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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 the Czech Republic were reviewed by the Committee on 13 February 2014. 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 28 February 2014.

The Secretariat's draft report was prepared for the Committee by Jens Christian Høj and Sónia Araújo under the supervision of Andreas Wörgötter. Research assistance was provided by Béatrice Guérard. The report has benefitted from the co-operation of Robert Price, a consultant, and from valuable background research by Petr Maleček, seconded from the Czech Ministry of Finance.

The previous Survey *of the Czech Republic was issued in November 2011.*

BASIC STATISTICS OF CZECH REPUBLIC, 2012

(Numbers in parentheses refer to the OECD average)[a]

LAND, PEOPLE AND ELECTORAL CYCLE

Population (million)	10.3		Population density per km^2	130.5	(34.3)
Under 15 (%)	14.8	(18.1)	Life expectancy (years, 2011)	78.0	(80.0)
Over 65 (%)	16.4	(15.3)	Men	74.8	(77.3)
Foreign-born (%)	4.2		Women	81.1	(82.8)
Latest 5-year average growth (%)	-0.1	(0.5)	Last general election	October 2013	

ECONOMY

Gross domestic product (GDP)			Value added shares (%)		
In current prices (billion USD)	196.9		Primary sector	2.4	(2.5)
In current prices (billion CZK)	3 846		Industry including construction	37.3	(27.4)
Latest 5-year average real growth (%)	0.3	(0.6)	Services	60.4	(70.0)
Per capita, PPP (thousand USD)	27.3	(37.1)			

GENERAL GOVERNMENT

Per cent of GDP[b]

Expenditure	44.5	(42.8)	Gross financial debt	55.7	(102.4)
Revenue	40.1	(36.4)	Net financial debt	11.6	(64.0)

EXTERNAL ACCOUNTS

Exchange rate (CZK per USD)	19.5		Main exports (% of total merchandise exports)		
PPP exchange rate (USA = 1)	13.7		Machinery and transport equipment	54.4	
In per cent of GDP			Manufactured goods	17.4	
Exports of goods and services	78.0	(53.8)	Miscellaneous manufactured articles	11.0	
Imports of goods and services	72.4	(50.4)	Main imports (% of total merchandise imports)		
Current account balance	-2.4	(-0.5)	Machinery and transport equipment	41.9	
Net international investment position (2011)	-50.4		Manufactured goods	18.0	
			Chemicals and related products, n.e.s.	11.1	

LABOUR MARKET, SKILLS AND INNOVATION

Employment rate (%) for 15-64 year-olds	66.6	(65.0)	Unemployment rates (%)		
Men	74.6	(73.1)	Total (age 15 and over)	7.0	(7.9)
Women	58.3	(57.0)	Youth (age 15-24)	19.5	(16.2)
Average hours worked per year	1 800	(1 766)	Long-term unemployed (1 year and over)	3.0	(2.7)
Gross domestic expenditure on R&D (% of GDP, 2011)	1.8	(2.4)	Tertiary educational attainment 25-64 year-olds (%, 2011)	18.2	(31.5)

ENVIRONMENT

Total primary energy supply per capita (toe)	4.2	(4.2)	CO_2 emissions from fuel combustion per capita (tonnes, 2011)	10.7	(10.0)
Renewables (%)	7.5	(8.5)	Water abstractions per capita (1 000 m^3, 2011)	0.2	
Fine particulate matter concentration (urban, PM10, µg/m^3, 2010)	16.2	(20.1)	Municipal waste per capita (tonnes, 2011)	0.3	(0.5)

SOCIETY

Income inequality (Gini coefficient, 2010)	0.256	(0.304)	Education outcomes (PISA score, 2012)		
Relative poverty rate (%, 2010)	5.8	(10.9)	Reading	493	(497)
Public and private spending (% of GDP)			Mathematics	499	(494)
Health care (2011)	7.5	(9.5)	Science	508	(501)
Pensions (2009)	9.0	(8.7)	Share of women in parliament (%, November 2013)	18.9	(26.0)
Education (excluding tertiary, 2010)	2.8	(4.0)	Net official development assistance (% of GNI)	0.1	(0.4)

Better life index: *www.oecdbetterlifeindex.org*

a) Where the OECD aggregate is not provided in the source database, a simple OECD average of latest available data is calculated where data exists for at least 29 member countries.

b) 2011 for the OECD.

Source: Calculations based on data extracted from the databases of the following organisations: OECD, International Energy Agency, World Bank, International Monetary Fund and Inter-Parliamentary Union.

Executive summary

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

Main findings

The economy has remained weak for longer than many other OECD countries and a hesitant export-led recovery is materialising, but significant reductions of the output gap are unlikely to take place over the short-term, raising the risk of deflation. Also, the income convergence process *vis-à-vis* the euro area has stalled, reflecting the recession and a decline in potential growth, reflecting decelerating investment and productivity. The main policy challenges are to sustain the recovery and raise potential growth, pointing to a need for developing a more competitive service sector and better school-to-work transition as discussed in Chapter 1 and 2, respectively.

Supporting the recovery and potential growth. The weak labour market has resulted in a lack of real wage growth over the past couple of years. Headline inflation is declining as the effects of indirect tax increases are fading and as underlying inflation is remaining below the lower band of the inflation target. The fiscal situation is relatively good with a public deficit and debt below 3% and 50% of GDP, respectively. However, fiscal sustainability challenges still have to be addressed. One of the problems encountered in this respect has been the difficulty of bringing on board all stakeholders to implement the necessary reforms in areas such as pensions and health care.

Promoting competition. A competitive service sector is key to boost value added in production, stimulate innovation and exploit domestic sources of growth. Competition in the sector is inhibited by red tape; government involvement in competitive areas; and uneven application of competition policy. Since joining the EU, great strides have been made in removing these barriers. The competition framework is at par with best practise, but successful prosecution of hard-core cartels has rarely happened. In addition, regulation of food retailing occupies scarce resources. Regulation of network sectors, on the other hand, has been weak, although improving in some sectors. This has meant that the drive towards more competition in network sectors has been slower than in other European countries, leading to relatively high prices and slow implementation of new technologies.

Strengthening skill use and school to work transitions. The ongoing structural change of the economy has led to profound changes in labour demand, requiring a reallocation of available labour resources as well as workers with new and different skills. However, the education system has not sufficiently kept up with the exception of a large increase in graduates with tertiary degrees. Students that leave the education system without a degree are experiencing difficulties in finding a job, while many of those with vocational training find that either there is little demand for their skills or that their skills are not suitable to modern work practises. The large expansion of tertiary education mostly reflects higher intake in the public system, but also the emergence of many private institutions. The public system has not had a corresponding increase in resources, which could lead to bottlenecks and has raised concerns about how to secure quality that is at an internationally comparable level. The gender wage gap is high and the labour participation of women with young children is relatively low, accentuating labour shortages of the ageing society.

Key recommendations

Supporting the recovery and potential growth

- Maintain an accommodative monetary stance until deflation risks definitively recede.
- Preserve a neutral fiscal stance until the economic recovery has been established and thereafter return to gradual fiscal consolidation to secure fiscal sustainability.
- Use a multi-pronged approach to secure fiscal sustainability. In this respect, measures are needed to ensure an increasing effective retirement age. Moreover, the government should continue to secure that the indexation of pensions does not lead to old-age poverty problems. In addition, the government should consider options for diversifying income sources for pensioners. An additional measure could be to bring forward the increases in the statutory retirement age.
- Strengthen consensus finding for important reform initiatives and introduce an independent fiscal council with a broad remit.

Promoting competition

- Improve the managerial integrity of remaining state-owned enterprises by concentrating governance within a single authority. Privatise and divest business-related state-owned enterprises and activities.
- Ensure that the leniency programme is working properly to unearth cartels, and that efforts to eliminate bid-rigging are successful. Remove the special sector regulation for food retailing from the competition policy framework.
- Secure effective independence for all network regulators, improve the co-ordination between the competition authority and regulators, and have a common approach to what constitutes a proper definition of market dominance. Tackle vertical constraints on competition via effective ownership unbundling or via holding structures with financial separation of all activities that counters the risk of cross-subsidisation.

Strengthening skill use and school-to-work transitions

- Encourage employers to provide training to young unskilled workers through tax subsidies or targeted reductions in social security contributions. Looking ahead, if the statutory minimum wage increases sufficiently, an additional measure could be the introduction of a youth minimum wage linked to training.
- Increase participation of private employers in vocational education by simplifying institutional frameworks and governance. Introduce a contractual employment relationship between the apprentice and the employer. Expand workplace training by providing subsidies to the participating firms for difficult to place students.
- Secure quality in the provision of tertiary education by introducing output based accreditation criteria and student fees to increase resources for the provision of public tertiary education, accompanied by a mixed system of means-tested grants and income-contingent repayment loans.
- To boost female labour market participation and help families to reconcile family and working lives, provide an adequate supply of affordable and high quality early childcare facilities. Conditional on this development, reduce the maximum duration of the parental leave and replace part of the parental allowance with a system of childcare vouchers.

Assessment and recommendations

- *A bumpy recovery is under way after a prolonged recession*
- *Long-term growth challenges*
- *A stronger framework for promoting competition supports domestic drivers of growth*
- *Strengthening skill use and school-to-work transitions*

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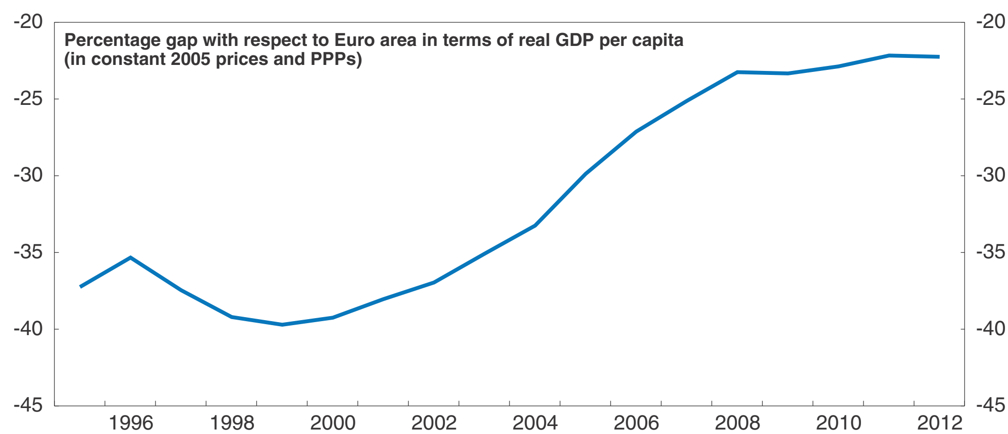
A bumpy recovery is under way after a prolonged recession

The income convergence process *vis-à-vis* the euro area has stalled, reflecting both a drawn-out economic recession and an estimated decline in potential growth from 3.5% to 1.5% – reflecting the fall in investment and decelerating productivity growth – more than in most other OECD countries (OECD, 2013a) (Figure 1). Thus, the most important macroeconomic policy challenges are to sustain an emerging recovery and raise potential growth.

Figure 1. **Convergence in GDP per capita**



Source: OECD calculations based on *OECD National Accounts Database*.

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The recovery of the Czech economy started in mid-2013 after contracting for six quarters. The main factor behind the contractions was weak domestic demand – partly due to accumulated fiscal consolidation of 2% of GDP in 2011-12 (Table 1). Slowing export market growth also played a role, although the export sector managed to gain market share every year until 2013. At the start of the recovery, the output gap was more than 4.5%, reflecting that GDP had fallen by nearly 4% below its pre-crisis peak.

After a prolonged contraction, employment began to expand again in 2011. Employment gains were supported by a reform of the labour code that allowed, notably, more flexible working hour arrangements and by an increase in the internationally low level of part-time employment (Figure 2). The expansion of employment was accompanied by a faster increase in labour participation, partly reflecting higher shares of population groups with relatively high labour market participation, and participation has reached the EU15 average (Figure 3, panels A and B). In all, the unemployment rate increased by less than ½ percentage point in 2012 before starting to decline and levelling off at just below 7% by end-2013 – 1¼ percentage point higher than in early 2009. The relatively small response in unemployment to the cycle reflects contractions in average hours worked.

Table 1. **Short-term macroeconomic indicators**

	2010	2011	2012	2013	2014	2015
	Current prices CZK billion	Percentage changes, volume (2005 prices)				
GDP	3 788	1.8	-0.9	-0.9	1.1	2.3
Private consumption	1 916	0.5	-2.1	-0.1	0.8	2.0
Government consumption	807	-2.7	-1.9	1.9	0.1	1.3
Gross fixed capital formation	929	0.4	-4.3	-3.3	0.4	2.3
Of which: Housing	159	-7.2	-1.6	-5.6	0.0	0.8
Final domestic demand	3 652	-0.2	-2.6	-0.5	0.6	1.9
Stockbuilding[1]		0.1	-0.1	-0.2	-0.2	0.0
Total domestic demand	3 661	-0.1	-2.8	-0.7	0.4	2.0
Exports of goods and services	2 519	9.6	4.7	0.1	4.6	5.0
Imports of goods and services	2 392	7.0	2.5	0.5	3.9	4.9
Net exports[1]	126	1.9	1.7	-0.3	0.8	0.5
Other indicators (% change, unless otherwise specified):						
Potential GDP	-	1.4	1.2	1.3	1.5	1.9
Output gap[2]	-	0.6	-1.6	-4.3	-4.7	-4.3
Employment	-	-0.2	0.4	1.0	0.6	0.7
Unemployment rate[3]	-	6.7	7.0	6.9	6.9	6.8
GDP deflator	-	-0.9	1.6	1.8	1.1	1.6
Consumer price index	-	1.9	3.3	1.4	1.0	1.3
Core consumer prices	-	0.3	1.0	0.8	0.9	1.2
Household saving ratio, net[4]	-	5.1	5.9	4.4	5.3	6.3
Trade balance[5]	-	4.1	5.6	6.4	7.4	7.7
Income balance[5]	-	-6.7	-7.5	-7.8	-8.4	-8.3
Current account balance[5]	-	-2.7	-2.4	-2.1	-2.3	-1.9
General government financial balance[5]	-	-3.2	-4.4	-2.9	-2.9	-2.9
Underlying government financial balance[2]	-	-4.5	-2.6	-1.6	-1.6	-1.7
Underlying government primary balance[2]	-	-3.3	-1.3	-0.3	-0.2	-0.4
General government gross debt[5]	-	48.2	55.7	58.6	61.2	63.5
General government debt, Maastricht definition[5]	-	41.4	46.2	49.0	51.6	53.9
General government net debt[5]	-	5.8	11.6	14.4	17.0	19.3
Three-month money market rate, average	-	1.2	1.0	0.4	0.2	0.6
Ten-year government bond yield, average	-	3.7	2.8	2.1	2.5	2.9

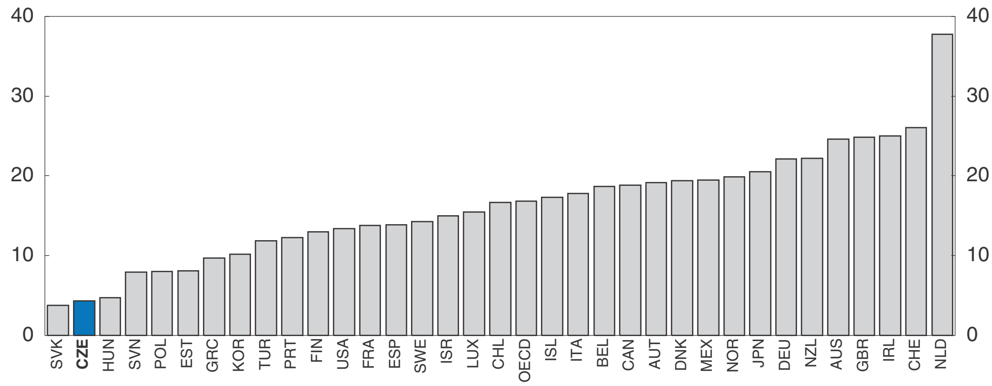
1. Contributions to changes in real GDP, actual amount in the first column.
2. As a percentage of potential GDP.
3. As a percentage of the labour force.
4. As a percentage of household disposable income.
5. As a percentage of GDP.

