer of 5% passengers per km in the Lisbon and Oporto Metropolitan Areas from individual transport to collective transport.

The Portuguese transport strategy sets ambitious targets but currently most of the projects are being delayed, while others are delivering disappointing outcomes. While the PNAC transport sector agenda provides transparent targets for emission reductions and inter modal shift associated with each project, it does not provide any cost – based economic analysis of the planned investments. Some implementation issues are associated with the multiplicity of responsible authorities and bodies involved in the overall strategy (municipalities, public transport operators, metropolitan authorities). A contingency plan has been drafted by the Ministry of Public Works, Transport and Communications in August 2009, which identifies a set of new measures capable of reducing emissions in the transport sector. This contingency plan is not publicly available

and is still being discussed. It has to be approved by the Portuguese Climate Change Commission and integrated with other sectors' contingency plans. The authorities should take this occasion to rationalise the overall strategy, including redefining the devolution of missions and responsibilities across the relevant actors, and enhancing the associated implementation procedures. Project selection should be based in accordance with emissions reductions engagement but also with a transparent CBA of the individual investments. The authorities should encourage private provision and ensure appropriate incentive-based regulation is in place to monitor operating firms. In this context, the fiscal consequences of the selected investments should be clearly identified.

Addressing transport infrastructure bottlenecks should be part of an integrated approach to climate change and environmental policy. The Kyoto Protocol emission targets stipulate an increase of Portuguese CO_2 emissions in 2008-12 by 27% relative to 1990 benchmark (Figure 3.6). By 2008, emissions were almost one third higher than the 2012 target. Policy to date has focused mostly on supply-side measures, such as the promotion of investments in renewable sources, energy savings, and clean technologies. The significant growth in renewable energy should play a large role in meeting the country's obligations set out in the EU Burden-Sharing Agreement under the Kyoto protocol. While a clear path towards compliance has been laid out, the transport-related component of the CO_2 emissions reductions is in doubt. As outlined above, many of the infrastructural projects supposed to contribute to the overall CO_2 emission reductions are behind schedule and thus delay the delivery of expected savings, at least within the time frame set out in the PNAC.Cost-effective transport policy tools to reduce CO_2 emissions should rely more on price-based instruments: the authorities have taken steps in this direction, through developments in CO_2-differentiated motor vehicle taxes, but more needs to be done, as discussed in-depth in Chapter 2.

Figure 3.6. **Greenhouse gas emissions**



1. Total CO_2 equivalent emissions without land use, land-use change and forestry.

Source: United Nations Framework Convention on Climate Change Database.

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Reaping the benefits of education is key to restore productivity growth

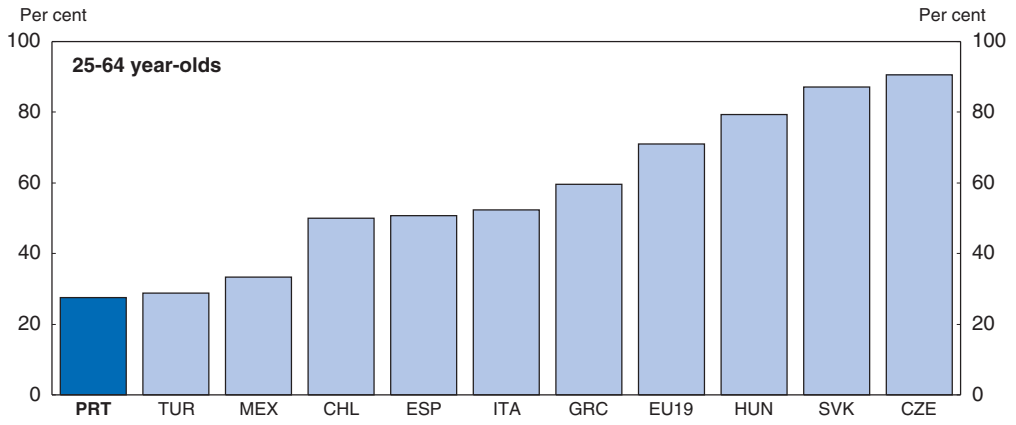
The educational gap is the main source of the labour productivity gap

The low education level of Portuguese workers is a major cause of their weak productivity relative to richer OECD countries, even though there has been a substantial improvement in educational attainment over generations (OECD, 2009a); still the

proportion of working-age population with upper-secondary education in Portugal is only slightly higher than 27%, as opposed to 71% in EU19 countries (Figure 3.7). The supply of skilled labour remains extremely scarce from a cross-country perspective: in 2007, less than 15% of the working-age population had attained tertiary education while the EU19 average was almost 30% (OECD, 2009a). Portugal's educational gap is higher relative to income when comparing with other countries (Figure 3.8). In this respect, Portugal is similar to middle income countries such as Mexico and Turkey while eastern European countries stand out as displaying very high levels of education for comparable income gaps. While this pattern is difficult to explain, it might be to some extent related to the level of income and wealth inequalities in Portugal, which is high and not far from that observed in middle income countries (OECD, 2008c). It is also part of the dictatorship's legacy, as education has long been confined to the *élites*. Upskilling Portugal's population requires making the educational system more inclusive by allowing all individuals to acquire basic skills. This is one of the defining dimensions of equity in education, at the core of Portugal's growth priorities.

Figure 3.7. **Educational gap**

Population with at least upper secondary education by age group in 2007



Source: OECD, *Education at a Glance 2009: OECD Indicators*.

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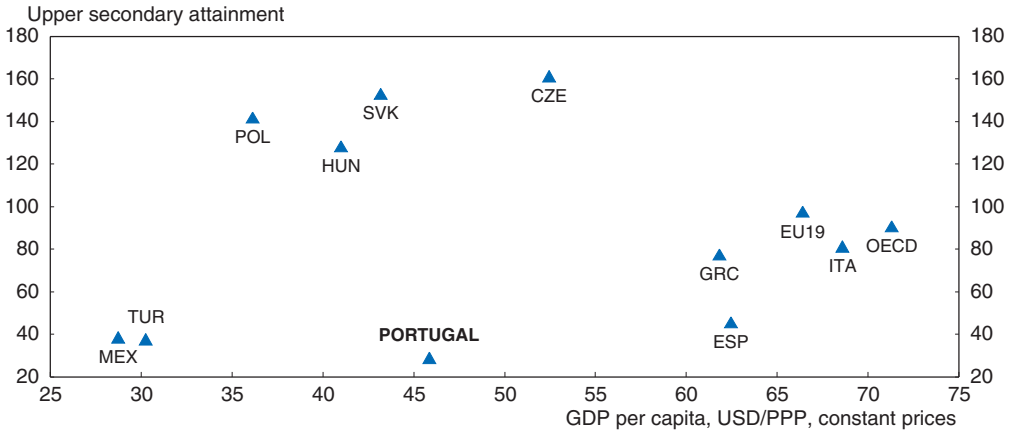
One way to illustrate the contribution of education to the Portuguese labour productivity gap is to compute the changes in labour productivity induced by changes in the composition of labour, from the current situation to a simulated scenario in which the structure of the working-age population is the same as in a reference country, while group-specific employment rates and average working-time remain at their current levels. In other words, holding overall labour utilisation constant, workers' productivity is allowed to change in line with changes in the composition of the workforce in terms of educational levels. This exercise is done for OECD countries in Boulhol (2009), with the US taken as the reference country.[24]

The implications for Portugal are substantial. Aligning working-age education shares for all groups on those of the US would increase average productivity levels dramatically. Based on this mechanical effect, differences in the education of the working-age population compared with the US penalise Portugal in terms of output per hour worked by 14.4%, while the effect for the EU15 is approximately 7% (Figure 3.9). In other words,

Figure 3.8. **Educational and income gaps, 2007**

United States = 100



Source: OECD, *National Accounts* and *Education at a Glance* 2009 *Databases*.

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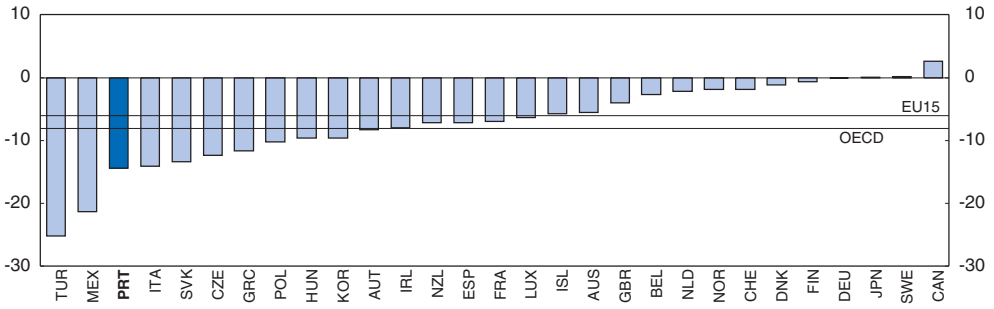
Figure 3.9. **Simulating the contribution of education to the Portuguese labour productivity gap**

Mechanical effect of population structure differences *vis-à-vis* the United States on average hourly productivity, 2004[1]



1. In Portugal, for example, average hourly productivity is mechanically reduced by 14.4% compared with the situation where Portugal had the same population structure as the United States while keeping its group-specific employment rates. Data for EU15 and OECD (minus the United States) are weighted averages.

Source: OECD (2009), Boulhol, H., "The Effects of Population Structure on Employment and Productivity", *Economics Department Working Papers* No. 684.