Source: OECD Economic Outlook Database.

The widening output gap (Table 1) and higher unemployment drove down core inflation in 2012 and 2013 below the lower bound of the inflation target range of 2% ± 1% (Figure 4). In response, the Czech National Bank (CNB) has appropriately pursued a very supportive monetary policy stance, with the two-week repo and the discount rate set to 0.05% and the Lombard rate to 0.25% (Czech National Bank, 2013), at or below the level of comparable policy rates in the euro area and elsewhere. However, these measures, although decisive, were not enough to eliminate deflation threats. As a consequence, the credibility of the inflation target was at risk. In spite of historically low long-term interest rates and narrow spreads *vis-à-vis* Germany (Figure 5), credit demand has not picked up (Figure 6).

Figure 2. **Part-time employment is relatively low**

Share of part-time employment across OECD countries, in per cent of total employment, 2012



Source: OECD, *Labour Force Statistics Database*.

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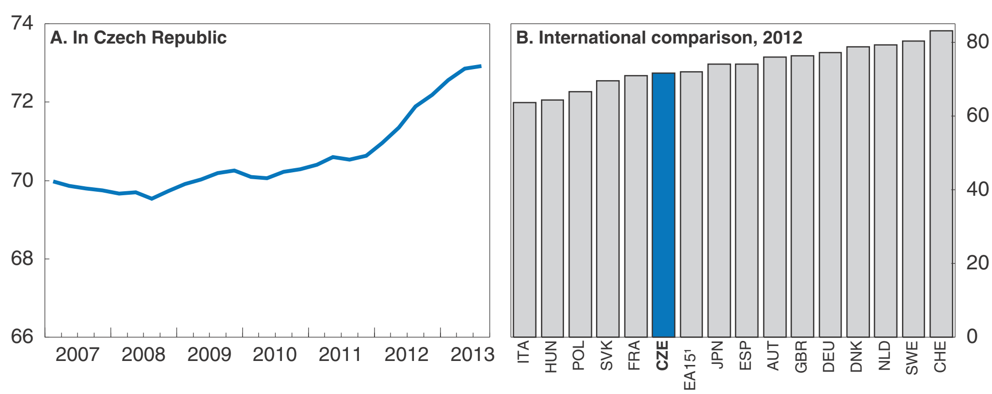
Figure 3. **Labour force participation has increased to the European average**

Labour force participation rate, in percentage of 15-64 population



1. Arithmetic average over 15 old members of the euro area.

Source: OECD, *Short-term Labour Market Database*.

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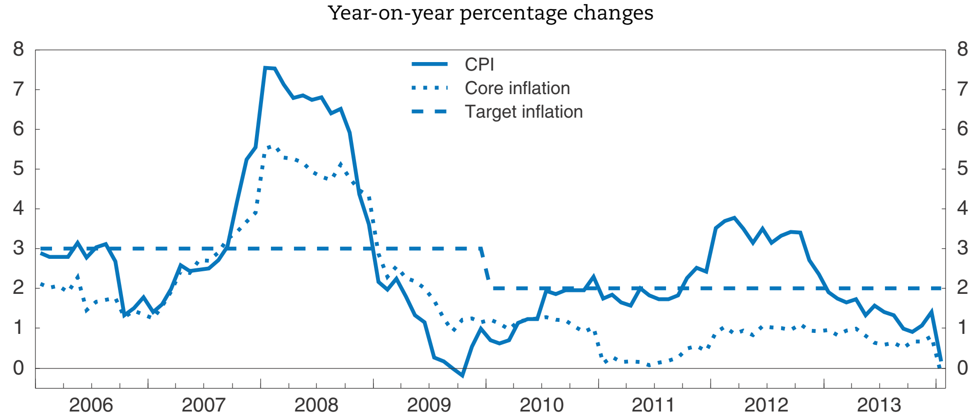
Figure 4. **Inflationary pressures remain weak**

Year-on-year percentage changes



Source: OECD, *OECD Economic Outlook Database*; and Czech Statistical Office.

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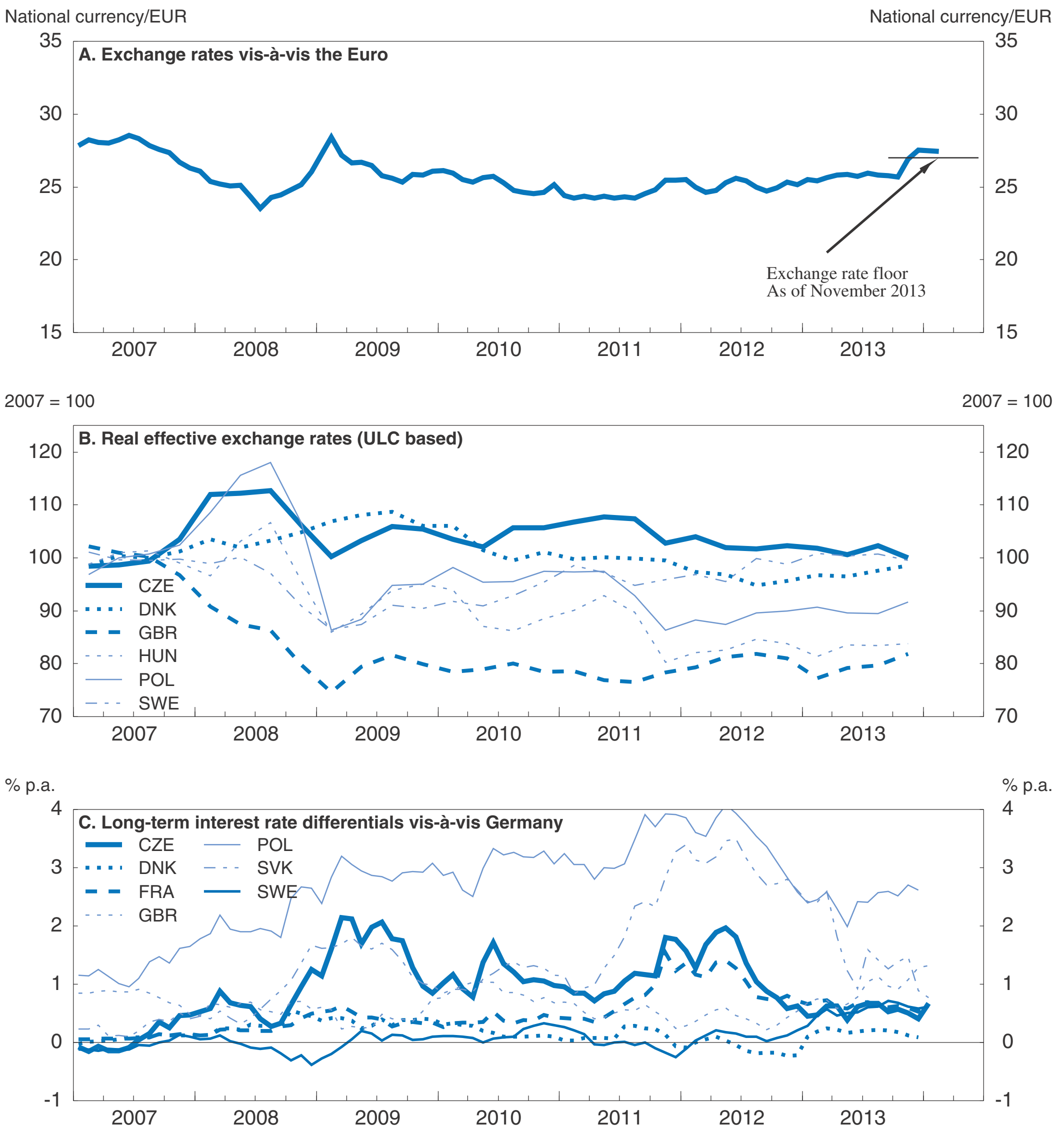
Figure 5. **A strong exchange rate is combined with low interest rate differentials**



Source: OECD, *OECD Economic Outlook Database.*

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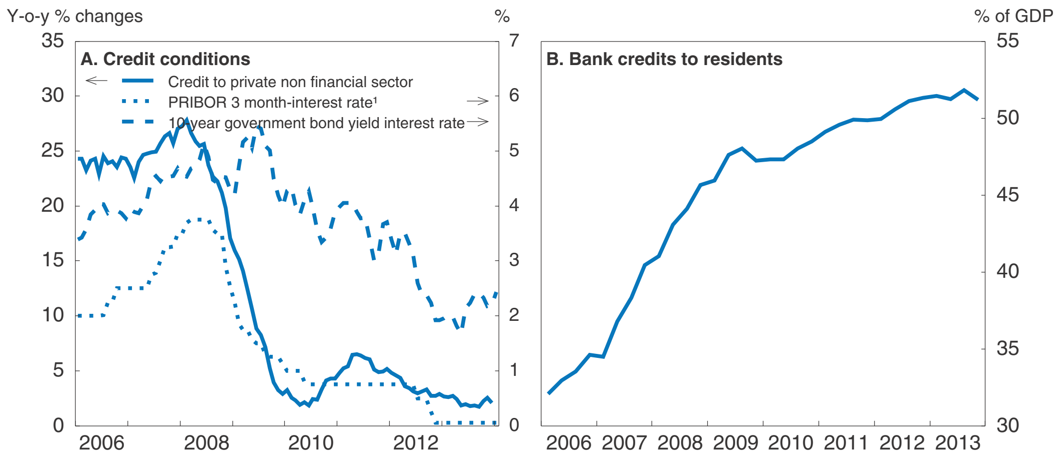
In this situation traditional monetary policy appeared to be exhausted and on 7 November 2013 the CNB announced an exchange rate floor of CZK 27 per euro allowing the exchange rate to float freely above it. The result was an immediate depreciation of about 4.5%. The CNB has indicated that this is a temporary measure and is communicating an exit from this measure once inflation has hit the target. The CNB expects the instrument to have its full effect on inflation within a horizon of up to 6 quarters, and OECD projections imply that the floor should be removed no later, and perhaps earlier, than that. Indeed, if inflation develops as projected, stopping the intervention, as planned, would further strengthen the inflation targeting framework.

Figure 6. **Credit expansion has slowed**



1. PRIBOR stands for Prague Interbank Offered Rate.

Source: OECD, *OECD Economic Outlook Database*; and Central Bank of the Czech Republic.

StatLink http://dx.doi.org/10.1787/888933007221

The outgoing government decided to put fiscal consolidation on hold and pursue a broadly neutral policy stance. The new coalition government has decided to adopt a fiscal policy that aims at keeping the public deficit below 3% GDP as well as a reform agenda focussed on promoting external competitiveness, investment, exports, infrastructures and quality of public services (Box 1). Given the still widening output gap, this implies a broadly neutral fiscal policy over the next couple of years. This seems appropriate considering the weakness of the economy and the possibility that further tightening at this point could derail a hesitant recovery (Valenta, 2011; Girouard and André, 2005). Moreover, the debt-to-GDP ratio is below 50% and, as mentioned, interest differentials are low. The authorities rightly wish to avoid budget deficits above the Maastricht ceiling, so the scope for discretionary fiscal measures is limited.

The economy is projected to gradually recover in response to stronger exports, reflecting growth in export markets, the use of Czech exports as intermediate inputs in the German supply chain (see below) and an expected continued strong export market share performance (Figure 7). These factors will feed into further improvements in domestic confidence and stronger investment (Figure 8). The strength of the projected recovery is not sufficient to secure more than a slow reduction of the large output gap and unemployment is projected to fall only marginally.

Risks to the export-led recovery are linked to developments in export markets, especially Germany and the rest of the euro area. If downside risks materialise in those markets, export growth would stall, harming confidence and the recovery. Another concern is the possibility of a renewed flare-up in European financial turbulence, which could affect the Czech Republic (Popov and Udell, 2012). However, the Czech National Bank has effective monitoring and prudential measures in place to minimise the risk of a sudden outflow of funds. On the other hand, a faster-than-expected recovery in confidence could trigger a more rapid upturn in investment, income and consumption growth.

Box 1. **Main policies in the government programme statement**

A new three party coalition government came into power in early 2014 with a majority of 111 seats out of 200 in the chamber of deputies, consisting of the Social Democrats, the political movement ANO 2011 and the Christian Democrats.

The new government will strive for a market oriented economy considering social and environmental balance as primary preconditions for sustainable growth. The government economic programme is based on promoting entrepreneurship, an efficient and transparent state administration, a well-functioning labour market, a sustainable pension system, and investment in education, research and innovation.

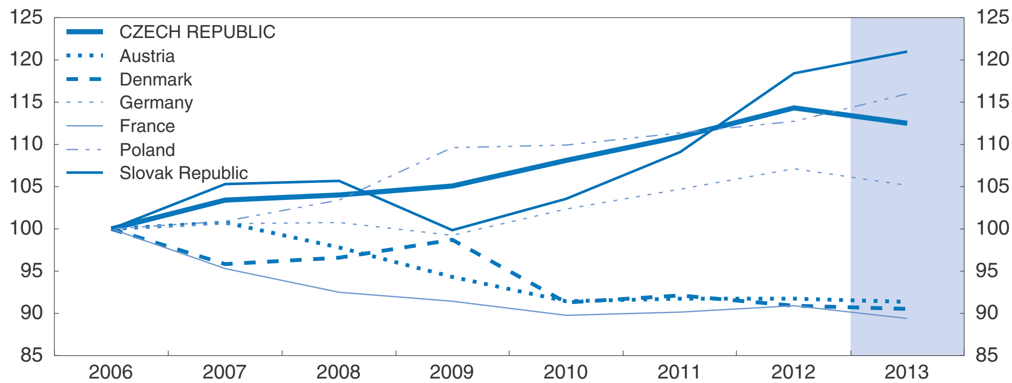
The new government's priorities include:

- Promoting entrepreneurship, sustainable economic growth, competitiveness of the economy and job creation with special emphasis on disadvantaged social groups and problem regions.
- Efficient use of EU structural funds, including for infrastructure development.
- Increasing the efficiency of public finance management, including administrative cost savings, review of mandatory expenditures and more transparent public procurement.
- Fighting corruption, financial crime and usury; promoting financial literacy of citizens.
- Developing high-quality and universally accessible services in the area of education, health care, social services, transport and security.
- Active membership in the EU including an active effort to create conditions for euro adoption.
- Adoption and implementation of the Civil Service Act to ensure the de-politicisation of the state administration, define clear and transparent criteria for hiring, rewarding and promoting public servants.
- Efficient use of ICT in public administration and development of the internet economy.

The key economic policies in the programme cover a wide range of areas. The government is committed to keeping the public deficit below 3% of GDP. It will seek to improve the efficiency of tax collection, reduce compliance costs and fight tax avoidance. With respect to pensions, the government aims to propose to withdraw the second pillar, as well as introducing measures to ensure the long-term stability of the public pension system and an adequate level of pensions. The minimum wage should be gradually increased to reach 40% of the average wage. The government will increase the level of staff in employment offices and pursue active labour market policies with a focus on disadvantaged groups, including women with young children, youth, low-skilled and older workers. Time-limited exemption for employer's social security contributions will be proposed for particularly fragile groups. The government will prepare a long-term strategy for the education system with an emphasis on enhancing quality of education and teachers' qualification at all levels. In addition, vocational education and training will be supported so as to better reflect labour market needs, while tertiary education at public institutions will remain free. Municipalities will be provided with funds to create sufficient capacity in kindergartens and elementary schools and the last year of pre-school education will become obligatory. The government will support the modernization of industry to increase its energy efficiency. Measures will be taken to further reduce the administrative burden for businesses. The government aims to re-launch the system of investment incentives for both foreign and domestic companies to stimulate projects with high added value and a high content of research and development.

Figure 7. **Export performance**

2006 = 100



Note: OECD projections for 2013.

Source: OECD, *OECD Economic Outlook Database.*

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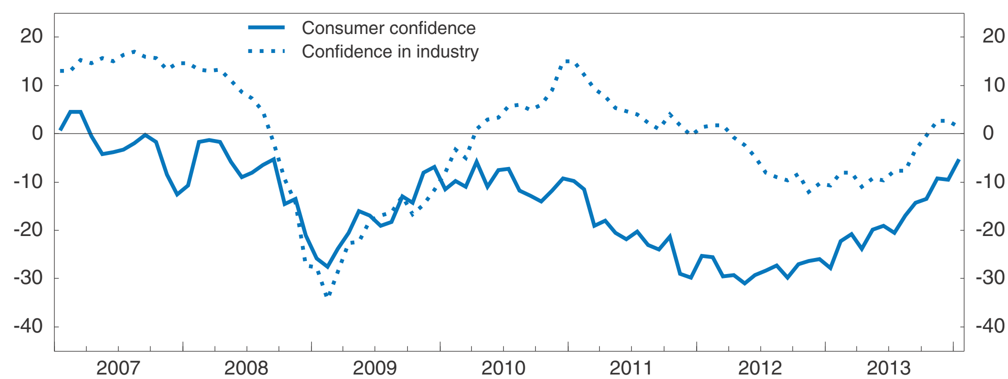
Figure 8. **Confidence is improving**

% balance, seasonally adjusted



Source: Czech Statistical Office.

StatLink http://dx.doi.org/10.1787/888933007259

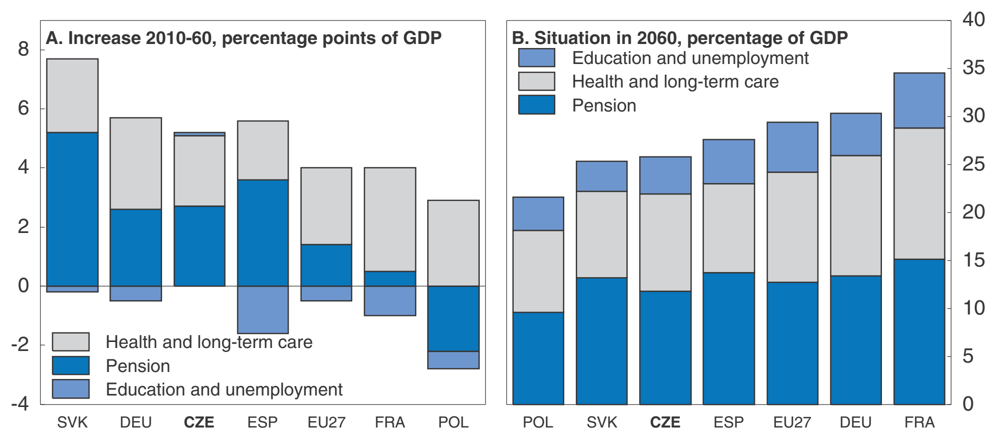
A long-term challenge is to secure fiscal sustainability

At about 50% of GDP, the public debt is by OECD standards not high, but on current settings it will continue to rise in the decades ahead. Thus, policy will have to tighten somewhat in the medium term. The debt-to-GDP ratio is projected to increase further (Table 1). If the deficit thereafter remains at 2.9% of GDP, debt dynamics calculations using OECD's medium-term growth scenario (which includes a recovery of potential growth to an average rate of 2.75% between 2015-30) imply that debt will increase to more than 60% by 2030. If potential growth turns out to be 1 percentage point lower than expected, the debt-to-GDP ratio would increase to around 70%. Debt would increase to similar levels if long-term interest rates are 1 percentage point higher than expected. Moreover, ageing-related spending is projected to rise by 5.2% of GDP by 2060 (more than 1 percentage point more than the EU average), coming mostly from pension spending that starts to accelerate along with the old-age dependency ratio in the late 2020s (Figures 9 and 10; European

Commission, 2012a). Deficit financing these ageing-related spending pressures could push debt up by another 10 percentage points of GDP by 2030.

To contain pressures on health spending, the *2011 Economic Survey* (OECD, 2011a) recommended the introduction of more competition among health insurance funds and improvements in the data infrastructure to secure better cost and quality control, but nothing has yet been done on these fronts. Future pension spending could be (partly) pre-funded by lowering public debt, but at the cost of skewing intergenerational burden sharing.

Figure 9. **Age-related public expenditure**

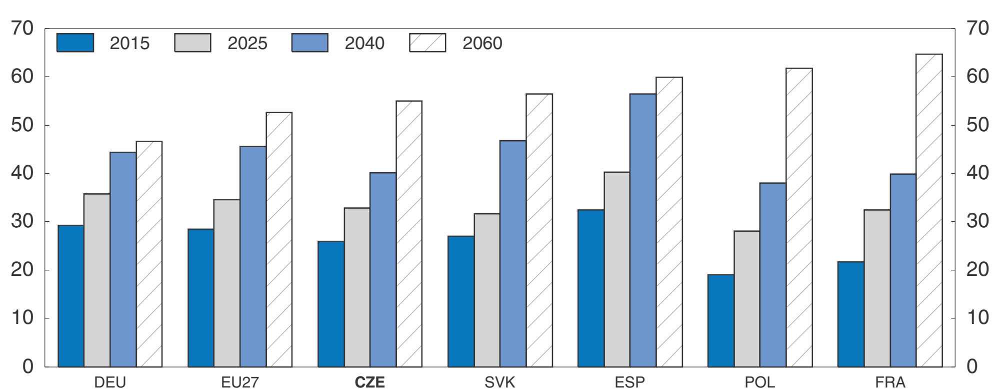


Note: The figure shows the decomposition of age-related budgetary expenditure projected under a reference scenario. In the reference scenario, healthcare expenditure is driven by a combination of changes in the population structure, assuming that half of future gains in life expectancy are spent in good health, and a low impact of income on per capita health care expenditure.
Source: European Commission (2012), *Fiscal Sustainability Report 2012*, European Economy 8.

StatLink http://dx.doi.org/10.1787/888933007278

Figure 10. **Old age dependency ratio**

Per cent of the population older than 65 as a share of population aged 15-64



Source: OECD calculations based on Eurostat data.

StatLink http://dx.doi.org/10.1787/888933007297

Pension spending increases are contained by the planned increase in the statutory retirement age (currently nearly 60 for females and 63 for males) to a common 66 years and 8 months in 2041 and to nearly 70 in 2060 and by indexing pensions (from 2016 onwards) to inflation plus one third of real wage growth. Without additional policy measures, this should ensure that pension spending is kept at between 8.5% and 9% of GDP until the late 2030s, before rising to nearly 12% of GDP in 2060 (European Commission, 2012a). Additional measures are needed to secure long-term sustainability of the pension system. The options in this area are policies to contain pension spending via lower replacement rates, higher contributions, or policies to boost the labour force participation of older workers.

In this respect, the Ministry of Labour and Social Affairs has prepared an amendment of the pension law that would index pension to price increases in pensioners' consumption basket (implying slightly faster indexation than when using the consumer price index) to secure unchanged pensions in real terms. A number of countries, including Canada, Belgium, France and the United States already index to overall consumer price inflation. Looking forward, however, there may be limits on how much the replacement rate in the public defined-benefit pension system can be compressed in the Czech Republic before political pressures arising from old age poverty concerns force a reversal. The system provides on average nearly 95% of pensioners' income and has strongly falling replacement rates. Entitlements up to nearly half of average earnings are paid out in full, but entitlements above this threshold are gradually reduced. Looking ahead, the government should continue to secure that the indexation of pensions does not lead to old-age poverty problems as well as being in line with the long-term sustainability of the pension system.

The previous government tried to supplement replacement rates by changing the pension formula in 2011 and by introducing a second pillar with voluntary participation in 2013, but by mid-2013 only 80 000 contracts had been signed compared with the 1 million contracts expected in the 2013 Convergence Programme, and the deadline for older workers (+35 years) to sign up has expired. Moreover, the new government intends to eliminate this pillar. Nevertheless, the government should consider options for diversifying income sources for pensioners. As discussed in the previous *Survey* (OECD, 2011a) a second pillar system could be more successful if allowing voluntary contributions and basing participation on having an opt-out clause rather than current opt-in system.

The above policy initiatives should be complemented with measures to secure that the effective retirement age increases at the same pace as the planned increase in the statutory retirement age. If this does not suffice to secure the sustainability of the pension system, an additional measure would be to bring forward the increases in the statutory retirement age.

A stronger fiscal policy framework could improve policy formulation and implementation

The fiscal policy framework is centred on a fiscal target and a three year rolling budget framework that converts budget targets into expenditure ceilings. However, these ceilings are only binding for the state budget and six state funds (60% of general government spending), reflecting the constitutional independence of municipalities (which are nevertheless closely scrutinised by the Ministry of Finance and their creditors) and the exclusion of health insurance funds (which are supposed to balance their budgets). Moreover, frequent revisions of end-year targets are undermining the effectiveness of the three-year budget horizon.

The Ministry of Finance has proposed a target of a balanced budget in structural terms (as compared with the 1% deficit target agreed with the European Commission). The proposal also contains a debt brake rule for the central and local governments, requiring corrective and progressively stronger measures once public debt exceeds 45% of GDP. For such a measure to work properly it is important to make sure that there is enough room for the cyclical variation in order to avoid a pro-cyclical policy stance close to the ceiling. The proposal includes a Fiscal Council (to improve budget preparation, implementation and monitoring) and a Committee for Budgetary Forecasts (to assess the realism of the government's macroeconomic and budget forecasts). This is consistent with EU rules. The Council is to have 5 members, nominated by the president, the senate, the central bank, the Ministry of Finance and local governments, and elected by parliament (Ministry of Finance, 2013). Together with the proposed introduction of more demanding and regular reporting criteria, including annual reports on tax expenditures and contingent liabilities, the proposed framework is a welcome measure to promote fiscal sustainability, transparency and accountability.

The structural budget objective could be strengthened by linking expenditure targets to long-term fiscal sustainability concerns, such as debt targets, and by including municipalities via an internal stability pact that stipulates their (medium-term) budget objectives within the overall fiscal framework. In this respect, a Fiscal Council could play an important role in assessing the budgetary stance of all government levels and recommending corrective actions.

The legislation should ensure the Council's independence (including secure financing) and that it has sufficient resources to become a recognised centre of expertise to provide independent advice in the fiscal debate, including warnings against using cycle revenue increases for financing new structural spending measures, following the recent OECD guidelines (OECD, 2013b). It would be particularly useful in the Czech Republic, where there are relatively few (governmental and non-governmental) bodies participating in the fiscal debate, to extend the Council's mandate beyond what is now envisaged to include structural analysis, as in Korea and Sweden, and cost estimates of new spending measures, as in Canada, the Netherlands, and the United States (Curristine et al., 2013; Calmfors, 2010; Calmfors and Wren-Lewis, 2011). Structural analysis would allow the Council to provide important unbiased inputs (including clear explications of complicated trade-offs) into the debates concerning fiscal sustainability and public sector efficiency (as in Australia, Canada, the Netherlands, and the United States) which could build support for reform measures.

Key macroeconomic policy recommendations

- Maintain the current accommodative monetary stance until deflation risks definitively recede.
- Preserve a neutral fiscal stance until the economic recovery has been established and thereafter return to gradual fiscal consolidation to secure fiscal sustainability.
- Use a multi-pronged approach to secure fiscal sustainability. In this respect, measures are needed to secure an increasing effective retirement age. Moreover, the government should continue to secure that the indexation of pensions does not lead to old-age poverty problems. In addition, the government should consider options for diversifying income sources for pensioners. An additional measure could be to bring forward the increases in the statutory retirement age.
- Strenghten consensus finding for important reform initiatives and introduce independent fiscal council with a broad remit.

Long-term growth challenges

The OECD estimates potential growth to be around 1.5% at present. Implementing structural reforms of labour and product markets to achieve at least the average stance in the OECD could push potential growth to an average of 2.75% in the period to 2030, before an ageing-related contraction in the labour supply reduces it by 1 percentage point on average until 2060 (OECD, 2012a). The relevant product market reforms are discussed in Chapter 1. Labour market reforms have been analysed in previous *Surveys* and some of the main issues are discussed further in Chapter 2 (OECD, 2011a, 2010a and 2008a). The effectiveness and impact of these reforms could be further enhanced by broader and well-targeted use of EU structural funds, where the absorption remains low: in the programme period 2007-13, only half of the allocated funds were absorbed in projects with a fully completed financing process. In addition, good public governance and stable institutions are important for economic performance, highlighting the need for stronger consensus building among all stakeholders, particularly to implement necessary structural reform, and for fighting corruption.

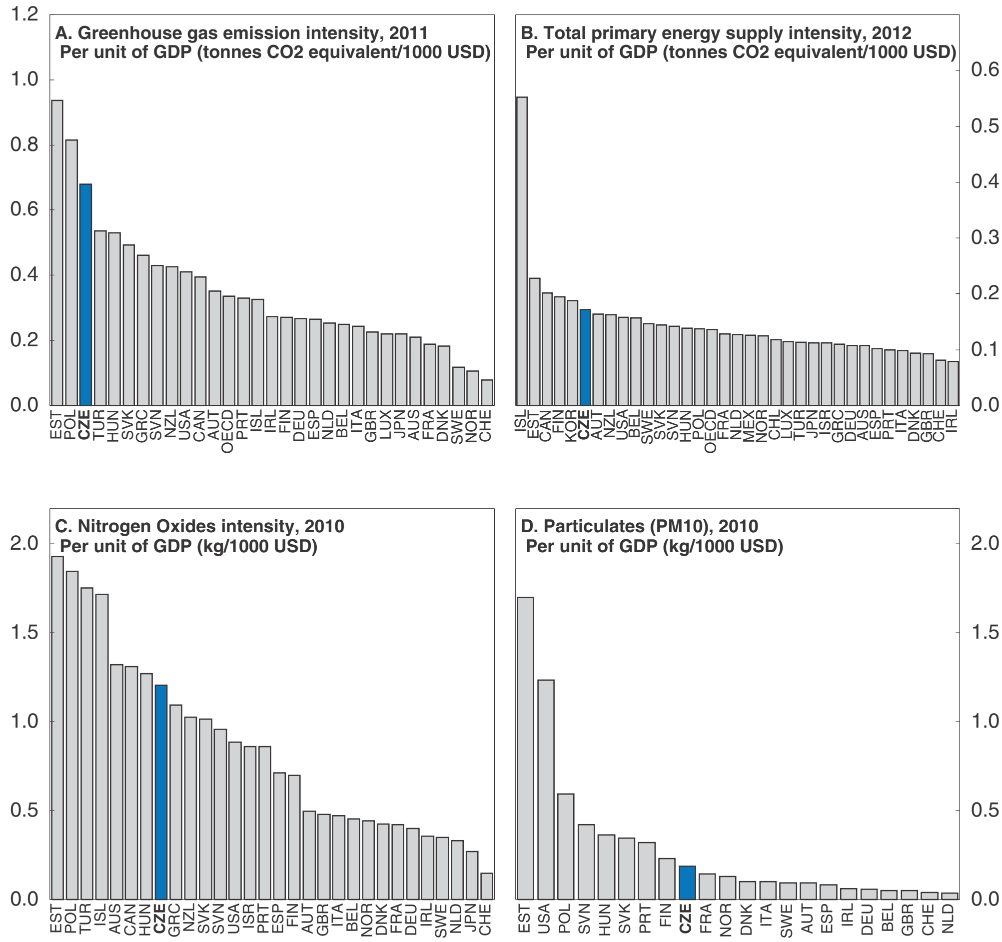
Environmental challenges must also be addressed

An important long-term challenge is to improve environmental outcomes, a prerequisite for sustained economic growth and, more broadly, higher living standards (OECD, 2011a). Greenhouse gas emissions have been reduced since 2000, but the emission intensity (relative to GDP) is relatively high in part because of high energy intensity (Figure 11, panels A and B). Emissions will increase along with the economic recovery, but as emissions from sectors outside the European Emission Trading System are already 8% below their target value in 2013, the Czech Republic should have relatively few problems in meeting its EU 2020 emission target of a 9% increase relative to 2005.