StatLink http://dx.doi.org/10.1787/888932331201

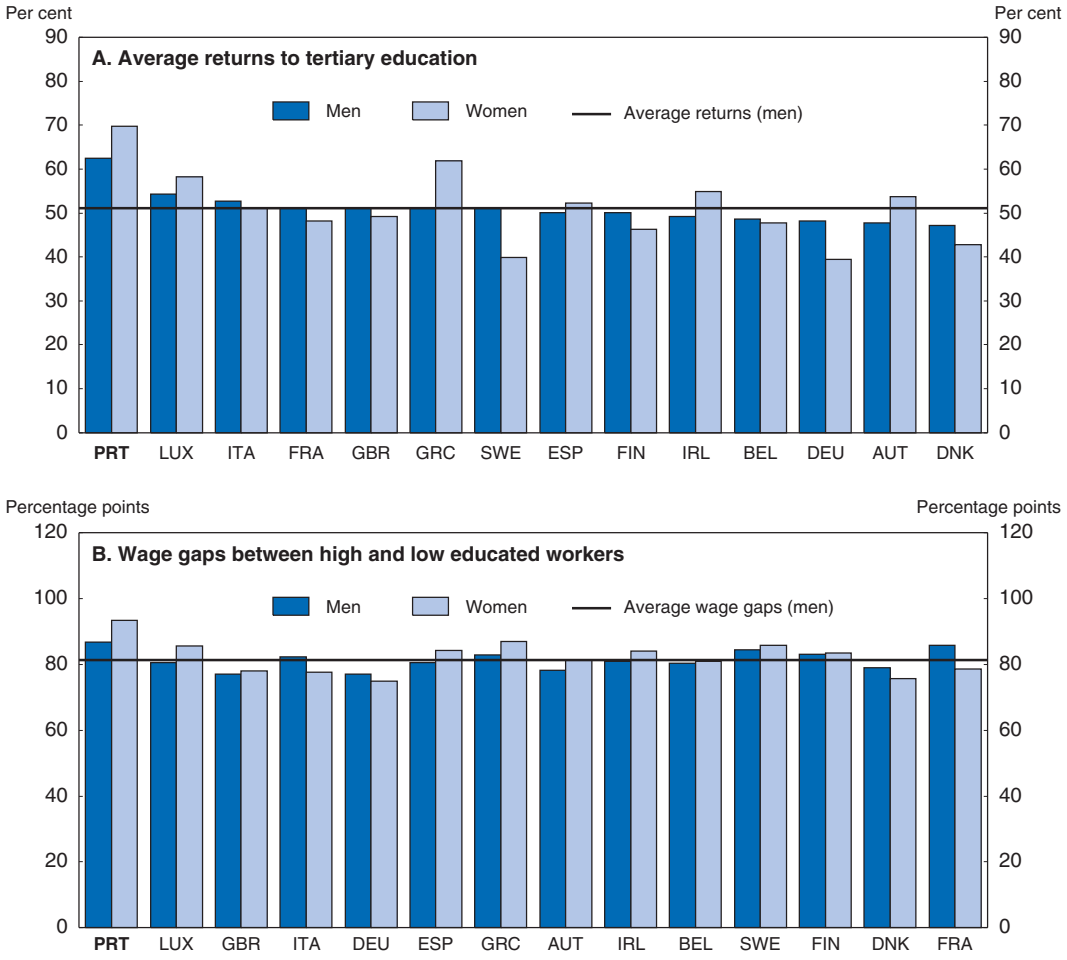
according to this calculation, Portugal's hourly productivity would be 14.4% higher if its working-age population had the same level of education as the US. According to this simulation, education would explain approximately 25% of Portugal's GDP per capita gap *vis-à-vis* the United States.[25]

Returns to education are high in a comparative perspective

Returns to education have been historically high in Portugal, particularly so after EU accession in 1986 (Hartog *et al.*, 2001; Martins and Pereira, 2002 and 2004; Budria and Celso, 2005). Skill-based technological change has been proposed as the chief explanation for a shift in the demand towards educated labour (Hartog *et al.*, 2001), and Portugal's high returns to education can therefore be understood as the outcome of an excess demand for skilled labour. New empirical results based on estimates from 2005 microeconomic household data confirm that returns to education are substantial in Portugal (Figure 3.10); they are the

Figure 3.10. **Returns to education based on household data**[1, 2]

2005



1. Estimated returns from tertiary education based on microeconomic household data (European Union Statistics on Income and Living Conditions (EU-SILC), 2005 data). Dependent variable is (log of) hourly gross wage for employees. The sample is restricted to individuals who declare having worked more than 15 hours per week and earning more than 1 euro per hour. Education is defined as the highest International Standard Classification of Education (ISCED) level attained by the individual. For the purpose of estimation, the five ISCED categories are aggregated into three modalities: *i)* low education (pre-primary, primary, lower secondary, *i.e.* ISCED 0-2); *ii)* medium education (upper-secondary and post-secondary *i.e.* ISCED 3, 4); and *iii)* higher education (tertiary *i.e.* ISCED 5, 6). Control variables include age and age squared, experience and experience squared, degree of urbanisation of the living area, marital status, and migration background. Regressions for men are performed through ordinary least squares while regressions for women are performed through Heckman's sample selection bias correction procedure. The latter estimation uses a dummy on the presence of children in the household for identification purposes in the selection equation. Regressions are weighted using individual sampling weights. Standard errors are clustered at the household level.
2. Interpretation: Panel A. In Portugal, a man who has attained tertiary education has a 62% wage premium compared to a man who has attained upper-secondary education, controlling for individual characteristics. Panel B. Wage gaps between high and low educated workers can be computed as the difference between the estimated premium to tertiary education and the estimated penalty to less than lower secondary education, relative to upper-secondary education. In Portugal, wage gaps between high and low educated workers amount to 87 percentage points.

Source: OECD, author's calculations based on EU-SILC data.

StatLink http://dx.doi.org/10.1787/888932331220

highest across European OECD countries covered by the analysis. According to the estimates, a man who has attained tertiary education has 62% wage *premium* compared to a man who has attained upper-secondary education, controlling for individual characteristics.[26]

Estimated *premia* to tertiary education are generally higher for women than for men, controlling for self-selection into paid employment. In Portugal, they amount to 70%.

The importance of education for individual wage outcomes in Portugal is further confirmed by the finding that the dispersion in wages is very well explained by the dispersion in educational levels within the employed population: in this respect too, the relationship between education and wages is the strongest among European OECD countries, both for men and for women.[27] Finally, wage differences between high and low educated workers are the highest among European OECD countries (Figure 3.10).[28]

Raising the educational level of the population by achieving higher equity in education

Portugal's educational gap is compounded by a lack of equity with respect to educational opportunities. It will not be possible to upskill the labour force without addressing the problem of educational equity upfront. The authorities have been developing a number of reforms that can be effective in achieving higher equity in education, but more needs to be done to openly address educational inequities in Portugal. Equity in education has two dimensions. The first is *fairness*, which implies ensuring that personal and social circumstances – for example gender, socio-economic status or ethnic origin – should not be an obstacle to achieving educational potential. The second is *inclusion*, which implies ensuring a basic minimum standard of education for all – for example that everyone should literate and numerate. The two dimensions are closely intertwined: tackling school failure helps to overcome the effects of social deprivation which often cause school failure.

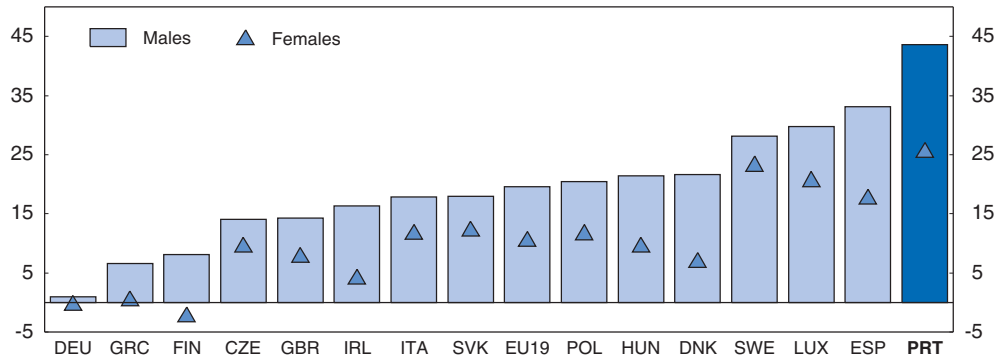
The benefits from education are large, and particularly so in Portugal. Education affects economic outcomes indirectly because it is associated with better health, successful parental and civic participation. The long-term social and financial costs of educational failure are high, as those without the skills to participate socially and economically generate higher costs for health, income support, child welfare and security. Finally, achieving higher inclusion in education can help address the dual and segmented nature of the Portuguese economy. A related structural feature of Portugal's economy and labour market is that of informality, which can at least in part be fought against by giving individuals better educational opportunities.

Many children fail to acquire basic skills at school in Portugal; 24.2% of 15 years-old students perform below the minimum skill level of 400 PISA points, whereas the OECD average is 18% (OECD, 2010a). Responding to the concern on the literacy levels of the Portuguese population in general, especially that of young people, the government has launched the *National Reading Plan* in 2006, aiming at raising literacy levels of the Portuguese population, especially targeted at children attending pre-school and basic education; similarly, it has launched the *Action Plan for Mathematics*, to support projects in schools to improve mathematics learning for pupils in the 1st, 2nd and 3rd cycles of basic education. The *National Reading Plan* is technically based on a set of studies and evaluation tools to verify its achievement. It is important to monitor the effectiveness of these programmes as they are implemented at different stages of the school system.

Retention at the secondary level is one of the major factors behind the low proportion of upper-secondary and tertiary education graduates in the Portuguese population. Portugal displays the highest dropout rates from secondary school among European OECD countries (Figure 3.11). There is also a striking difference between male and females, as in

Figure 3.11. **Dropout rates**

Percentage of an age cohort that will not complete upper-secondary education in 2007[1]



1. Data are calculated using the 2007 net graduation rates.

Source: OECD, *Education at a Glance 2009: OECD Indicators*.

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other countries; male are almost twice as likely to dropout as females. It is difficult to identify the reasons of such high dropout rates; to some extent, the phenomenon reflects the weak cultural value associated with education until recent times in the Portuguese society. There is evidence that this perception is changing, partly due the government's commitment to emphasize the importance of education. Reducing dropout rates at the secondary level is indeed on top of the policy agenda. Recent policies are showing encouraging results. According to data from the Ministry of Education, the academic year 2008-09 exhibits a downward trend of school failure and early leaving, and there are signs of a consolidated and sustained increase in the number of pupils completing mandatory education and entering upper-secondary school. Increasing enrolment at the tertiary level is also an important objective; however, ensuring higher completion rates at the secondary level will, by itself, allow greater enrolment at the tertiary level.

The impact of family background on the probability to dropout is also strongest in Portugal than elsewhere: according to 2005 household data, 98.9% of men aged between 25 and 34 years old who dropout before the end of upper-secondary school has a low-educated father, more than 10 percentage points higher than it is on average across European OECD countries (OECD calculations based on the *2005 EU-SILC Database*). Not surprisingly, the impact of family socio-economic background on student performance is also among the highest among OECD countries. Empirical evidence further suggests dramatic learning difficulties concentrated in socio-economically disadvantaged schools.[29] Targeted interventions for disadvantaged schools and for disadvantaged individuals can therefore have positive effects.

Parental background also influences adults' post-secondary educational opportunities. Tertiary education is not only relatively rare but also unequally distributed in Portugal, in particular for women. Individuals coming from educated families make up the most of university graduates. Based on household data for 2005, Causa *et al.* (2009) estimate that a woman whose father achieved less than upper-secondary education faces a probability to achieve tertiary education that is 52 percentage points below that of a woman whose father achieved tertiary education. Portugal has recently introduced an innovative system of student loans with mutual guarantee underwritten by the State, which complements the system of public grants. This is an appropriate initiative that is

already improving educational opportunities. However, because education is a cumulative process and because early interventions have the highest payoff, focusing on basic and secondary education will be more effective to raise tertiary enrolment levels and to diversify students' social background.

Education policies: achieving stronger performance and inclusion

There are enormous economic gains to be achieved in Portugal by improving educational performance and inclusion. Recent simulations based on PISA data suggest that reforms that brought all Portuguese students to a level of minimal proficiency for the OECD – which would achieve higher performance and inclusion, would imply an average annual growth rate that is 0.9% higher (see Box 3.3).

Box 3.3. **Achieving stronger education performance and inclusion: quantifying the gains in Portugal**

The historical record on the relationship between cognitive skills and economic growth provides a means of directly evaluating the benefits of educational reform programmes. OECD (2010a) uses several alternative benchmarks to provide country-specific information about the economic impact of a change. A simulation model is employed, based on the idea that moving from one quality level to another of the workforce depends on the shares of workers with different skills. As such, the impact of skills on GDP at any point in time will be proportional to the average skill levels of workers in the economy. The expected work life is assumed to be 40 years, which implies that each new cohort of workers is 2.5% of the workforce. Thus, even after an educational reform is fully implemented, it takes 40 years until the full labour force is at the new skill level. In order to consider the impacts of improvement on OECD countries, the simulations rely on the estimates of growth relationships derived from the 23 OECD countries with complete data. These estimates suggest that a 50-point higher average PISA score (*i.e.,* one-half standard deviation higher) would be associated with 0.87% higher annual growth. This estimate clearly includes some uncertainty, a factor that is also included in the simulations. The simulation does not adopt any specific reform package but instead focuses just on the ultimate change in achievement. Reforms are assumed to take 20 years to complete, and the path of increased achievement during the reform period is taken as linear. For example, an average improvement of 25 points on PISA is assumed to reflect a gain of 1.25 points per year. This might be realistic, for example, when the reform relies upon a process of upgrading the skills of teachers – either by training for existing teachers or by changing the workforce through replacement of existing teachers. This linear path dictates the quality of new cohorts of workers at each point in time. To gauge the magnitude of such changes, Poland, the country that displayed the largest improvement in PISA, improved its performance in reading by 29 points between 2000 and 2006.

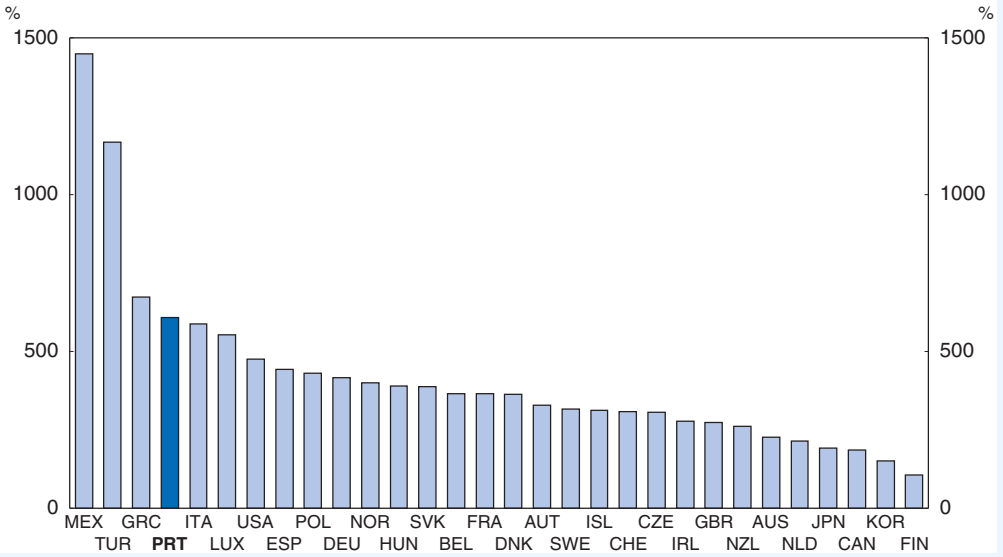
The simplest way to see the impact of any improvement in cognitive skills is to trace out the increased GDP per capita that would be expected at any point in the future (Figure 3.12). For example, it is possible to say what percentage increase in GDP per capita would be expected in 2050,given a specific change in skills started today. The benchmark considers all economic returns that arise during the lifetime of a child that is born at the beginning of the reform in 2010. The calculations take a time horizon until 2090, considering all future returns that accrue until then, but neglecting any returns that accrue after 2090. Finally, because economic benefits accrue at varying times into the future, the

Box 3.3. **Achieving stronger education performance and inclusion: quantifying the gains in Portugal** *(cont.)*

entire stream is converted into a present discounted value. A standard value of the social discount rate used in long-term projections on the sustainability of pension systems and public finance is 3%.

Figure 3.12. **Present value of bringing all to a level of minimum proficiency for the OECD**[1]

As a percentage of current GDP



1. Discounted value of future increases in GDP until 2090 due to a reform that ensures that all students perform at a minimum of 400 points on the PISA scale.

Source: OECD (2010), "The High Cost of Low Educational Performance: The Long-Run Economic Impact of Improving PISA Outcomes".

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OECD (2010a) presents several simulation scenarios, all of which have dramatic implications for Portugal. Giving the country's context, low performance and low equity, the goal of bringing Portugal to a level of minimum proficiency for the OECD (a PISA score of 400) probably represents the most relevant scenario for assessing the potential gains from human capital reform. Against this background, Figure 3.12 presents the expected benefits of bringing all students to minimum of 400 points in PISA in OECD countries. As can be seen from the figure above, Portugal ranks among the countries that would experience the strongest GDP benefit from this move, more than 6 times its current GDP.

The shortage of human capital calls for action not only to raise the education level of the population, but also to review the type of education and its quality, as identified in the last two *OECD Economic Surveys of Portugal* and also various editions of *Going for Growth* (OECD, 2010b). The government has implemented a number of major reforms across all levels of the education system, including steps to promote vocational education and training (VET) and integrate unskilled adults in formal learning. Overall Portugal's reforms are ambitious and well designed. It is important that the authorities consolidate the reform process by carefully

monitoring implementation and effectiveness. A number of the enacted reforms do tackle the problem of equity. However, more needs to be done to address the issue upfront, through specific policies in the education area, but also through the promotion of educational equity within the civil society, that is, by raising public awareness of the equity challenges.

Vocational education: the diversification of upper-secondary education and adult education

The focus on vocational education and training is a major development in Portugal in the current context, because it is key to both preventing school failure and dropout, and also effective to upgrade adults' qualifications. Major reforms under this strategy are headed under the *Novas Oportunidades* programme, launched in 2005, and covering two distinct axes: one that structures vocational education for young people at the upper-secondary level, and the other targeting adults who did not conclude secondary education. The government must also be praised because the system is sufficiently open and flexible to allow students to transfer between general and vocational courses: indeed, a more flexible curriculum may help make VET more attractive and reduce dropout rates (DeLuca *et al*., 2005; Teese *et al*., 2005).