The Czech Republic has successfully addressed a substantial part of the environmental burden from the Communist era, such as reducing SO_2 emissions and improving river water quality, although emission intensity of non-greenhouse gas emissions tends in most cases to be relatively high (panel C). Moreover, regional environmental issues need to be addressed, particularly in the highly industrialised Moravian-Silesian region that has one of the highest concentrations of Particulate Matter (PM10) among the EU regions, and with annual limit values for this and other pollutants (such as benzo(a)pyrene) regularly being breached (European Environment Agency, AirBase v. 7 data 2011).

Part of the emission reduction strategy has relied on developing renewable energy sources. According to the 2012 National Renewable Energy Action Plan, the share of electricity from renewable sources (including hydropower) was 11.5% of total electricity consumption, as compared with a 2020 target of 13.5% (Ministry of Industry and Trade, 2012). Photovoltaic power has expanded rapidly in response to the introduction of guaranteed prices and falling investment costs, but government subsidies amount to 0.25% of GDP and costs from higher electricity prices for private entities are three times higher than that. Another environmental concern is that, despite progress, there are still 22% of residents living in dwellings not connected to waste water treatment plants. Flooding has become more frequent and severe over the past 15 years, which could be combated by supporting and recreating natural features of the landscape, including stricter zoning laws. Stricter zoning would also have positive effects on soil quality and conservation, and reinforce natural water filtration to improve ground water quality. EU structural funds

Figure 11. **Environmental indicators**



Source: OECD, *Environment Database*.

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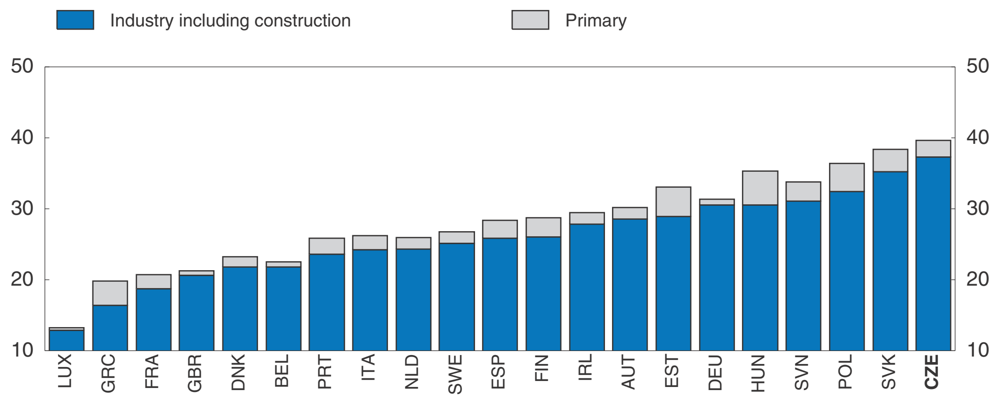
could be used to address some of these environmental challenges as national disbursement rules now include environmental projects for large producers (and pollutants).

Income convergence has stopped

The convergence process *vis-à-vis* the euro area has come to a halt since 2008. Foreign direct investment and export-driven growth underpinned a share of industry in value added of nearly 40% – the highest among the European OECD countries (Figure 12). This reflects the traditional strengths of the Czech economy and a policy focus on promoting manufacturing output and exports. Given the size of this part of the economy, the scope for further income convergence is mostly via productivity gains rather than a larger industrial sector.

Figure 12. **Value added shares by industry**

In percentages of total gross value added, 2012



Source: OECD, *National Accounts Database.*

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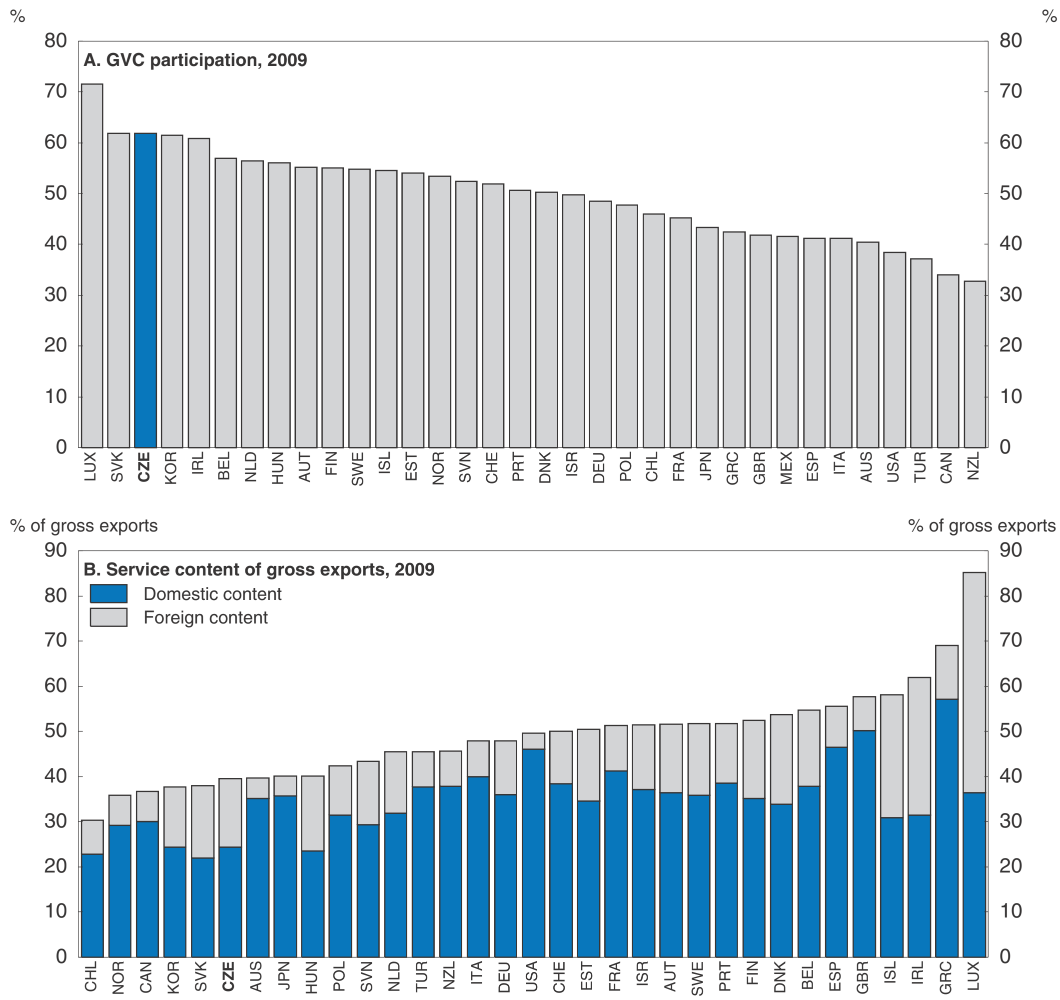
A principal factor behind the rapid technology catch-up has been the rapid and deep integration of the Czech economy into German led supply-chains (Baldwin, 2012; Elekdag and Muir, 2013) (Figure 13, panel A). Bilateral trade with Germany alone amounts to nearly half of Czech GDP and relatively few firms export to countries outside the EU (IMF, 2013; Araújo and Gonnard, 2011). The rapid integration reflects an initial large differential in unit labour costs, a relevant labour skill endowment and bilateral advantages, such as geographical proximity, similarities in traditions and industrial sectoral structure which attracted large inflows of foreign direct investment, particularly in the form of modern assembly technology in the electrical and transport equipment producing sectors. As a result, Czech export oriented manufacturing is focussed on final products with a relatively large amount of imported intermediate inputs, while Czech production of intermediate goods is relatively little used in Czech exports and as intermediate input in international production (OECD, 2013c). Likewise, the domestic service sector is poorly integrated as its content in exports is among the lowest in the OECD countries (panel B).

Thus, the challenge for Czech policy makers to better exploit the favourable position in the global supply chain is to increase the content of Czech produced intermediate goods and services in final exports as well as move Czech final production up the value added chain. This requires a continuous skill upgrade of the labour force to match technology driven changes in labour demand through a more flexible and effective education system (IMF, 2013; OECD, 2013d) as discussed in Chapter 2. Boosting the service content in final production to secure higher value added production requires modern and competitive services – such as business services, transport and logistics (OECD, 2013c). A competitive service industry also provides innovative Small and Medium sized Enterprises (SMEs) with auxiliary support for complex tasks, facilitating moving production up the value added chain and supplying sophisticated inputs to larger exporters. An additional benefit of a larger services sector is the higher prevalence of part-time jobs, which tend to favour female labour force participation. However, such services are often sheltered from international competition and therefore require a strong domestic competition policy (Chapter 1).

Figure 13. **Czech Republic is highly integrated in the global value chain**



Source: OECD (2013), *Interconnected Economies: Benefiting From Global Value Chains*; OECD-WTO Trade in Value-Added *Database* (TiVA).

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A stronger framework for promoting competition supports domestic drivers of growth

Making regulation more competition friendly and reducing administrative overheads

Despite improvements, important barriers to entrepreneurship remain in terms of bureaucratic delays for construction, business start-ups and other operational impediments, particularly at the local level (World Bank, 2013). Another often voiced concern from the business community is “gold-plating” regulation, where the Czech adaptation of European regulations exceeds the standards of European Community directives without a clear estimate of the involved costs and benefits. Regulation can be improved by submitting it to more effective regulatory impact assessments (RIA). Increasing the independence of the current assessment committee by making it into an independent agency would help in this regard. Perhaps most important is to complete the process of dismantling economic regulations for services as defined under the EU Services

Directive. With respect to liberal professions, the most problematic aspects are excessive, confusing and fragmented regulation (Ministry of Education, Youth and Sports, 2013).

Impediments to the growth of SMEs come from state interference, including substantial state ownership, deficiencies in public procurement procedures and corruption. A significant number of state-owned enterprises remain and they have experienced severe governance problems (SAO, 2013). According to the OECD guidelines on Corporate Governance of State-Owned Enterprises, public control should be more transparent, and separated from the State's regulatory function, by concentrating the ownership control function within a single authority enforcing professional corporate governance and explicit financial and other performance objectives (OECD, 2005 and 2011a). As recommended in the *2011 Survey*, a number of state enterprises still engaged in commercial activities need to be privatised or to divest such activities.

Public procurement continues to pose risks in terms of breaches of procedures and standards. New legislation is in place to correct these deficiencies and needs to be implemented vigorously. At the same time, irregularities in the disbursement of public funds may involve the professional integrity of civil servants, pointing to a need for a new Public Servants Act to separate political appointees from non-political staff, improve transparency, and create a well-functioning career system to reduce high staff turnover. This could be backed with a requirement of asset declarations of government officials involved in public procurement. The ranking in the Transparency International's corruption index is unfavourable and so are the scores concerning perceptions and actual experiences of corruption as reported in a recent EU report (European Commission, 2014). Also, there is low awareness of international bribery risks as addressed by the OECD anti-bribery convention (OECD, 2013e).

Czech merger policy follows European practice, but *ex post* impact assessment of decisions in merger cases should be introduced. The prosecution of cartels involved in collusive anti-competitive behaviour has been desultory, apart from a concerted attack on bid-rigging in public procurement. The unearthing of hard-core cartels has been strengthened by a revamping of the leniency programme in 2012, including the introduction of criminal sanctions, and the reform should be monitored to ensure it works effectively. However, an unresolved issue is how a proposal for an increased use of private enforcement, i.e. the awarding of compensation, interacts with the leniency rules. At the same time, the use of competition advocacy and settlement processes to solve what are considered less serious cases may be a problem if it is perceived that non-competition issues, such as industrial policy considerations, enter into the assessment processes. The recent revision of advocacy tools helps in this respect.

The resources of the competition authority may be inadequate for the effective implementation of its mandate. The overall staff level is on the low side compared with other competition authorities, and high staff turnover creates skills shortages. Also, apart from merger control, resources seem skewed away from competition policy enforcement towards other administrative areas (see below). The low rate of initiation of dominant position cases is likely to be related to resource constraints in addition to the complexities of proving abuse. The authority's increasing use of market surveys is welcome as a means of identifying the presence of competitive anomalies, but the surveys are costly. Moreover, bottlenecks have resulted in an increasing number of cases being rejected after often long and drawn out judicial review by the competition court (the Administrative Regional Court in Brno). A more effective competition policy requires a markedly shorter judicial review process.

The retail sector is dominated by larger outlets, providing scale benefits for consumers. However, concerns about the impact of unequal bargaining power on small suppliers, particularly farmers, has led to special sector regulation in food retailing to improve producer power *vis-à-vis* distributors. This regulation is rather prescriptive and its effect has been to increase tensions between retail chains and their suppliers. This regulation should not be part of the competition policy framework. Legitimate concerns over consumer protection should be addressed through health and safety regulation. Industrial policy and sector concerns should also be addressed directly. Contractual imbalances associated with unequal bargaining power should be addressed by contract law or unfair commercial practices laws (Høj et al., 2007).

Network consumers suffer from inefficiencies and high prices

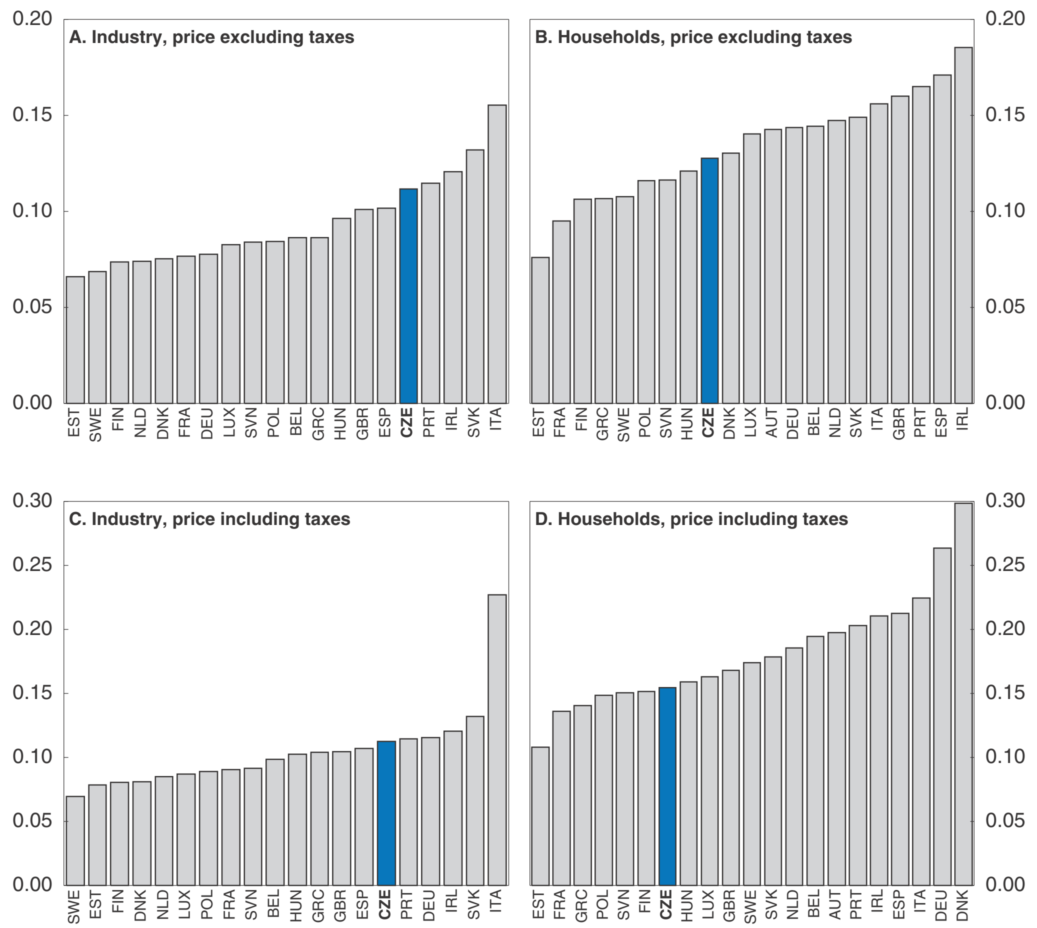
A common concern for network industries is the lack of effective unbundling as the minimalist legal approach leaves the incumbents/network managers with too much power to block (upstream) market entry, restrict infrastructure investment and cross-subsidise. Unbundling in the energy sector according to the EU third energy packages has been completed. Nevertheless, ownership unbundling would be the first-best option. Alternatively in some sectors, clear separation of network managers from operators via holding companies could be considered. Another concern is that some sector regulators lack effective independence, which leaves them with insufficient incentive to police abuses of dominance; in the case of the energy regulator this has necessitated legislation to reinforce its independence and this should become the general model.

Network sectors have strong natural monopoly elements, requiring sector regulation. Some of these sectors have frequently been cited as problem areas with respect to infrastructure delivery and popular perception is that some of these industries have been performing poorly in terms of serving consumers' interests (European Commission, 2012b). A problem in network industries is that at times the competition authority and the network regulators come to different conclusions concerning the degree of competition in the market.

In the highly concentrated electricity sector, there has been no instance of domestically instigated competition-infringement investigations or sanctions for abuse of dominance, despite it being a highly vertically integrated industry with weak (legal) unbundling. However, market liberalisation has led to the establishment of new energy distribution companies and increased competition. To prevent cross-subsidisation, the energy regulator requires cost reporting directly allocated to each regulated activity. Nevertheless, pre-tax prices for industry are relatively high (particularly when compared with neighbouring countries), while post-tax prices are in line with those in neighbouring countries, suggesting that the public purse is compensating for a lack of competition (Figure 14). In addition, surveys show that over half of Czech firms see electricity infrastructure pricing and provision as a major business constraint. For consumers, pre-tax prices are at par with the EU average and post-tax prices are relatively low, helping to explain that consumer surveys suggest that households have no particular problems with electricity provision. Moreover, in most countries prices of industry are lower than for households, reflecting relative cost of provision, while in the Czech Republic prices are very similar, indicating effective cross-subsidisation.

Figure 14. **Electricity prices**

Price in EUR per kWh, 2012[1]



1. 2011 data for Spain.

Source: *IEA Energy Prices and Taxes Database* and OECD calculations.

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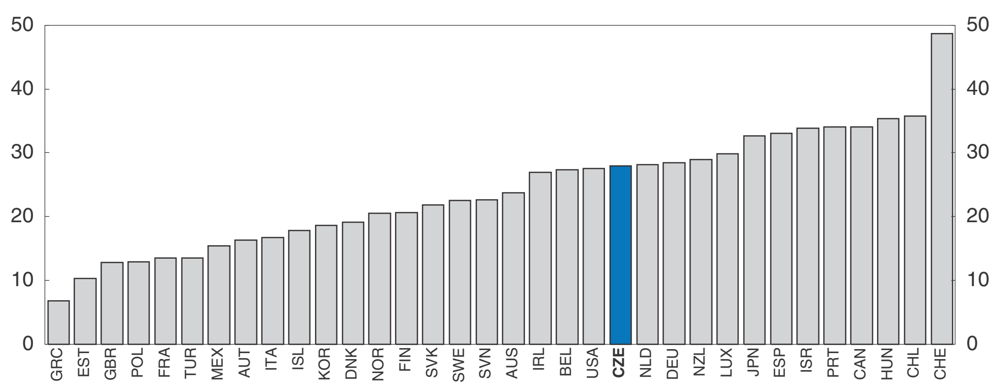
Concerns have also emerged that the existing regulatory regime may not be generating an adequate level of infrastructure investment (European Commission, 2012b; World Bank and IBRD, 2009). A particular issue is the strong position of the government-owned incumbent (CEZ), which has roughly 70% share of the generation market, where national energy policy imperatives (social, environmental and national security driven) have given the incumbent the possibility of extracting economic rents from coal, renewable and nuclear energy sources. The possibility is somewhat curbed by the integration with electricity markets in neighbouring countries. This should be countered through effective ownership unbundling, further divestment, and a more stable energy policy (Chapter 1).

The liberalisation of the Czech gas market has been successful in part because the energy regulator has ensured that market dominance did not hinder market access, boosting the number of gas suppliers and stimulating a significant increase in switching. Nevertheless, pre-tax prices for household are relatively high, and noticeably so when compared with neighbouring countries, albeit post-tax prices are similar. Indeed, concerns have emerged that gas market participants have inflated their profits by exaggerating the value of their past investments and hence their regulated asset base. In response, the regulator proposed to cut short by one year the current five-year regulatory agreement. The proposal was not accepted in the end and it is important to remain vigilant that regulatory interventions do not undermine the credibility of the regulatory system as it may raise the cost of capital and deter future investment in the sector.

In the telecommunications market competition and regulation, particularly of the mobile segment, seem weak. Since spring 2013, telecommunication prices have come down rapidly, but remain high by international standards, particularly for mobile services, as are profit margins (Figure 15). The number of mobile virtual network operators (MVNO) has expanded rapidly to reach about 50 registered MVNOs by end-2013. However, their combined market share remains less than 0.5% of telecommunication traffic. This reflects partly that they have little data transmission. Effectively the ICT sector continues to have a highly concentrated structure, suggesting that dominant behaviour may still be an issue. The powers of the competition authority over the sector were strengthened in 2007 and the sector has been the subject of a number of competition policy investigations. However, cases tend to be very slow-moving and difficult to prove, particularly where there are judicial differences over the definition of the "relevant market". Prospects for developing a more competitive market depended on reserving a block of spectrum for a new entrant in the recent auction of 4G licences to boost the number of network operators to four, although in the final auction this failed to materialise.

Figure 15. **Mobile prices remain relatively high**

OECD 100 calls mobile basket,[1] in USD, November 2013



1. OECD basket of mobile telephone charges, 100 calls, per month, VAT included, November 2013.

Source: OECD and Teligen Tariff and Benchmarking Knowledge Center.

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This means that the onus of ensuring competitive markets must rely on securing non-discriminatory access for MVNOs, either through regulation or investigations of abuse of dominant position and the facilitation of private actions for redress of damages in the courts. The introduction of MVNOs in the Czech telecom market is a positive development. So far, however, no Full-MVNOs have developed that manage their own Mobile Network Codes (MNCs) and could change host network without having to issue new SIM-cards to their customers. The government is advised to investigate whether there are regulatory or competitive barriers that preclude MVNOs to choose to become Full MVNO independent of their host network. In addition, the same regulations should enable non-telecom companies such as car companies, energy companies and the central government to become independent of mobile operators.

The transport and postal services sectors are in a state of transition, with growing downward pressure on prices:

- The benefits of opening up the rail network for passenger services can be seen in fierce ticket price competition on a few main lines. However, the partial separation of the government owned incumbent's operational activities from infrastructure management, together with the lack of a fully independent regulator, creates the risk of operational barriers to entry, under-investment in infrastructure, cross-subsidisation of transport activities and predatory pricing. Financial separation of all activities should be designed in a way to counter the risk of cross-subsidisation.
- The postal monopoly has been removed, but potential distortions to competition arise from the obligation of all postal service providers to contribute to the reimbursement of the universal service costs provided by the incumbent, which would impede entry if this payment were set too high. In addition, there is a danger of cross-subsidisation within the widely diversified operations of the incumbent.

Key recommendations to promote competition

- Improve the managerial integrity of remaining state-owned enterprises by concentrating governance within a single authority. Privatise and divest business-related state-owned enterprises and activities.
- Ensure that the leniency programme is working properly to unearth cartels, and that efforts to eliminate bid-rigging are successful. Remove the special sector regulation for food retailing from the competition policy framework.
- Secure effective independence for all network regulators, improve the co-ordination between the competition authority and regulators, and have a common approach to what constitutes a proper definition of market dominance. Tackle vertical constraints on competition via effective ownership unbundling or via holding structures with financial separation of all activities that counters the risk of cross-subsidisation.

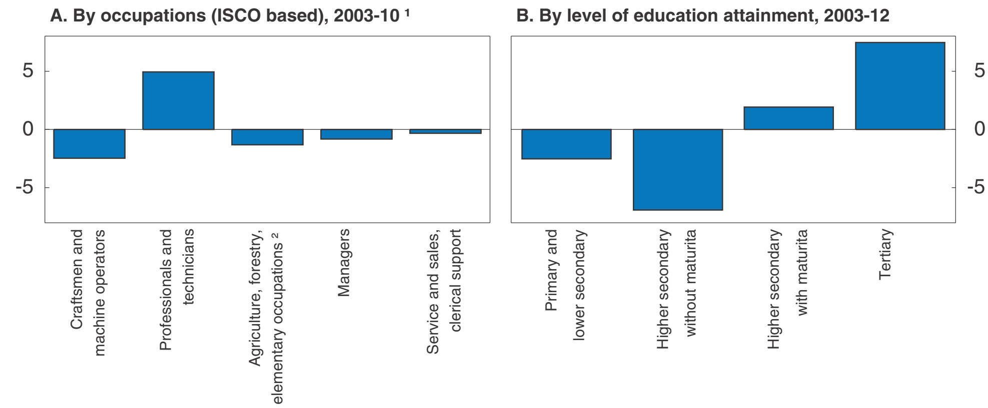
Strengthening skill use and school-to-work transitions

The transition to a market economy has led to significant changes in the labour market. In manufacturing, employment losses in low-technology intensive and heavy industries were offset by expansion in the transport equipment and electronics sectors. This shift has boosted the share of professionals and technicians relative to total employment, while reducing the share of all other occupations (Figure 16, panel A). The shift also increased the share of workers with tertiary education by more than 7 percentage points and reduced the share of workers with apprenticeships by a similar amount (panel B).

The transformation in employment patterns has not been accompanied by changes in relative wages across occupations or by a dispersion of wages within occupations. This means that relative wages are poor signals to students when they choose their studies.

Figure 16. **The occupation and education structure of the labour force is changing**

Change from 2003 in shares of employment, in percentage points



1. A change in the classification of occupations from ISCO-88 to ISCO-08 precludes meaningful comparisons of changes in the occupation structure of employment from 2011 onwards relative to previous years.
2. "Elementary occupations" is the title of major group 9 in the ILO classification system of occupations. It comprises, inter alia, street vendors, shoe cleaners, domestic helpers, building caretakers, messengers, doorkeepers, garbage collectors, hand labourers, etc.

Source: Eurostat and Czech Statistical Office.

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Indeed, wage increases tend to be very similar for all workers (except for managers), which is somewhat surprising as wage determination typically takes place at the sector or firm level. Only 40% of all employees are covered by collective agreements (covering most of the larger firms) and only half of the agreements consider pay increases (Working Conditions Information System surveys; Visser, 2013). In addition, tripartite negotiations between the government and social partners typically do not extend to norms for wage increases, although the largest trade union (ČMKOS) makes regular recommendations on wage increases, based on its inflation forecast and expected economic developments. Moreover, detailed wage information is easily available through the earnings survey by the Czech Statistical Office and Ministry of Labour and Social Affairs. The only strong wage signal for students is a relatively high wage premia for workers with tertiary education. Against this background, relative labour demands are better reflected through employment and unemployment rates.

Important geographical dispersions of labour market outcomes remain, reflecting the fact that the loss of jobs during the transition process was not fully offset by job-creating investment, while local education institutions have not addressed changing labour market needs. Low geographical mobility has aggravated the situation, as vacancies for jobs with low-skill requirements co-exist with registered low-skilled unemployed within commuting distance. Thus, it should be investigated whether employment offices could make more use of measures to support mobility.

Demand for unskilled workers has not been stimulated by recent increases in the bargained minimum wage at the sector level, which rose from 10% higher than the statutory minimum wage to 25% higher in 2012. Moreover, the youth minimum wage, which stood at 80 and 90% of the statutory minimum wage for those less than 18 and those between 18 and 21 years of age, respectively, was abolished on 1 January 2013. Given the high youth unemployment rate of around 20%, the government should encourage employers to provide training for young unskilled workers. This could be achieved via tax subsidies or a targeted reduction in employers' social security contributions; these are among the highest in the OECD (OECD, 2013f). Indeed, a growth enhancing revenue-neutral tax reform would lower taxation on labour and raise environmental and property taxes. Looking ahead, if the statutory minimum wage increases sufficiently an additional measure could be the introduction of a reduced youth minimum wage linked to training.

One response to the challenge of population ageing is to remove impediments to labour-force participation of remaining pockets of under-utilised labour resources, particularly females. Indeed, closing the gender employment gap by 2030 would increase the annual growth of GDP per capita by 0.5 percentage points (OECD, 2011b). Older women's low activity rates reflect their low statutory retirement age and the programme of increasing and aligning it with the male statutory retirement age should, as argued above, be brought forward. Younger women delay entry in the labour market as they pursue higher education studies, while low employment rates thereafter reflect long parental leaves, negative personal income tax burden and a dearth of in-kind childcare options. The latter is the result of a drop in in-kind child care from more than 1 000 crèches in 1990 to less than 50 two decades later (mainly in the major cities), which was the outcome of a regionalisation of this responsibility without an associated fiscal transfer or mandatory service obligations. In addition, the classification of nurseries as healthcare facilities has boosted operational costs, and fee revenues in public crèches cover only about a fifth of total costs. While enrolment in kindergartens is higher, capacity is not distributed evenly and there are significant constraints in larger cities. Thus, most working mothers rely on family provided childcare.