VET programmes are being implemented with encouraging results. There has been an increase of 24 percentage points in the enrolment of young people in vocational education and training courses at the upper-secondary level, including technological specialisation courses, professional courses, apprenticeship courses, and courses promoted by tourism schools. Fifty per cent of students in upper-secondary education are estimated to be currently enrolled in VET. The large expansion of the network of VET providers has led to a dramatic diversification in the supply of vocational education and training courses at the upper-secondary level in Portugal. There are currently more than 120 different VET courses in the system. At this stage of development, the problem is therefore lack of information for prospective students and parents. Career guidance services are fragmented and weakly underpinned by information on labour market opportunities. As a first step, the authorities could support the creation of a comprehensive website with career guidance information.

More needs to be done also to raise the social standing of VET, which has been historically low. Involving firms in the process is a way forward, and this is starting to occur in some schools that have created local networks with employers and firms. Stronger links with employers would help to ensure that the skills acquired through VET correspond to labour market requirements. Ireland has developed a number of relevant tools in this respect, which could serve as examples. It has launched a schools-business partnership to support educational inclusion, which has apparently reduced dropout (OECD, 2007). It has developed some innovative ways of engaging employers in a bottom-up approach to provision, such as Skillnets – an initiative widely supported by employers (OECD, 2010c). Going further, Portugal should strengthen the professional content of VET. Supply diversification has to evolve towards a better matching between acquired competencies and labour market needs, which calls for the development of professionally oriented courses. Over the medium term, Portugal should consider expanding the supply of apprenticeship programmes and ensure that guidance is in place to enrol students and firms in the process. Switzerland provides an effective model of apprenticeship, because the system is strongly employer and market driven, flexible, and subject to regular evaluation (OECD, 2009b).

The adult axis of the *Novas Oportunidades* programme promotes integration of low skilled adults into formal learning. The programme comprises the recognition of qualifications acquired throughout life and the chance for low skilled adults to undergo further education and training. The challenge is to enable under-qualified adults to improve their employability and encourage their returns to education and training processes. The initiative has attracted strong demand from adults both for the recognition of competencies and for lifelong learning. Since 2007, there have been more than one million candidates enrolled in the adult axis of the new opportunities centres, 63% of whom are employed and 33% unemployed. Portugal's experience is quite unique in this respect. It is crucial at this stage of implementation that the quality of services provision matches the increasing number of participants in the programme and that training actually meets labour market demand. This is all the more relevant in the current context of rising unemployment. Labour market links should be given more emphasis through partnerships between training centres, social partners, local governments and companies. In this context, enhancing the connection between the information system of *Novas Oportunidades* and the employment centres is a relevant step to improve the effectiveness of the system in smoothing labour market matching between employers and re-qualified unemployed. Education and training programmes for adult learners should be targeted at the needs of the labour market as well as their particular skills. It is important in this context to provide flexible learning arrangements, including part-time or distance learning, reducing the opportunity cost of studying by making it compatible with everyday adult life: against this background, Portugal should better target provision to meet specific adult needs and schedules. This a particular challenge for Portugal where typically the offer of training had traditionally not been directed at people already in employment.

The authorities should reinforce evaluation tools to monitor the effectiveness of the *Novas Oportunidades* programme. Historical estimates of the market returns to vocational education in Portugal cast some doubt on the market value of the skills acquired within the apprenticeship system and in the vocational training schools.[30] It is also important to evaluate whether adults succeed in upgrading the quality of their job after programme participation. This assessment is relevant to measure the effectiveness of the programme and evaluate if it responds to participants' expectations. Preliminary evaluation analysis initiated by the authorities provides encouraging results in this respect. There is currently an international experts' team developing an external evaluation study about the impact of the programme on adults' social and professional paths. The 4-year study began in 2008 and it is supposed to publish its preliminary results in 2011. This process is welcome: the authorities should put more emphasis on evaluation tools, including cost-benefit analysis, to measure the effectiveness of the *Novas Oportunidades* programme.

The increase in the age of compulsory education

In 2009, Portugal raised the age of compulsory education from 15 to 18 years old. Widening mandatory school comes as a corollary to all the work developed on the diversification of the educational supply that resulted in a dramatic increase of the VET. This policy has the advantage of providing a clear signal about the importance of education. Portugal is making important efforts to meet the needs and expectations of all target groups, and to expand the networks of VET providers. Financial support to low-income students has also been increased. The flexibility and diversity of the offer is expected to result in a diversification of the students' body.

While the reform might be very effective in reducing the statistics on dropouts, it will not by itself significantly change the underlying failure of the system to retain children in school. Portugal's education system must offer strong incentives for learning and ensure that these incentives are understood by all students, including those with the weakest achievement. Without clear demonstrable benefits, under-achievement will continue: legally raising compulsory education will not by itself translate into higher incentives for students and their families. It is important in this context that this process is accompanied by measures to inform parents and students about the benefits of education, which can be done through career guidance and mentorship programmes.

Portugal needs to address up front the implementation issues associated with raising the age of compulsory education. Financial resources are needed to cope with the increase in pupils attending education and training. Preliminary surveys have concluded that there will not be a significant overload of the system associated with this reform, mainly due to the trend decrease in the number of students as a result of demography, which will imply a stable student-teacher ratio. However, more consideration should be given to the need to increase physical resources, and in particular those that are associated to the provision of technical and vocational education (laboratories, specific equipment): indeed, the VET providers will probably absorb most of the increase in the student intake. The government has launched a technological plan for the educational system and a modernisation programme in secondary schools to improve facilities and building quality. Implementation of the programme should be monitored closely in order to ensure that it effectively achieves a comprehensive coverage of the relevant training providers.

The increase in the number of students raises the challenge of addressing increased diversity and heterogeneity in the student body. An associated issue relates to potential disciplinary problems arising if students are not motivated to stay at school. It is essential to provide training to school managers and teachers to improve their competencies to work in complex contexts, including through the help of multidisciplinary teams (psychologists, sociologists, and social workers). Raising compulsory schooling should not come at the cost of educational quality: the reform raises the challenge of keeping educational standards while enlarging the audience of compulsory education. Portugal should monitor closely the implementation and the impact of the reform, including on school performance, taking into account the socio-economic context in which schools operate.

Teacher evaluation reform and school governance

Over the last three years, important measures have been taken to strengthen teachers' skills and improve the quality of teaching. In particular, a contentious yet necessary system of teacher performance evaluation has been introduced first in 2007. Implementation has been challenging, reflecting natural resistance to change and an introduction of a new culture of evaluation, as well as practical difficulties associated with introducing a comprehensive model within a short time span. Difficulties experienced by the school management bodies relate to the definition of objectives and goals, the development within the school of tools and instruments to register evidence concerning the dimensions evaluated, and the lack of teaching staff trained to develop and implement the assessment process. Considering these implementation difficulties, the Ministry of Education re-opened the negotiation process with the unions, and adopted in early 2010 a revised version of the 2007 model. A concomitant OECD report by education experts has

provided a comprehensive review of teacher evaluation in Portugal, highlighting the strengths and the weaknesses of the original model (OECD, 2009c).

The teacher evaluation model provides a good basis for further development, because it is comprehensive, includes most aspects of teachers' performance, a wide range of sources of data, provides more than one evaluator and has a peer review element. One important loophole in the original model was that it did not explicitly consider the development of competencies to implement teacher evaluation. The Ministry of Education has recently announced that new specialised training will be provided to evaluators during 2010 with the aim of developing professional competences and responding to the training needs. It is important to implement such training systematically within schools.

Portugal should ensure appropriate articulation between school evaluation and teacher evaluation.[31] School evaluation should include the establishment of school internal mechanisms to assess the quality of teachers and teaching. In particular the external evaluation of a school, which in principle takes into consideration the teachers' evaluation procedures developed by the school, should provide recommendations for improvement, and hold the school director accountable if such procedures are deemed inadequate. Portugal should also introduce an external component to teacher evaluation and link the evaluation to national-level criteria standards and indicators, while accounting for the school context. There is evidence that this process is starting. The Scientific Council for Teacher Evaluation (CCAP) is defining national teacher performance standards. These will be used as references for teacher evaluation.

Educational outcomes seem disappointing given the scale of expenditures in Portugal (Figure 3.13). To improve the quality of education and the efficiency of educational expenditure, the authorities should further increase school autonomy and accountability. Investment in school autonomy has been rather slow, mostly due to the centralised tradition and resistance factors of a cultural nature. Currently, the development of autonomy is based on the possibility for schools to sign autonomy contracts on a voluntary basis, which are conceived as instruments for negotiation and involvement of local stakeholders. Under the contract, schools are being evaluated by external agents, as a precondition to be transferred a limited amount of responsibilities.