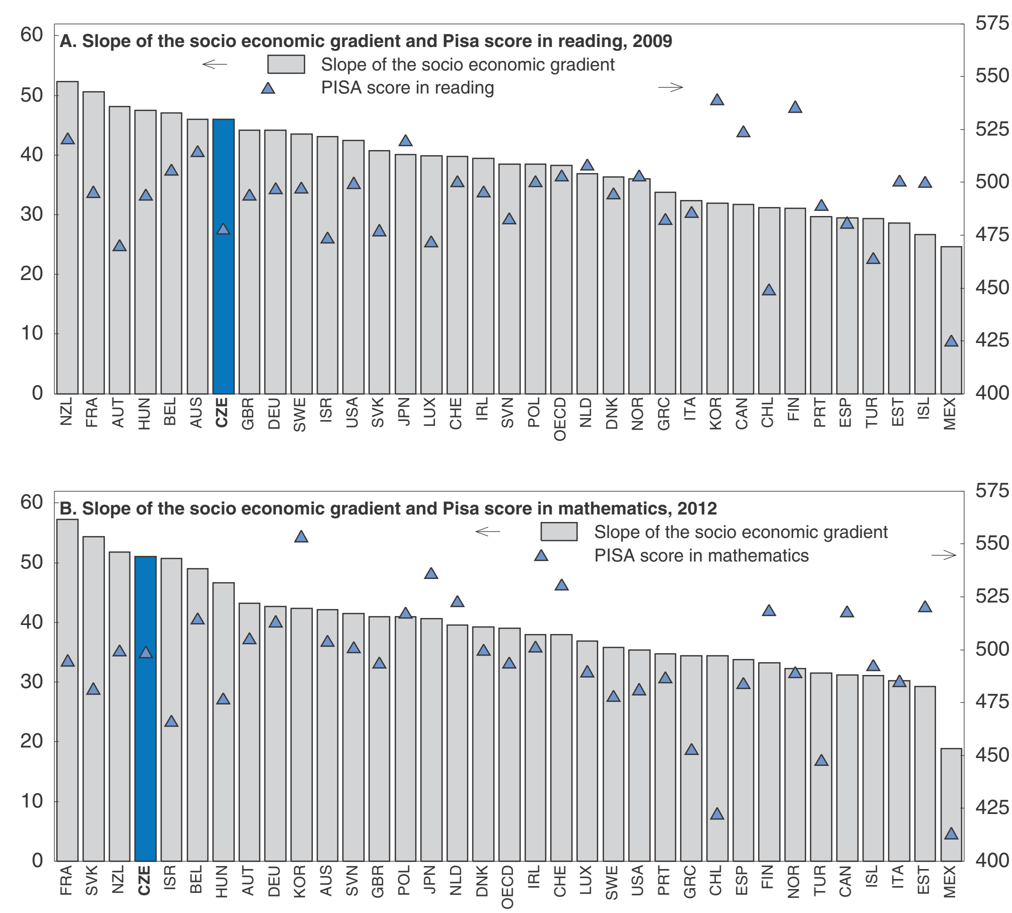
Parental leave averages 2½ years. After 6 months of maternity leave, parents are entitled to a lump sum parental allowance (paid at three quarters of the annual average wage). For children less than 2 years old, the allowance is conditioned on the child being in a crèche for less than 46 hours/month. The allowance, together with other elements of the tax and benefit system, produces high effective tax rates, especially for low wage earners and single parents, discouraging women from resuming work (OECD, 2013f). The tax and benefit system should be made more neutral and thus support parents in combining work and family lives. This could be achieved by a gradual reduction in the duration of the parental allowance so as to limit the combined maternity and parental leave period. In many other OECD countries with high female labour market participation, the combined period is around one year. Under all circumstances, reductions in leave periods should be conditional on an accompanying expansion of affordable and high quality early childcare facilities (*OECD Family Database*, 2012b). The practice of withdrawing childcare benefits if working parents use (public) childcare facilities should be discontinued. In addition, a share of the parental allowance could be made conditional on fathers taking part of the parental leave, as in Germany and Austria.

To stimulate the supply of childcare, part of the parental allowance should be transformed into a voucher for purchasing childcare services (OECD, 2007). A step in the right direction to expand the supply of childcare is the recently proposed Act on Child Group, which increases the scope for both public and private in-kind childcare provided on not-for-profit basis, contributing to the expansion and diversification of childcare provision as recommended in the *2010 Economic Survey* (OECD, 2010a; Hrdlicka et al., 2010). Given the very low number of crèches, the availability of places in kindergartens to children younger than 3 years should be expanded.

The education system has provided the economy with a well-qualified labour force as more than 90% of the working age population has attained at least upper secondary education – the highest share in the OECD (OECD, 2013g). On the other hand, the Czech Republic has one of the lowest tertiary education attainment rates, although it is increasing fast. In PISA tests, secondary school pupils score around OECD average in mathematics and reading and above average in science (Figure 17). However, performance declined over time and the share of low achievers increased (Figure 17; OECD, 2013h). PISA results associate this outcome to practices in the education system that reinforce students' socio-economic background, such as early tracking, streaming and low transferability between educational tracks (Koucký et al., 2004; Münich, 2005; OECD, 2013h). Moreover, the recent OECD survey of Adult Skills shows that the relationship between the socio-economic background and literacy proficiency among young people is stronger than among the overall adult

Figure 17. **Student performance is relatively low and strongly influenced by socio-economic status**

PISA score and score point difference associated with a one-unit increase in the PISA socio-economic index



Note: Defined as the estimated coefficient from the country-specific regression of PISA performance on corresponding index of economic, social and cultural status (ESCS).

Source: OECD (2012), *Equity and Quality in Education: Supporting Disadvantaged Students and Schools*; and OECD (2010), *PISA 2009 Results: What Students Know and Can Do: Student Performance in Reading, Mathematics and Science* (Vol. I); OECD, *PISA 2012 Database*, Table II.1.2b.

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population, which is in contrast with many OECD countries (OECD, 2013i). These problems are preventing students from fulfilling their educational potential, which have negative effects on their labour market prospects and human capital accumulation (OECD, 2010b).

Teacher quality can make a difference in disadvantaged schools with high shares of low performing students (OECD, 2013j). The *2006 Economic Survey* identified poor management tools as a problem and recommended that school principals should be given more opportunities to reward individual teacher effort and the quality of teaching (OECD, 2006; Goglio, 2006). Additional support and incentives to school leaders and teachers in the form of special training, coaching (induction), mentoring and improved working conditions is also important (OECD, 2013j). Struggling students in primary education have frequently been streamed into special schools with reduced curricula and very few opportunities to return to the regular education system. More recently, this practise has been changed with greater emphasis on integration into regular classes, although streaming into special classes is still happening. Instead, increasing enrolment in pre-primary education and developing targeted initiatives for low performing students in primary education would improve learning outcomes. Tracking begins at age 11 even though there is evidence that early student selection has a negative impact on students assigned to lower tracks and does not raise average performance (OECD, 2012c). Moreover, there is evidence that family background matters more than academic ability in explaining access to the more prestigious academic tracks (Koucký et al., 2004; Münich, 2005). Therefore, early tracking should be postponed and combined with increased possibilities to transfer between education tracks.

Vocational Education and Training (VET) is an important feature of the education system. Over 70% of upper secondary education enrolees are in VET – the highest share among OECD countries. The system comprises a technical education programme of four-year vocational programmes, preparing the student either for the labour market or for tertiary education, and an apprenticeship programme, lasting mostly three years, ending with a certificate providing direct access to the labour market. Over the past decade, enrolment in apprenticeship programmes has declined, but has increased in the technical programme. This reflects, at least partly, a declining number of 15-year olds. Indeed, the rigid system of quotas imposed on the maximum number of places offered in educational programmes and fields of study is not adequately supporting student preferences or the changing set of skills demanded in the labour market (OECD, 2010c). A disturbing development is the falling employment of workers with apprenticeships. Indeed, a growing concern is that the VET programmes are neither providing the occupations demanded by the labour market nor the right skill sets within individual occupations (OECD, 2013h; OECD, 2010c; Trhlíková, 2013).

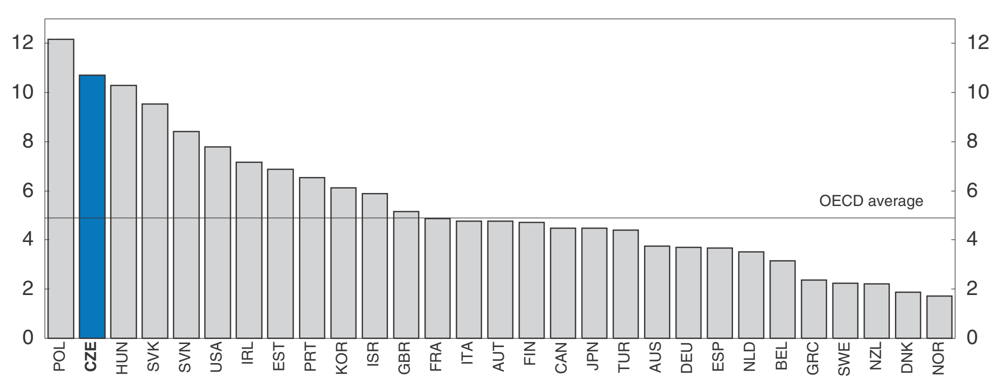
The variation in the quality of teaching is high, particularly in apprenticeship programmes, and is poorly connected with the labour market as few VET students have access to workplace training (OECD, 2010c). In addition, the skill sets acquired in school are often not following developments in the labour market. Low investment in equipment and a flat career system give teachers few incentives to update their knowledge, disconnecting them from technological developments, new production processes and working practices. Another problem is a large variation in skills sets, reflecting the regional implementation of VET policy, although the introduction of national standardised exams in apprenticeship programmes, which is expected to become compulsory in the academic year of 2014/15, should partly address this concern. However, schools remain in charge of practical school or workplace training, leading to a large variation across schools and training fields in terms of the number of students participating and the length and quality of training.

A first step to improving VET would be to develop binding rules for workplace training and assessment standards to secure transferable skills, and to strengthen interaction with private employers (OECD, 2010c). Links to the private sector should be strengthened by replacing the fragmented governance system with an institutional framework with clear objectives and responsibilities as recommended by the Review of VET (OECD, 2010c). Moreover, employers and trainees should have stronger incentives by better matching opportunities, including a remunerated training contract, as is the case in Austria, Denmark, Germany, Netherlands, Norway and Switzerland. Subsidies could play a supplementary role. To make VET programmes more responsive to student demand and labour market needs, the system of school financing should (at least partly) be tied to the student. In such a system, VET schools would have incentives to adjust programmes to changes in demand.

Since the mid-2000s, the favourable labour market prospects and the high net returns associated with tertiary education have contributed to a 32% expansion of enrolment in public universities, but only a 6% increase in expenditures (Figure 18). In addition, the share of students enrolled in private tertiary institutions has increased from 1% to 13% over the past decade. The slow increase in public funding raises quality concerns. The high private returns to tertiary education and the revealed willingness to pay argue for the introduction of an element of cost sharing by students. However, to ensure equitable access to tertiary education a mixed system of means tested grants and income contingent repayment loans needs to be introduced (OECD, 2008b). Quality in tertiary education could be further secured through improved accreditation of institutions by introducing output based criteria (such as graduation rates and students' labour market outcomes) in addition

Figure 18. **There are high net private returns associated with tertiary education**

Net private returns over the life-cycle of a male attaining tertiary education, as compared with returns obtained from upper secondary or post-secondary non-tertiary education as multiples of GDP per capita, 2009



Note: The figure shows the discounted net economic payoff to a male in obtaining tertiary education and provides a monetary estimate of the value of investing in tertiary education in terms of its economic benefits (increased earnings and a higher probability of being employed), after accounting for the cost of the investment (foregone earnings, training costs net of grants, additional tax payments resulting from an education-induced increase in taxable income and decrease in transfers). Net private returns are calculated using an actuarial method of discounting overtime costs and benefits, using a fixed discount rate of 3%.

Source: OECD (2013), *Education at a Glance* and *National Accounts Database*.

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to input criteria (such as library collections, computers, academic qualifications of teaching staff) (OECD, 2009). In addition, teaching quality could be enhanced by stimulating the development of a more diverse academic career structure. This could be achieved by restructuring career progression based on teaching and research results rather than on the current *habilitation* system based to a large extent on bureaucratic procedures, discouraging foreign academics and professionals from the private sector (OECD, 2009). A Ministry of Education proposal from 2013 to address quality assurance, accreditation mechanisms and academic career paths could form the basis for reform in this area.

Key policy recommendations to strengthen skill use and school-to-work transitions

- Encourage employers to provide training to young unskilled workers through tax subsidies or targeted reductions in social security contributions. Looking ahead, if the statutory minimum wage increases sufficiently, an additional measure could be the introduction of a youth minimum wage linked to training.
- To boost female labour market participation and help families to reconcile family and working lives, provide an adequate supply of affordable and high quality early childcare facilities. Conditional on this development, reduce the maximum duration of parental leave and replace part of the parental allowance with a system of childcare vouchers.
- Increase participation of private employers in vocational education by simplifying institutional frameworks and governance. Introduce a contractual employment relationship between the apprentice and the employer. Expand workplace training by providing subsidies to the participating firms for difficult to place students.
- Secure quality in the provision of tertiary education by introducing output based accreditation criteria and student fees to increase resources for the provision of public tertiary education, accompanied by a mixed system of means-tested grants and income-contingent repayment of loans.

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ANNEX

Progress in main structural reforms

This annex reviews action taken on recommendations from previous Surveys. They cover the following areas: strengthening the fiscal framework, promoting spending efficiency through budgetary management and control, reforming the pension system, improving health spending efficiency, making the tax structure more growth and employment friendly, achieving efficiency in the energy system, improving the business environment, supporting innovation and the adoption of new technology, improving the business environment, supporting innovation and the adoption of new technologies. Each recommendation is followed by a note of actions taken since the November 2010 Survey. Recommendations that are new in this Survey are listed in the relevant chapters.

This annex presents under each theme:

- Past recommendations
  - ❖ ***Actions taken and current assessment***

Strengthening the fiscal framework

- Establish a responsibility for the government to announce a debt target that is translated into medium-term expenditure ceilings broken down to individual ministries' targets.
  - ❖ ***The previous government prepared a comprehensive fiscal framework reform encompassing a debt brake rule and a structural balance rule with expenditure ceilings for individual ministries.***
- Adopt an independent fiscal institution to increase the credibility of the existing framework. The institution should assess the budget in light of the cyclical position and medium-term fiscal objectives.
  - ❖ ***No action taken.***

Promoting spending efficiency through budgetary management and control

- Improve transparency of budgetary documentation. Introduce performance oriented budgeting for the state budget and with extension to sub-central governments. Promote wider use of *ex ante* and *ex post* cost benefit analysis. Include a regular tax expenditures report in the annual draft budget proposal.
  - ❖ ***Transparency of budgetary documentation will be enhanced by issuing the Citizens Budget (the first vintage to be published in February 2014). Efficient public spending being among the top priorities of the new government, the Ministry of Finance has re-opened the discussion on performance budgeting by organising two workshops on this issue with the World Bank. The tax expenditures report will be included in the budgetary documentation starting the draft budget proposal 2015 and published independently on www.mfcr.cz by the end of 2014.***
- Foster inter-municipal co-operation and joint provision of services. Introduce an "internal stability pact" with borrowing limits on local budgets. Publish cost and efficiency indicators on sub-central governments and benchmark their performance.
  - ❖ ***Limit of indebtedness of local budgets is set by the constitutional Law on fiscal responsibility, which has been re-submitted to the parliament of the Czech Republic.***
- Substantial change the public procurement law and establish a central purchasing authority.
  - ❖ ***The Institute of Central Procurement is used by individual ministries.***
- Improve corporate standards and transparency of state owned enterprises, considering partial privatisation and listing, or consolidating all corporate state holdings under one roof with a professional management.
  - ❖ ***No action taken.***

Reforming the pension system

- The pace of retirement age increases should be kept in line with changes in life expectancy.