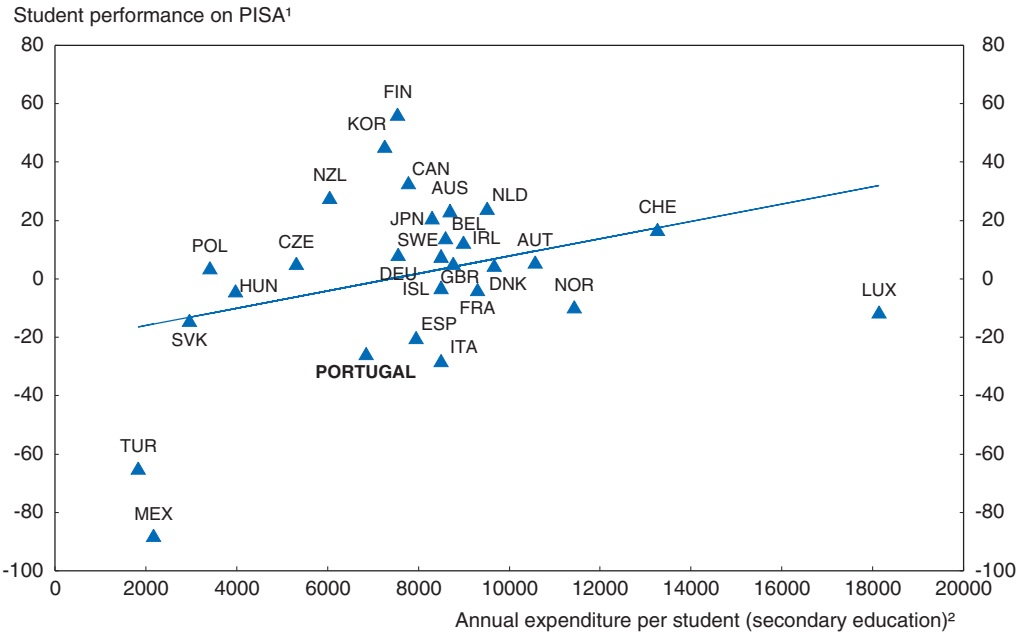
School and out-of-school practices

According to PISA 2003 data, school repetition in Portugal is among the highest in OECD countries: more than 15% of students repeat years in primary and lower secondary school, compared to less than 5% in more than half of OECD countries, including the best performing ones.[32] There is wide recognition in educational research that grade repetition is an ineffective intervention for low achievement while it poses risks for equity in terms of bias based on social background (OECD, 2007). Also, the costs of repetition are indirect but substantial: the full economic costs have been estimated up to USD 20 000 equivalents for each student who repeats.[33] The problem is that schools have very few incentives to take these large costs into account. In summary, year repetition is ineffective and costly: this has both efficiency and equity implications.

Portugal should reduce high rates of school-year repetition. This practice has been questioned in other countries that acknowledged the problem, such as France and Luxembourg. There are alternative ways of supporting those with learning difficulties in the classroom: one way is to provide extra teaching time for students who fall behind and adapt

Figure 3.13. **Educational outcomes and educational expenditure**

2006



1. Student performance on PISA, relative to the OECD average score. Computed as the sum of the contributions of relative performance in mathematics, reading and science (these three skills are weighted equally in the total score).
2. Expenditure on educational institutions in equivalent USD converted using PPPs for GDP.

Source: OECD, *Education at a Glance 2009: OECD Indicators*.

StatLink http://dx.doi.org/10.1787/888932331277

teaching to their needs. More generally, interventions in the classroom can be very effective to tackle underachievement: among approaches available, the Finish example, offering a sequence of intensifying interventions which draw back into the mainstream those who fall behind, is a successful approach. Portugal has started introducing classroom interventions along these lines. This strategy requires continuing supporting teaching professionals so that they develop their in-classroom techniques to help those who are falling behind.

The impact of family background on school achievement in Portugal is among the highest among OECD countries, as recalled above: this implies than home factors, including parental support for education, engagement with children's learning and cultural assets are, in Portugal more than in most OECD countries, associated with stronger school performance. Against this background, it is important to strengthen the links between school and home and help disadvantaged parents help their children to learn. One approach is that of providing additional time for children who need homework support on school premises, as done in Ireland, where a school completion programme to help youth at risk includes a strategy of before-school and after-school support delivered outside school.[34] Strengthening communication with parents is another complementary approach, especially when formal arrangements to link parents and school may not work for disadvantaged groups. The authorities have very recently approved a law aimed at involving more parents and local authorities in the process of enhancing schooling outcomes. It will be import to evaluate the effectiveness of this new process at the school level.

It is also important to address the educational problems of newly arrived migrants in Portugal, where specific educational programs targeted to them appear to be less developed

than in other OECD countries. Portugal should expand interventions targeted to immigrant groups, given the observed low educational attainment of some of them, in particular migrants from former Portuguese colonies in Africa, like Cape Verde (OECD, 2008d), and in so far as they are overrepresented among the socio-economic disadvantaged groups.

Resources and outcomes

Portugal has recently introduced a number of measures aimed at targeting education spending to disadvantaged schools and pupils. One of the most important measures is the programme "Educational Territories of Priority Intervention" (TEIP), which was developed in 105 schools groups with high rates of failure, dropping out and absenteeism (Box 3.4). According to this programme, schools propose a pluriannual intervention program for improving results at different levels of education, setting their respective goals. The Educational Administration provides human and financial resources and evaluates the implementation of the proposed plan. The program includes socio-cultural mediators and other professionals with the objective of improving the integration of pupils and supporting head teachers in their relation with families. The approach taken by Portugal has been to grant more autonomy to TEIP schools whose results were positively evaluated, the idea being that schools be progressively able to develop their own projects and targets.

Box 3.4. **Directing resources to disadvantaged schools in Portugal**

The Programme "Educational Territories of Priority Intervention"

In 2006, the Portuguese Educational Administration re-launched "Educational Territories of Priority Intervention", a programme targeted at disadvantaged schools. The aim of the programme is to provide targeted schools with effective means to improve the educational environment, promote inclusion, prevent dropout, and improve outcomes. It has been developed in the context of the progressive transfer of competencies to schools and local authorities in Portugal. To date it has been implemented in 105 schools groups with high rates of failure, dropping out and absenteeism.

Against a background of accrued autonomy, the schools are asked to propose a pluriannual intervention programme to improve their results, setting their respective goals, according to their economic, social and cultural specificities. The schools assume the responsibility to provide a diversified offer through alternative paths, education and training courses, recovery plans and other educational support.

The Educational Administration provides human and financial resources to implement school plans, and then evaluates the implementation of the proposed plan. The Ministry of Education allows for the priority placement of teachers in schools integrated in TEIP. Schools are also being reinforced in professional resources to allow the constitution of multidisciplinary teams (psychologist, mediators, social workers, etc.). Part of the resources targeted at TEIP schools comes from the European Social Fund.

The programme is currently being continued for most of the TEIP schools and extended to other schools. Based on observed implementation issues, it is being adjusted to improve its effectiveness in reducing dropouts and school failure.

Implementation of the programme has been challenging so far. Targeted schools have shown a lack of capacity and expertise to manage their extra resources. This is to some extent due to the fact that part of the extra funds comes from the European Social Fund

and targeted schools have experienced difficulties in dealing with the associated application procedures. Portugal should tackle the efficiency issue upfront; schools should be given the relevant resources to build financial expertise. The authorities should also consider introducing the possibility of hiring external experts on specific issues such as accounting and fund management. The costs involved by this approach would be much lower than the current efficiency losses incurred by the program.

It is important to expand mechanisms to properly evaluate the effectiveness of the TEIP programme to improve schools' outcomes. External evaluation mechanisms should be reinforced in every school to properly evaluate the effectiveness of the TEIP programme. Portugal could also consider designing a panel of students and schools that could be followed over time. Microeconomic data at the student level would allow for a scientific evaluation the programme. International experience can be useful to assess the relevance of the programme and to avoid replicating some well-known errors. For instance, the authorities must ensure that the extra resources are used to assist those most in need and avoid labelling certain as disadvantaged, as suggested by the unsuccessful French experience of the *Zones d'Éducation Prioritaires*. One way to avoid labelling issues is systematic evaluation of schools, so that schools easily obtain or lose their status.

Qualified teachers are an important resource for disadvantaged schools: there should be incentives for them to work in these schools. Currently the education system does not foresee any specific policy to attract experienced teachers to difficult schools: as a result of the centralised management of teacher allocation, the best classified teachers are avoiding sensitive areas. Consideration should be given to incentive-based pay for teachers. International experience suggests that this is not an easy task.[35] The teacher evaluation reform can be a relevant basis to address this important issue. To start with, Portuguese schools should be given more autonomy for hiring staff in the context of stronger accountability.

Box 3.5. **Summary of recommendations on productivity and competitiveness: setting the priorities for an appropriate growth strategy**

Business environment

- Expand industrial clusters, building on local stakeholders such as business associations and further develop co-operation between firms and the R&D sector. Regularly evaluate the performance of these programmes.
- Ease further licensing procedures, notably at the local level.
- Streamline the judicial process.

Transport infrastructure

- Policies to improve public infrastructure should be pursued. The authorities should resume the new airport construction as soon as the financial conditions permit. However, investments should rely on cautious and transparent cost benefit analysis (CBA).
- The fiscal implications of pluriannual contractual spending commitments under PPPs and concessions should be fully transparent.
- Increase efficiency and profitability of SOEs. Ensure effective implementation of the new performance monitoring regulation in railways and expand it to other sectors. Reduce the scope of the public enterprise sector further as soon as the financial market conditions improve.

Box 3.5. **Summary of recommendations on productivity and competitiveness: setting the priorities for an appropriate growth strategy** *(cont.)*

- Liberalise the passenger railway transport activity.
- Ensure effective regulation of the new monopoly in the airport sector. Increasing competition in airline services should also be considered.
- Rationalise the metropolitan public transport strategy to tackle CO_2 emissions and increase public transport by redefining the devolution of missions and responsibilities across the relevant actors and enhancing implementation at the local level.

Education

- Enhance career guidance mechanisms for prospective students in vocational educational training (VET).
- Strengthen the links between training centers and firms by engaging employers in a bottom-up approach to VET provision. Reinforce the professional content of the training programmes. Consider expanding the supply of apprenticeship.
- Reinforce evaluation tools to monitor the impact of the *Novas Oportunidades* programme.
- In the context of the rise in the age of compulsory education, consider the need to increase physical resources, and in particular those that are associated with the provision of technical education. Provide training to school managers and teachers to address increased diversity in the student body.
- Implement training for teacher evaluation systematically within schools. Strengthen the links between teacher and school evaluation. Consider introducing an external component to teacher evaluation and link the evaluation to national-level criteria standards and indicators.
- Reduce the high rates of school-year repetition. Continue to strengthen monitoring mechanisms of those at risk of dropping out. Expand targeted interventions to immigrant groups.
- Schools should be given more autonomy to hire staff and consideration should be given to design incentive-based pay for teachers.

Notes

1. Portugal's performance is benchmarked against two groups of countries: on the one hand, the neighbouring Southern European countries, and, on the other, the Eastern European countries, because those are becoming important competitors for Portugal in a number of sectors, particularly so in manufacturing.
2. The industry sector includes manufacturing, mining, quarrying, electricity, gas and water (see Table 3.A1.1).
3. Data from the Bank for accounts of companies harmonised (BACH), as analysed by the European Commission (European commission, 2009).
4. The share of clothing, textile materials and shoes in manufacturing exports went down from more than 28% in 1998 to less than 14% in 2008.
5. Recent empirical literature that has shown, based on firm-level data, that increased import competition with China has caused a significant technological upgrading in European firms through both faster diffusion and innovation, both within and between establishments and firms (Bloom *et al.*, 2009).
6. There are well-known difficulties in properly measuring labour productivity in services, which should be kept in mind when interpreting this analysis. These cover: *i)* general problems of definition and computation of underlying price indexes for measuring constant price value added;

ii) the use of employment *versus* hours worked as a measure of labour input (see Wölfl, 2003). The dataset used in this analysis if produced with the explicit aim of minimizing measurement issues for cross-country comparative perspective.

7. The productivity benefits of FDI in trade, restaurants and hotels is less clear cut than in other sectors, though. Dynamic MNCs can have an impact on growth by boosting services exports.
8. Nunes and Sarmento (2010b).
9. See also data on size distribution of firms and employment (European Commission, 2009). Morever, empirical work based on *Quadros de Pessoal* shows that firm size has been decreasing in Portugal over the recent period, within sectors (Nunes and Sarmento, 2010a).
10. The level of concentration, measured by the Herfindhal-Hirschman index (HHI), is increasing in both industries. According to *Quadros de Pessoal* data, in wholesale, it went from 25.1 in 1995 to 36.39 in 2006. In retail, it went from 49.44 in 1995 to 108.46 in 2006. This assessment comes with a caveat, however. The HHI criterion might indeed not be a sufficient metric to assess the overall level of competition in an industry. Furthermore, the relatively high turnover of firms in the sector in Portugal (measured by birth and death rates) can be indicative of a relatively better competitive stance.
11. See the product market indicators database (Wölfl *et al*., 2009).
12. The period referred by the World Bank indicator includes the required notifications and inspections. However, a warehouse may be in use before an inspection is performed and, thus, it is usually operating in a shorter period than 287 days.
13. Wölfl *et al*., 2009.
14. Doing Business indicators (*Doing Business*, 2010).
15. Performance contracts are already in place in television broadcasting, air travel, public theatres, and privately-owned public transportation operators that practice social tariffs.
16. Congestion is one of the main externalities under discussion, but it is important to consider the costs associated with air quality and noise, especially in urban areas. The Portuguese Ministry of Environment has set up innovative and ambitious policies in this respect, such as a set of binding measures aimed at enhancing interior air quality within buildings.
17. These data come from the International Energy Agency Review of Portugal's energy policy (IEA, 2009).
18. In the 2010 Stability and Growth Programme, the government announced the "postponement, for two years, of the Lisbon-Porto and Porto-Vigo high-speed rail links, in order to avoid any financial impact until 2013".
19. According to Araujo and Sutherland (2010), nine countries responding to the OECD infrastructure questionnaire in 2008 report that PPPs are accounted for as contingent liabilities in government accounts. Portugal is not part of them.
20. It should be noted though that the plan was launched immediately before the onset of the global financial crisis, which clearly affected the capacity to invest in some of the projects.
21. There is a 2007 CBA study on focused on the previous location (Ota), which implies a 10.8% economic rate of return. The comparative analysis made in 2007 by an independent entity between Ota and Alcochete indicated that Alcochete is close to or better than Ota in terms of CBA.
22. Recently, some low cost companies have entered the market. In principle, there is no entry restriction in the market.
23. Information available at *www.eurotestmobility.com*.
24. The effect of population structure actually covers both demographic and educational differences, because the groups are defined according to education, gender, and age classes. However, variations along the educational dimension explain about 85% of the total population structure effect across countries and 93% in Portugal so that the results would be the same by using only the educational structure component.
25. While these calculations are illustrative in nature, they confirm the key role that education can deliver to close Portugal's income gap; moreover, these calculations are mechanical because group-specific employment rates and countries' aggregate technological levels are assumed to remain at their current levels. This implies that the complex implications of such population shifts for group-specific labour utilisation performance and for technology adoptions are ignored. To the extent that such changes in the composition of the working-age population would be associated

with skill upgrading, they would likely be conducive to the adoption of more efficient technologies. This would imply that those shifts in population structure have also indirect effects that amplify the direct ones that are computed herein.

26. Education is measured by a categorical variable based on the highest International Standard Classification of Education (ISCED) level attained by the individual. For the purpose of estimation, the five ISCED categories are aggregated into three modalities: *i)* low education (pre-primary, primary, lower secondary, *i.e.* ISCED 0-2); *ii)* medium education (upper-secondary and post-secondary *i.e.* ISCED 3, 4); and *iii)* higher education (tertiary *i.e.* ISCED 5, 6).

27. The R squared of a regression of low wages on educational attainment is the highest across European OECD countries: 33% for men and 50% for women (OLS estimates).

28. Wage differences between high and low educated workers can be computed as the difference between the estimated premium to tertiary education and the estimated penalty to less than lower secondary education.

29. Causa and Chapuis (2009).

30. Hartog *et al.* (2000).

31. Currently, there are two main mechanisms through which teacher and school evaluation are related: *i)* external evaluation takes into account how teacher evaluation is organised; *ii)* schools that receive a good evaluation can rise their quota of "very good" and "excellent" teachers.

32. Unfortunately, the more up-to-date PISA 2006 survey does not allow analysing repetition rates in a cross-country perspective.

33. Estimates presented in OECD (2007).

34. Empirical literature generally finds a positive effect of out-of-school practices on students' achievement. One of the most recent examples is Zimmer *et al.* (2009), who provide empirical support to the effectiveness of programmes providing learning opportunities for students by funding tutoring and programmes providing supplemental educational services to low-income students attending schools that miss school-wide academic targets in Pittsburgh.

35. OECD (2009d).

Bibliography

Antipa, P. (2008), "Productivity Decomposition and Sectoral Dynamics", *Banque de France Bulletin Digest*, No. 171, March 2008.

APICCAPS (2009a), "Footwear Components and Leather Goods: Statistical Study 2008".

APICCAPS (2009b), "Footure 2015. Programa de acção para a fileira do calçado".

Araujo, S. and D. Sutherland (2010), "Public-Private Partnerships in OECD Countries: Identifying Best Practices", *OECD Economics Working Paper*, OECD, Paris, forthcoming.

Blanchard, (2007), "Adjustment Within the Euro: The Difficult Case of Portugal", *Portuguese Economic Journal*, Vol. 6, No. 1, pp. 1-21.

Bloom, N., M. Darca and J. Van Reneen (2009), "Trade Induced Technical Change? The Impact of Chinese Imports on Innovation, Diffusion, and Productivity", mimeo.

Boulhol, H. (2009), "The Effects of Population Structure on Employment and Productivity", *OECD Economics Department Working Paper* No. 684, OECD, Paris.

Budria, S. and N. Celso (2005), "Education and Wage Inequality in Portugal", Munich Personal RePEc Archive.

Causa, O. and C. Chapuis (2009), "Equity in Student Achievement Across OECD Countries: An Investigation on the Role of Policies", *OECD Economics Department Working Paper* No. 708, OECD, Paris.

Causa, O., S. Dantan and A. Johansson (2009), "Intergenerational Social Mobility in European OECD Countries", *OECD Economics Department Working Paper* No. 709, OECD, Paris.

Combes, P.P., T. Mayer and J.F. Thisse (2008), *Economic Geography: The Integration of Regions and Nations*, Princeton University press.

Corbacho, A. and G. Schwartz (2008), "PPPs and Fiscal Risks: Should Governments Worry?", in Schwartz, G., A. Corbacho and K. Funke (eds.), *Public Investment and Public-Private Partnership: Addressing Infrastructure Challenges and Managing Fiscal Risks*, International Monetary Fund.

Crafts (2009), "Transport Infrastructure Investment: Implications for Growth and Productivity", *Oxford Review of Economic Policy*, Vol. 25, No. 3, pp. 327-343.

DeLuca, S., A. Estacion and S. Plank (2005), *Dropping Out of High School and the Place of Career and Technical Education: A Survival Analysis of Surviving High School*, National Dissemination Center for Career and Technical Education, Columbus, Ohio.