- ❖ ***The statutory retirement age is linked to life expectancy as the new schedule of the statutory retirement age (an additional two months every year) is expected to follow life expectancy, keeping years spent in retirement broadly constant until 2100.***

- Consider a centralised clearing house for pension plans to contain administrative costs down is the second pension pillar. Make life-cycle investment strategy a default plan for participants. Offer annuities as the default in the pay-out phase. Consider scaling back support for the third pillar.

  - ❖ ***Administrative costs are curtailed by maximum management fees (0.4-0.8%) on assets administered. Performance fees are only possible if a valuation of assets reaches previous years (high watermark).***

- Improve financial literacy and awareness of the population. Prepare regular reports on pension prospects to inform the public about their future retirement incomes.

  - ❖ ***Several private institutions conduct programmes on financial literacy. A website provides applications for calculation and familiarity with the basic conditions of the pension claim.***

Improving health spending efficiency

- Implement a diagnosis-related group payment system to strengthen cost-consciousness among providers.

  - ❖ ***Diagnosis-related group payment system was implemented in 2008, covering almost 50% of all health services.***

- Review in-patient capacity and prepare a national capacity plan to guide medium-term contracts with providers, as well investments and equipment purchases.

  - ❖ ***No action taken.***

- Introduce compulsory active substances prescription and an electronic prescription system. Stimulate co-ordinated purchases and auctions of drugs and other supplies.

  - ❖ ***In 2013, a "Positive list" of recommended pharmaceuticals was introduced by one insurance company.***

- Introduce soft gate-keeping to improve care management.

  - ❖ ***No action taken.***

- Implement plans for e-Health while ensuring adequate security and resources for implementation.

  - ❖ ***No action taken.***

- Improve risk-adjustment formula among insurers by implementing pharmaceutical drug groups.

  - ❖ ***A new formula is ready for legislative implementation.***

- Work towards a definition of the basic package of health care paid for by public system and develop a private insurance market to cover other expenditures.

  - ❖ ***No action taken.***

Making the tax structure more growth and employment friendly

- Harmonise and simplify the definitions and tax bases for the personal income tax and social security contributions (SSCs). Reduce the number of tax expenditures. Introduce a single declaration covering all labour taxes.
    - ❖ ***The first official tax expenditures report should be published in 2014.***
- Reduce the disparities in the tax treatment of dependent workers and the self-employed.
    - ❖ ***From 2013, a limit of CZK 600 000 to CZK 800 000 is imposed on lump-sum expense deductions by self-employed persons and taxpayers are limited in using lump-sum expense deductions and tax credits (for spouse and child) simultaneously.***
- Increase the real estate tax revenues by raising tax rates and linking the tax to actual market prices.
    - ❖ ***No action taken.***

Achieving efficiency in the energy system

- Ensure full consistency among strategic policies, including currently prepared documents on Environmental, Energy and Transport Policies to anchor private sector expectations about future policies.
    - ❖ ***In 2013, the new Transport Policy of the Czech Republic for the period 2014-20 was adopted with inputs form the State Energy Policy) and the State Environmental Policy and assessed within the Strategic Environmental Impact Assessment (SEA) process.***
- Strengthen the use of cost-benefit analysis and the effectiveness of environmental impact assessment for all policy instruments. Ensure proper *ex ante*, on-going and *ex post* evaluations.
    - ❖ ***In 2013, a new EIA Directive was adopted to make the process more effective and should enter into force in spring 2014.***
- Systematically estimate abatement costs and adjust public intervention and subsidies to ensure equalised marginal abatement costs. Avoid overlaps and ensure common standards among instruments.
    - ❖ ***The New Green Savings Programme and Operational Programme Environment is using common standards to a very large extent.***
- Tax away windfall gains linked to the remaining free allocations of ETS allowances. Monitor and evaluate the efficiency of free ETS permit allocations.
    - ❖ ***The tax on free emission allowances was abolished in 2013, but the allocation of free ETS permits is not finalised.***
- Support implementation of carbon taxation at the EU level. Realign the excise tax rate on all fossil energy sources and products, based on their carbon content and other environmental externalities, notably by increasing the relative taxation of diesel. Remove several excise tax reliefs on fuel use.
    - ❖ ***Agriculture fuel tax subsidies were reduced in 2013. The tax rate on natural gas used as motor fuel is increasing gradually from CZK/GJ 0 to CZK/GJ 73.56 of gross calorific value in the period 2008-20. In the years 2012-14 the rate is CZK/GJ 9.50.***

- Plan a strategic switch to low-emission sources and technologies. Rebalance support for renewables to promote the lowest cost sources in a technologically neutral way.
  - ❖ ***Operational support of electricity production from renewable sources has been withdrawn for installations from 2014 or later.***
- Enhance competition in the energy sector to increase market entry, minimise inefficiency and losses and stimulate emission-reducing innovations, including smart grids and meters.
  - ❖ ***No action taken.***
- Invest in building energy efficiency measures under the Green Investment Scheme but improve its efficiency and improve co-ordination with the PANEL programme. Use loan support instead of investment subsidies. Increase the role of energy providers in promoting energy savings.
  - ❖ ***From 2014, a New Green Savings programme (2014+) for houses and apartments and government buildings is expected to be launched. The programme PANEL 2013 gives low-interest loans to support reconstruction of multi-apartment buildings with the aim of reducing energy consumption.***
- Apply best practices in support of energy efficiency among SMEs, promoting Energy Performance Contracting and the development of Energy Service Companies. Continue support for the energy efficiency improvements from EU structural funds under the next EU financial framework.
  - ❖ ***No action taken.***
- Increase consistency between transport infrastructure investment programmes and environmentally transport objectives. Improve the co-ordination of transport and land use plans. Complete the railway restructuring.
  - ❖ ***In 2011, rail infrastructure operation is transferred from the state owned railway company (České dráhy) to the infrastructure manager (SŽDC). The Transport Sector Strategy document for funding of transport infrastructure was adopted in 2013. This strategy, which contains a number of measures with expected significant positive effects on the environment and human health, will serve in the future also as a key background for national and regional planning processes.***
- Develop traffic management in urban areas, including traffic restrictions in city centres, parking fees and incentives to commute by public transport. Strengthen control of emission from older vehicles and stimulate the renewal of vehicles through adequate carbon pricing.
  - ❖ ***The differentiation of rates within the tolling system in the Czech Republic stimulates fleet renewal.***

Improving the business environment

- Increase the speed and reduce the cost of judicial proceedings, particularly in respect of contract enforcement and bankruptcy.
  - ❖ ***No action taken.***
- Step-up competition-promotion efforts in electricity and telecommunications. Enhance the role of the competition authority in these sectors, particularly in the rapidly expanding telecom broadband segment.
  - ❖ ***No action taken.***

- Strengthen mechanisms for screening regulatory impact assessment (RIA) when legislative proposals are considered.
  - ***No action taken.***
- Combat corruption by making public procurement more transparent and more competitive, including by facilitating bidders to challenge questionable procurement decisions.
  - ***In 2012, an amendment to the Public Procurement Act became effective, obliging the publication of relevant data for the public contract.***
- Ensure access to capital, notably by pursuing initiatives to develop a venture capital market.
  - ***A new Act on Management Companies and Investment funds ("the Act") brings a stratified regulation and oversight of investment funds and broadens the variety of legal forms for investment funds. a trust or a limited liability partnership by shares (SCA).***

Supporting innovation and the adoption of new technology

- Enhancing co-operation between enterprises and universities.
  - ***The co-operation programme between enterprises and HEIs ("Education for Competitiveness" Operational Programmes) is planned to be continued in 2014-20.***
- Strengthen indirect support to R&D.
  - ***In 2011, an amendment of Income Tax Act (Act No. 458/2011 Sb) boosted tax deductibility to include services related to the realisation of R&D projects (contractual R&D). In 2014, the tax deduction increases from 100% to 110% if R&D expenditures increased in comparison with previous tax period.***
- Evaluate systematically public support effectiveness and enhance the co-operation between different public bodies.
  - ***The IPN Methodology project was launched (2012-15), aiming to create new system of evaluation and financing R&D&I.***

Reforming education

- Avoid elitism in secondary education, including phasing out streaming at the age of 11, and strengthen benchmarking of schools and students.
  - ***No action taken.***
- Introduce tuition fees in tertiary education accompanied by publicly guaranteed student loans.
  - ***No action taken.***

Thematics chapters

Chapter 1

Completing the transition to a competitive domestic economy

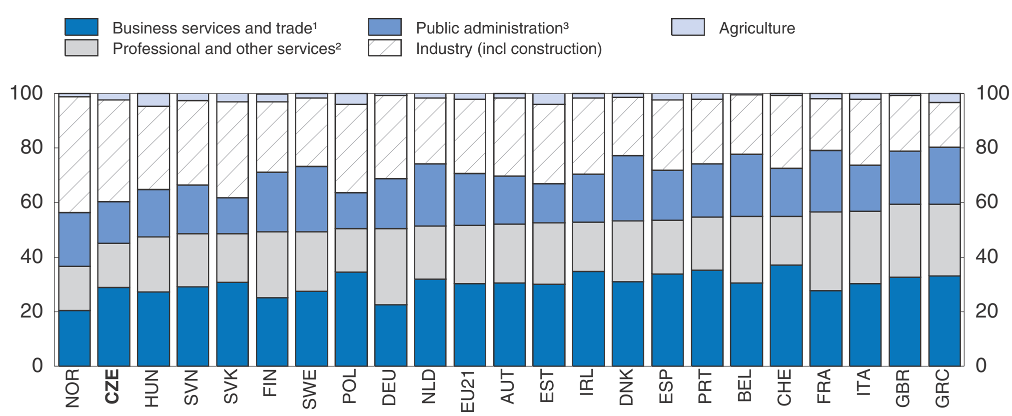
The stalled income convergence and the economy's high reliance on international trade point to a need for a more balanced and stable income convergence process. This requires the development of a strong domestic economy, implying a substantial expansion of one of the smallest private service sectors in the OECD. This would constitute a growth driver as well as an improvement in international competitiveness as more competitively priced services are intermediate inputs in manufacturing production and contribute to stimulating innovation processes and product diversification. Promoting a competitive private service sector relies on the effective implementation of competition policy. Over the past couple of decades, many impediments to entrepreneurship have been dismantled and the foundations of a competitive market based economy established. The competition authority and its tools are close to best practice, but still have to uncover any domestic hard core cartels, pointing to a need for a review of its resources and some of its key tools, such as the leniency programme. Many of the network sectors remain dominated by vertically integrated state-owned incumbents, requiring additional measures to restrict public sector interference and securing non-discriminatory access to networks.

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

The Czech Republic's reliance on international trade makes it highly dependent on external sources of growth. A more balanced and stable income convergence process requires an equally strong domestic economy. This basically means putting policies in place to allow a strengthening of the private service sector, which is one of the smallest in OECD Europe (Figure 1.1). Fostering growth and, more importantly, productivity in domestic sectors of the economy has several benefits: it increases employment and output; it contributes to international competitiveness because of a positive relationship between services-sector reforms and the performance of domestic firms in downstream manufacturing sectors; and it helps to promote diversification. This chapter looks at the instruments for achieving this rebalancing, in particular by a more comprehensive application of competition policy instruments. Over the past couple of decades, many impediments to entrepreneurship have been dismantled and the foundations of a competitive market-based economy have been established. But judging by the relative performance of the Czech economy in a number of domains, much more needs to be done with respect to the regulatory and competition-policy environment.

Figure 1.1. **Relative size of the service sector, by value added**

In percentages of total gross value added, 2012



1. Wholesale and retail trade, transport, accommodation, food service activities, information, communication, financial and insurance activities.
2. Real estate activities, professional, scientific and technical activities, administrative and support service activities, arts, entertainment, recreation and other service activities.
3. Public administration, defence, education, human health and social work activities.

Source: Eurostat.

StatLink http://dx.doi.org/10.1787/888933007468

The first section of this chapter identifies potential problem areas. At the aggregate level, competitive distortions are indicated by a combination of excess returns on capital, low productivity and high prices. These indicators are a useful starting point for an investigation into potential problem areas, but need to be cross-referenced to indicators of firm size and market power. Then institutional encouragements or barriers to competition are identified: the degree of competition is negatively related to the regulatory and administrative barriers, which prevent market entry and firm development, as well as to the extent of state-ownership. The succeeding sections discuss the application of competition law, both in general and in the regulated network sectors.

In many sectors consumer welfare can be boosted by passing on productivity gains

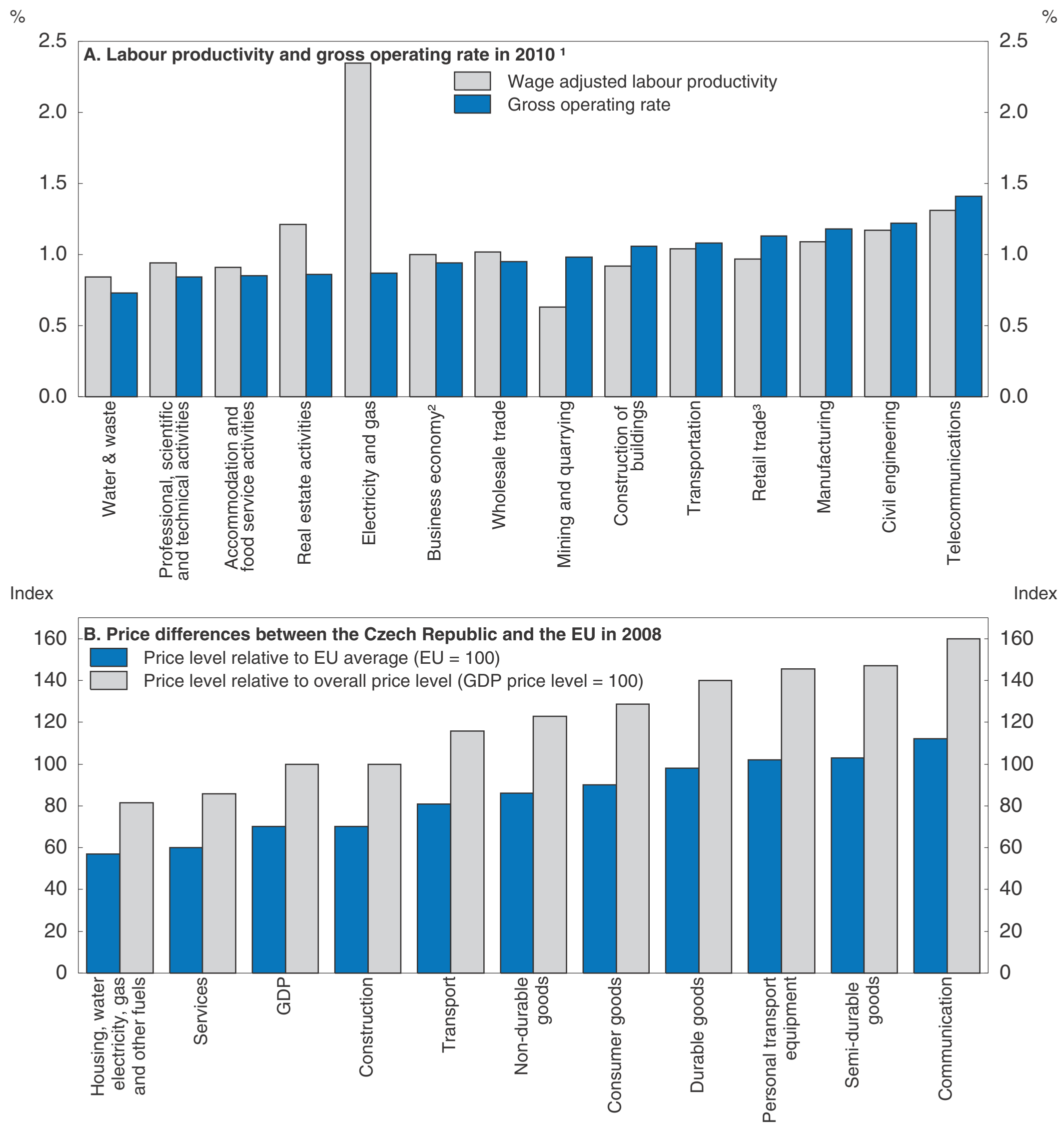
Deficient competition is associated with high profit margins and prices and low productivity (OECD, 2002). In the Czech case, several sectors have profit margins above the EU average: telecommunications, civil engineering, manufacturing, retail trade and transportation (Figure 1.2, panel A). Other, not fully compatible, evidence shows sectors with high margins also have high prices (panel B). Below-average productivity performance is associated with relatively low gross operating rates and many service sectors (real estate, professional, technical services, etc.) fall into this category. Here, competition problems may be growth constraining. High productivity and low margins tend to suggest the absence of competition problems in the energy sectors: electricity and gas generation and distribution.