Doing Business (2010), *Doing Business 2010 Report*, *www.doingbusiness.org/economyrankings*.

European commission (2009), *Sectoral Growth Drivers and Competitiveness in the European Union*, M. Pender (ed.), Luxembourg: Office for official publications of the European Communities.

Frankel, J. and D. Romer (1999), "Does Trade Cause Growth?", *American Economic Review*, Vol. 89, No. 3, pp. 379-399.

Hartog, J., P. Pereira and J.A. Vieira (2000), "Vocational Education and Earnings in Portugal", *Economia*, Vol. 24, Janeiro/Maio/Outubro.

Hartog, J., P. Pereira and J.A. Vieira (2001), "Changing Returns to Education in Portugal During the 80s and the Early 90s: OLS and Quantile Regression Estimators", *Applied Economics*, 33, pp. 1021-1037.

International Energy Agency (2009), *Energy Policies of IEA Countries: Portugal, 2009 Review*, IEA, Paris.

Limão, N. and A. Venables (2001), "Infrastructure, Geographical Disadvantage, Transport Costs, and Trade", *World Bank Economic Review*, Vol. 15, pp. 451-479.

Lin, J.Y (2010), "New Structural Economics: A Framework for Rethinking Development", *World Bank Policy Research Working Paper* No. 5197.

Martins, P.S. and P.T. Pereira (2004), "Does Education Reduce Wage Inequality? Quantile Regression Evidence from 16 Countries", *Labour Economics,* 11, pp. 355-371.

Martins, P.S. and P.T. Pereira (2002), "Education and Earnings in Portugal", Banco de Portugal Proceedings 2002.

McKinsey Global Institute (2003), *Portugal 2010. Increasing productivity growth in Portugal*, McKinsey Institute, Lisbon.

Monteiro, R.S. (2005), "Public-Private Partnerships: Some Lessons from Portugal", *EIB Papers*, 10(2), pp. 72-81.

Nunes, A. and E. Morais Sarmento (2010a), "Business Demography Dynamics in Portugal: A Non-Parametric Survival Analysis", *Grupo de Estudos Monetários e Financeiros Working Papers*, Universidade de Coimbra Junho de 2010.

Nunes, A. and E. Morais Sarmento (2010b), "Business Demography Dynamics in Portugal: A Semi-Parametric Survival Analysis", *Grupo de Estudos Monetários e Financeiros Working Papers*, Universidade de Coimbra Junho de 2010.

OECD (2007), *No More Failures. Ten Steps to Equity in Education*, OECD, Paris.

OECD (2008a), *OECD Territorial Reviews: Portugal*, OECD, Paris.

OECD (2008b), *OECD Economic Surveys: Portugal*, OECD, Paris.

OECD (2008c), *Growing Unequal? Income Distribution and Poverty in OECD Countries*, OECD, Paris.

OECD (2008d), *Jobs for Immigrants*, Vol. 2: Labour Market Integration in Belgium, France, the Netherlands and Portugal, OECD, Paris.

OECD (2009a), *Education at a glance 2009: OECD Indicators*, OECD, Paris.

OECD (2009b), *Learning for Jobs, OECD Reviews of Vocational Education and Training Policies, Switzerland*, OECD, Paris.

OECD (2009c), *Teacher Evaluation Reform in Portugal: OECD Review*, OECD, Paris.

OECD (2009d), *Evaluating and Rewarding the Quality of Teachers: International Practices*, OECD, Paris.

OECD (2010a), *The High Cost of Low Education Performance: The Long-Run Economic Impact of Improving PISA Outcomes*, OECD, Paris.

OECD (2010b), *Going for Growth*, OECD, Paris.

OECD (2010c), *Learning for Jobs, OECD Reviews of Vocational Education and Training Policies, Ireland*, OECD, Paris.

Sutherland, D., S. Araujo, B. Egert and T. Kozluk (2009), "Infrastructure Investment: Links to Growth and the Role of Public Policies", *OECD Economics Department Working Papers* No. 686, OECD, Paris.

Teese, R., P. Aasen, S. Field and B. Pont (2005), *Equity in Education Thematic Review: Spain Country Note*, OECD, Paris, *www.oecd.org/dataoecd/41/39/36361409.pdf*.

Vieira, J., A. Cabral, A. Menezes and P. Gabriel (2005), "Low Pay, Higher Pay and Job Quality: Evidence for Portugal", *Applied economic letters*, Vol. 12, pp. 505-511.

Wölfl, A., I. Wanner, T. Kozluk and G. Nicoletti (2009), "Ten Years of Product Market Reform in OECD Countries – Insights from a Revised PMR Indicator", *OECD Economics Department Working Papers*, No. 695, OECD, Paris.

Wölfl, A. (2003), "Productivity and Growth in Services Industries : An Assessment of Recent Patterns and the Role of Measurement", *STI working Paper 2003/7*, OECD Directorate for Science, Technology, and Industry, OECD, Paris.

Zimmer, R., R. Christina and L. Hamilton (2009), "After-School Tutoring in the Context of No Child Left Behind: Effectiveness of Two Programmes in Pittsburgh Public Schools", *Economics of Education Review*, Vol. 29 (1), pp. 18-28.

ANNEX 3.A1

Results of the productivity analysis by sector

Table 3.A1.1. **Sectoral contributions to productivity growth**[1, 2]

	Portugal		Czech Republic		Hungary		Poland		Slovak Republic		Italy		Greece		Spain	
Agriculture																
1990-1995	1.0	(0.0)	. .	. .	0.0	(–0.1)	. .	. .	0.0	. .	0.0	(0.0)	0.3	. .	0.0	0.0
1995-2000	0.0	(–0.1)	0.3	(0.2)	0.3	(0.3)	–0.1	(0.0)	0.7	(0.5)	0.3	(0.2)	0.3	(0.1)	0.2	(0.1)
2001-2006	0.1	(0.0)	0.2	(0.2)	0.9	(0.7)	0.4	(0.2)	0.7	(0.7)	0.0	(0.0)	0.4	(0.1)	0.0	(0.0)
Construction																
1990-1995	0.1	(0.1)	. .	. .	0.0	(–0.2)	. .	. .	. .	. .	0.0	(0.4)	. .	. .	0.1	(0.0)
1995-2000	–0.3	(–0.1)	0.1	(–0.1)	–0.1	(–0.1)	0.4	(0.4)	1.0	(0.5)	0.0	(0.0)	0.2	(0.2)	–0.3	(–0.1)
2001-2006	0.0	(–0.1)	0.0	(0.0)	0.0	(0.0)	0.2	(0.3)	0.3	(0.3)	–0.1	(0.0)	0.6	(0.5)	–0.2	(0.0)
Industry																
1990-1995	0.5	(1.9)	. .	. .	3.1	. .	. .	. .	. .	. .	0.7	(1.0)	. .	. .	0.4	(0.3)
1995-2000	0.8	(0.5)	1.4	(1.3)	1.9	(1.1)	2.0	(2.1)	1.3	(1.2)	0.5	(0.4)	0.5	(0.3)	0.2	(0.1)
2001-2006	0.5	(0.3)	2.1	(1.9)	1.4	(1.4)	1.6	(1.5)	4.3	(3.8)	0.0	(–0.1)	0.6	(0.4)	0.1	(0.0)
Trade																
1990-1995	0.1	(0.4)	. .	. .	–0.3	(0.3)	. .	. .	. .	. .	0.4	(0.3)	. .	. .	–0.1	(0.1)
1995-2000	0.2	(0.3)	0.9	(0.8)	–0.2	(–0.1)	0.9	(0.8)	0.6	(0.5)	0.2	(0.2)	0.5	(0.5)	–0.2	(–0.2)
2001-2006	–0.5	(–0.3)	1.0	(1.0)	0.5	(0.6)	0.7	(0.8)	0.1	(0.2)	–0.3	(–0.2)	–0.1	(0.0)	–0.3	(–0.2)
Finance																
1990-1995	0.2	(–1.5)	. .	. .	0.8	(1.1)	. .	. .	. .	. .	0.2	(–0.4)	. .	. .	–0.1	(0.0)
1995-2000	1.0	(0.4)	–0.1	(–0.4)	0.0	(–1.0)	0.6	(–0.3)	–0.1	(–0.9)	0.0	(–0.6)	0.3	(–0.2)	0.2	(–0.3)
2001-2006	0.4	(0.2)	0.2	(0.0)	0.8	(0.3)	0.5	(0.4)	0.0	(–0.3)	0.0	(–0.4)	0.4	(0.0)	0.5	(0.1)
Other services																
1990-1995	0.6	(0.3)	. .	. .	0.5	(2.3)	. .	. .	. .	. .	0.1	(1.2)	. .	. .	0.2	(0.3)
1995-2000	0.3	(0.5)	–0.2	(–0.1)	1.0	(1.2)	0.9	(1.2)	1.9	(1.6)	0.1	(0.2)	0.7	(0.8)	0.1	(0.3)
2001-2006	0.3	(0.3)	0.6	(0.7)	0.5	(0.5)	0.9	(1.0)	–0.1	(0.0)	0.1	(0.2)	0.7	(0.6)	–0.3	(–0.2)
Total services																
1990-1995	0.9	–0.8	. .	. .	1.0	3.7	. .	. .	. .	. .	0.7	1.1	. .	. .	0.0	0.4
1995-2000	1.5	1.2	0.6	0.3	0.8	0.1	2.4	1.7	2.4	1.2	0.3	–0.2	1.5	1.1	0.1	–0.2
2001-2006	0.2	0.2	1.8	1.7	1.8	1.4	2.1	2.2	0.0	–0.1	–0.2	–0.4	1.0	0.6	–0.1	–0.3
TOTAL																
1990-1995	2.6		. .		5.2		. .		. .		1.7		. .		1.1	
1995-2000	2.0		2.1		2.9		4.6		4.2		1.1		2.5		0.2	
2001-2006	0.8		3.9		3.9		4.3		4.7		–0.3		2.5		–0.1	

1. Data in parenthesis represent within-sector effects.
2. Sectors are classified as follows (ISIC Rev. 2): Agriculture: Agriculture, hunting, forestry and fishing (01-05). Construction: Construction (45). Industry: Mining, quarrying, manufacturing electricity, gas and water (1014 + 4041 + 1537). Trade: Wholesale and retail trade; repair of motor vehicles and household goods, and hotels and restaurants (5055). Finance: Financial assurance and real estate (6574). Other services: Transport, storage, communication and community, social and personal services (6064 + 7599).

Source: OECD calculations based on *Structural Analysis (STAN) Database*.

ANNEX 3.A2

Progress in structural reform

This annex reviews actions taken to follow productivity-related policy recommendations made in the 2008 *OECD Economic Survey of the Portugal*. Recommendations that are new in this Survey are shown in the box at the end of the chapter.

Recommendations in previous *Survey*	Actions taken and current assessment
A. Maximising the gains from integration in the world economy	
Reduce non-tariff barriers to trade	
Continue to reduce customs costs associated with exporting and importing, through upgrading and developing an integrated information technology (IT) system that can be used by all the main actors in importing and exporting, including customs, ports and airports and freight companies.	Since July 2009, all export-related customs declarations are produced at the customs authority by using an IT system.
	A Single Port Window, a technological platform involving all public relevant actors in importing and exporting, is in use in the main Portuguese ports.
Remove Portuguese specific (*i.e.* non-EU), penalties for non compliance with the customs code and other regulations.	No actions taken.
Maximise the benefits of FDI	
Reduce FDI restrictions in air transport, to promote competition and tourism trade.	There has been an increase in the number of low-cost airlines operating in the main Portuguese airports, although no formal action was taken to promote competition in the sector.
Improve the product market regulatory system	
Fully implement the SIMPLEX programme to improve the administrative and regulatory environment for business-government interactions.	The SIMPLEX program is being consistently implemented since its introduction in 2006. There has been a substantial reduction of administrative and regulatory procedures needed in business-government interactions. Simplex has been extended to municipalities through its 2009-10 Edition.
Streamline the licensing process and increase collaboration between central government and municipalities, for example through contracting arrangements, as this is important for effective implementation.	The licensing process is being streamlined by several measures, such as the "zero licensing" programme, further computerisation of procedures through the "Point of Single Contact" programme (set to be fully operational by January 2011), and simplification of commercial and industrial licensing (Decree-Law 21/2009, of January 19, and Decree-Law 209/2008, of 29 October, respectively). Licensing regimes were also simplified in the tourism sector.
	The *SimplexAutárquico* programme promotes collaboration in some licensing procedures between central government and a small but growing number of municipalities.
Harmonise regulations with major trading partners, particularly sector-specific regulations in services, including service sector standards and qualification requirements.	While transposing the Services Directive (2006/123/EC), sector-specific regulations have generally adopted rules on candidate selection procedures, tacit approval and nation-wide validity and unlimited duration for authorisations granted. Sector-specific "freedom to provide services" clauses were put in place.

Recommendations in previous *Survey*	Actions taken and current assessment
Facilitate SME access to capital markets	
Ensure public intervention to improve SMEs' access to financing remains focussed on solving market failures, such as information asymmetries. Maximise private sector capital contributions per euro of public capital at risk, and avoid outright grants or credit with a zero interest rate for SMEs.	Policies intended to improve SMEs' access to financing have been expanded through several programmes, such as *PME segura* (credit insurance), *FINICIA* (support new business start-up through technical advice and access to credit and venture capital), *FINTRANS* (encourage business re-sising and transfer), COMPETE (co-financed by the private sector, support the creation of risk capital and business angels funds).
Conduct a rigorous cost-benefit analysis of the programmes in place to promote SMEs' access to finance (for start-ups and more mature SMEs), in order to ensure maximum returns from public funds.	No actions taken.
Strengthening competition and improving infrastructure	
Increase the priority on price in public procurement criteria, differentiate the criteria used for procurement of consulting, infrastructure and goods and services and give the Competition Authority jurisdiction to issue decisions on public procurement concessions and contracts.	No actions taken.
Consider amending the Competition Law to repeal the Government's exceptional review power that allows it to overrule a Competition Authority decision to block a merger. Undertake a broad review across the economy of legal restraints on competition.	No actions taken.
Telecommunications	
Continue to lower mobile telephone termination charges and require that there be no discrimination of termination charges between calls within a firm's own network and calls from other networks to eliminate network externalities that favour larger firms.	From July 2008 to October 2009, the National Telecoms Regulator (ICP-ANACOM) implemented positive discrimination in mobile termination charges in favour of the smallest operator. In May 2010, ICP-ANACOM decided to further lower termination charges, which are set to decline until August 2011, therefore contributing to reduce the on-net/off-net gap.
Take action to increase ownership independence of the newly separated copper wire and cable-owned networks. Ensure there is effective competition between the two networks.	There is evidence of increased competition between copper and cable networks with bundled offers playing an important role. The incumbent market shares have decreased, especially in the fixed broadband access market where the entrants now have a combined market share of 56%.
Consider separating the ownership of PT multimedia content from the rest of the company to encourage competition.	In November 2007, the spin-off of PT Multimedia (now ZON) from Portugal Telecom (PT) allowed for a structural change in the Portuguese telecoms market, promoting platform competition between the incumbent public switched telephone network (PSTN) operator PT and the cable network operator ZON. However, the latter now possesses substantial media content in addition to its offer of bundled services.
Electricity	
Continue to encourage an increase in non-incumbent generation through expansion of the Virtual Power Plants scheme and issuing licenses to build new generation to non-incumbents.	The expansion through Virtual Power Plants was discontinued. Licenses to build new gas fired generation capacity have been issued but only one company made public a predicted entry date in the market.
Allow the regulator full independence to set retail tariffs.	No actions taken.
Fully implement the plan to phase out regulated retail tariffs and replace with market tariffs. Extend the phasing out to all consumers and, if necessary, introduce direct income support targeted to low-income consumers.	The Government has announced the phasing out of regulated tariffs in very high voltage, high voltage, medium voltage and low special voltage but the phasing out does not include domestic consumers.

Recommendations in previous *Survey*	Actions taken and current assessment
Transport	
Introduce a performance contract for both the rail track and rail companies with clear performance and financial targets linked to management compensation. Internationally benchmark both the rail track and rail operators to help set targets and encourage efficiency.	A new Performance Contract Regulation was enacted by the Railway Regulatory Unit (URF) of the Institute for Mobility and Terrestrial Transportation and came into force on 21 May 2010.
	The performance contracts are mandatory and the first proposals must be submitted to the URF by the end of July 2010. The contracts are based on penalties and compensations in case of delays, as well as prizes for good performance, evaluated on a multi-year basis. Public service contractWithin the context of the Iberian Electricity Market (MIBEL), an agreement was reached between Portugal and Spain (approved by the Portuguese Parliament in January 2009), to eliminate all regulated tariffs by January 2010, except for Low Voltage customers and management contracts targets will be linked.
B. Up-skilling the labour force	
Maintain the focus on developing human capital of youths to improve their employment and earning prospects; and continue to develop vocational and technical education to improve the school-to-work transition.	There has been a sizeable expansion of vocational education and training supply at the upper-secondary level, notably through the *Novas Oportunidades* program.
Promote life-long learning to help the workforce adjust to higher value-added production, favouring important private sector participation, both in defining the programmes needed and in supply (such as private institutions providing courses or courses being offered in private firms).	Lifelong learning is being promoted through the *Novas Opportunitades* program. The private sector is involved in the supply of training courses.
Monitor the implementation and evaluate the results of the "New Opportunity" initiative (education programmes for the young at risk of dropping out and training programmes for adults with low school attainment) as its scale expands, to ensure that programmes meet private sector demand.	There is currently an international experts' team developing an external evaluation study about the impact of the *Novas Oportunidades* program on adults' social and professional path. The 4-year study began in 2008 and it is supposed to publish its preliminary results in 2011.

Glossary

CBA	Cost-benefit analysis
CIT	Corporate income tax
CO_2	Carbon dioxyde
EPL	Employment protection legislation
EU	European Union
EU15	EU members before enlargement in May 2004
EU19	EU member countries that are also OECD member countries, except Slovenia
FDI	Foreign direct investment
GDP	Gross domestic product
GHG	Greenhouse gas
HICP	Harmonised index of consumer prices
IMI	Real estate recurrent tax
IMT	Real estate transaction tax
NAIRU	Non-accelerating inflation rate of unemployment
PES	Public employment services
PISA	Programme for international student assessment
PIT	Personal income tax
PNAC	National Programme for Climate Change
R&D	Research and development
SGP	Stability and growth programme
SME	Small and medium-sized enterprises
SOE	State-owned enterprise
SSC	Social security contributions
STW	Short-time working
TEIP	Educational territories of priority intervention
UB	Unemployment benefits
USD	United States dollar
VAT	Value added tax
VET	Vocational education and training

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