The EU's Consumer Markets Scoreboard assesses consumer conditions on the basis of six criteria: comparability, trust, problems and complaints, satisfaction, as well as choice and switching. All relate to the ability of consumers to make informed choices and of markets to reward efficient and innovative businesses. The overall assessment of market performance in the Czech Republic is below the EU average, and has declined sharply in the past 2 years, from being the second highest in 2010 to 22nd in 2012 (European Commission, 2012a) (Figure 1.3). However, there are large sub-sectoral differences with particularly poor performance in areas, such as telephone services and retail services.

Linking profits, productivity and price performance to the sectoral size and composition of firms may give a first indication of where competition problems might originate. A sectoral breakdown in turnover by firm size (measured by employment) gives a proxy measure of either concentration or dominance and shows that the sectors identified above as benefiting from above-average profits and prices are (mainly) those where large firms (those with 250+ employees) dominate (Figure 1.4, panel B). These include ITC, civil engineering, the retail trade and the manufacturing sector, all to a greater extent than the EU at large (Eurostat, 2013). These are sectors where size and economies of scale are important for productivity, but where consumers and/or end-users have not necessarily benefited price-wise to the extent they might have. Conversely, sectors relating to personal services, building construction and wholesaling are more fragmented and more price competitive, but also less productive. In between are the (regulated) network sectors, where the energy industry is concentrated, productive and relatively price competitive (but where mining is even more concentrated but unproductive and price-unfriendly) and the transport industries.

Thus, in important segments of the economy, size and/or dominance have helped raise productivity, but also profits and prices, suggesting that the welfare gains have not been fully shared by consumers and/or end users. On the other hand, smallness is associated with inefficiencies which reduces consumer welfare, but a dynamic undergrowth of SMEs can often boosts choice and innovation. In either case, policies which

Figure 1.2. **Productivity and gross operating rate by sector**



Note: Classification of economic activities follows NACE Revision 2.

1. Wage-adjusted labour productivity (WALP) is defined as value added divided by personnel costs (expressed as a ratio in percentage terms). This indicator is based on expenditure for labour input (rather than a headcount of labour input) and is more relevant for comparisons across activities (or countries) with very different incidences of part-time employment or self-employment. The gross operating rate (GOR) is the ratio of gross operating surplus to turnover (%).
2. Excluding the financial sector.
3. Excluding motor vehicles.

Source: Eurostat and OECD calculations.

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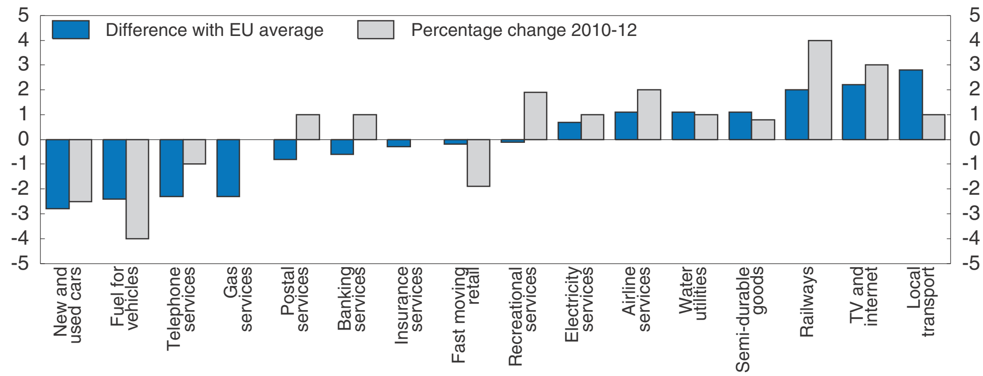
reduce the effects of dominance and facilitate SME growth – more effective competition surveillance in the first place and reduced regulatory entry barriers in the second – are likely to be consistent with more balanced and welfare-enhancing growth. At the same time, areas with high concentration and productivity growth have benefited consumers via lower prices – an effect that probably depends on the quality of regulatory oversight.

Figure 1.3. **Consumer market scoreboard: Czech Republic versus EU average**

Percentage change or change in market performance index (MPI)



Source: European Commission, Directorate-General for Health and Consumers (2012), "Consumer Markets Scoreboard: Making markets work for consumers".

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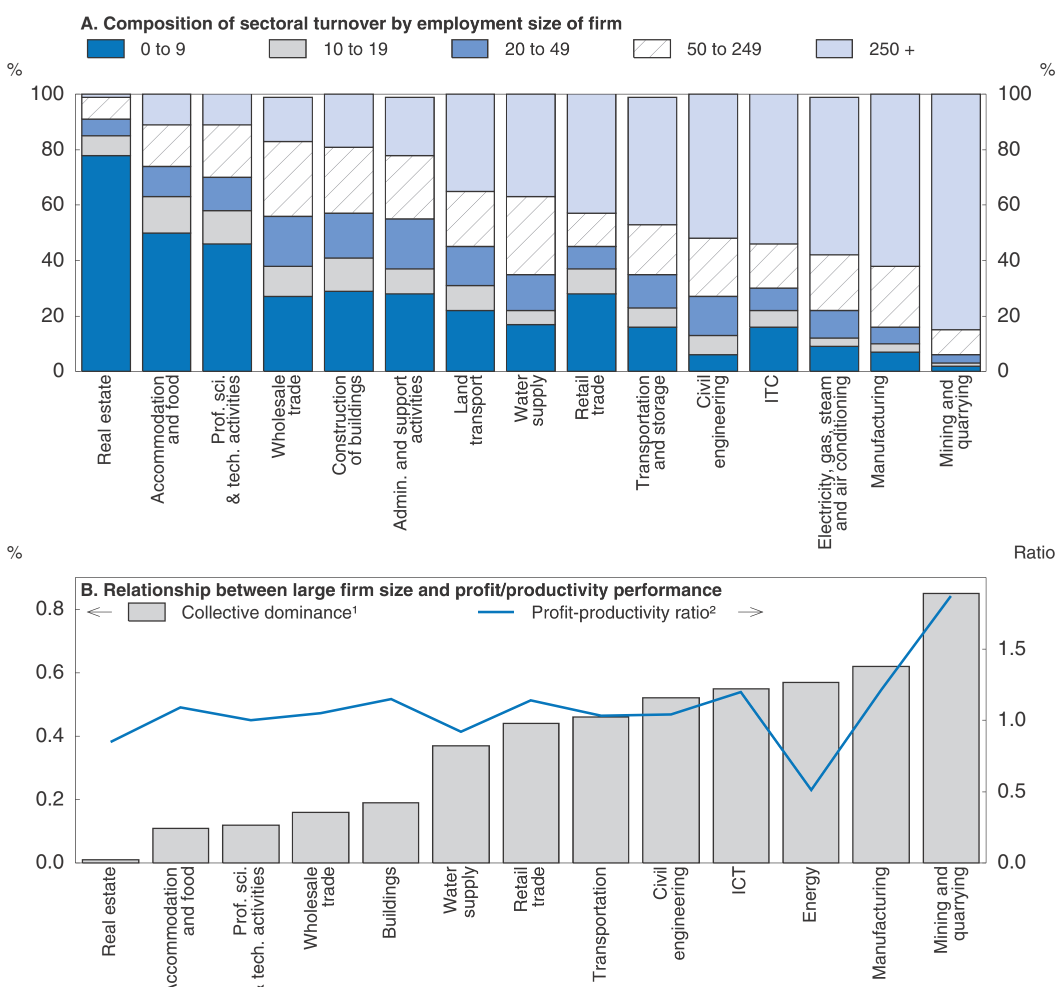
Figure 1.4. **Proxy measures of sectoral dominance**



1. Percentage of firms over 250 employees in total turnover.
2. Ratio of gross operating rate to productivity.

Source: OECD calculations based on Eurostat data.

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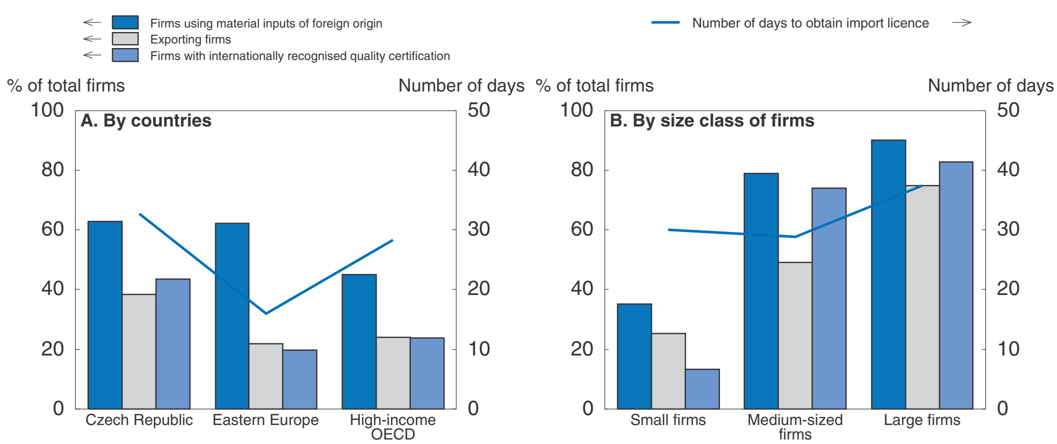
Reducing regulatory and administrative barriers

Czech firms are well integrated into the international supply chain, with 90% of large firms active in the export market, a proportion falling to half for mid-sized enterprises and quarter for small firms (World Bank and IBRD, 2009). A relatively high proportion of all firms use material inputs/supplies of foreign origin (Figure 1.5). In terms of FDI restrictiveness, the Czech Republic is slightly less liberal than the top 10% of the OECD economies, and remaining restrictions are concentrated in agriculture, transport and real estate (Kalinova et al., 2010). On the other hand, the World Bank's *Ease of doing business* indicators show considerable room for facilitating trading across borders, particularly in terms of improving documentation requirements, administrative delays and costs (World Bank and IBRD, 2013), which would support the export sector and facilitate the entry of SMEs into export markets.

Figure 1.5. **International openness**



Source: World Bank and IBRD (2013), *Doing Business 2014, Economy Profile: Czech Republic, www.doingbusiness.org/~/media/giawb/doing%20business/documents/profiles/country/CZE.pdf.*

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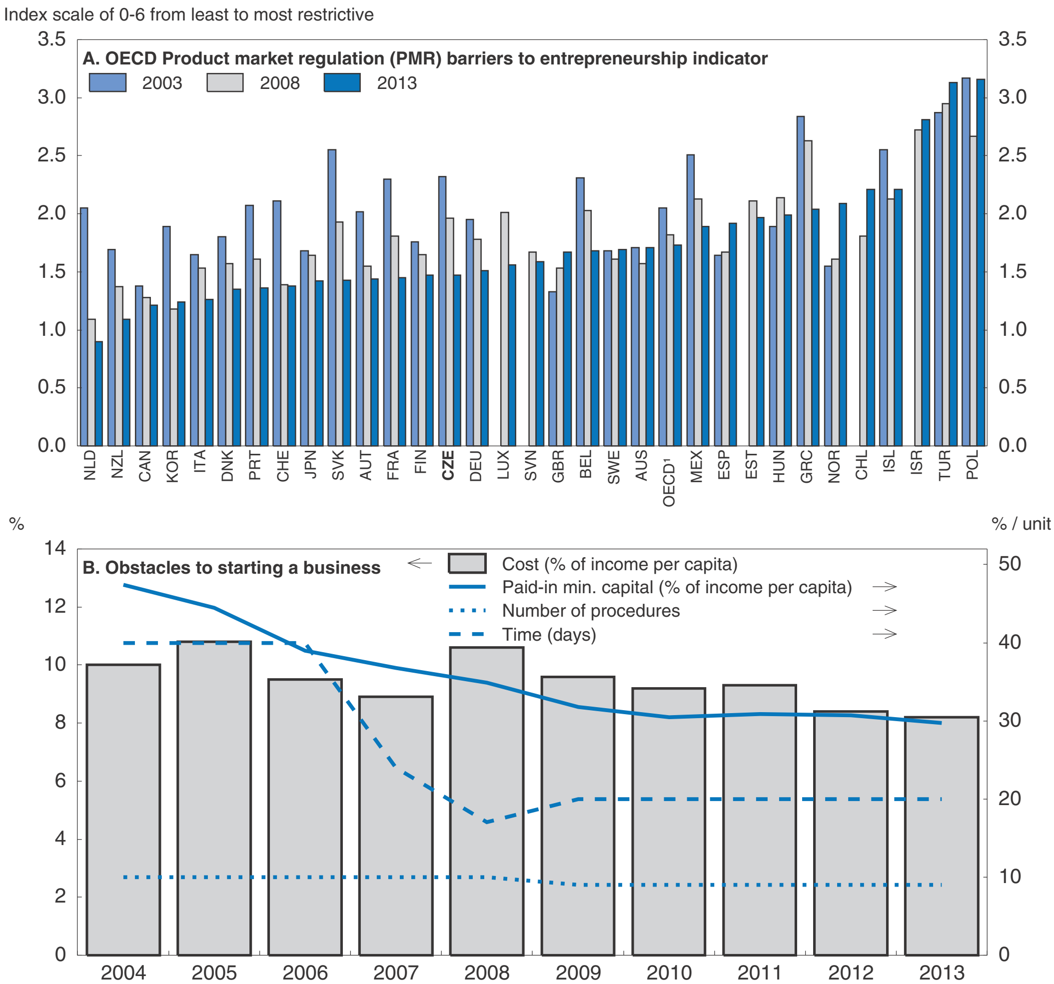
Significant barriers to entrepreneurship remain according to the recently updated OECD Product Market Regulation Indicator (Figure 1.6, panel A). In the domestic market, construction permits have become substantially easier to obtain as a result of reductions of bureaucratic delays in processing the registration of new plots, while property registration has also been streamlined (World Bank and IBRD, 2009). The cumbersome regulation of business start-ups for sole proprietors and new companies has improved with a substantial cut in the time required for registering new enterprises. Moreover, the costs involved were significantly above the OECD average because of minimum capital requirements (panel B). In early 2014, the latter was reduced from CZK 200 000 to CZK 1.

The enterprise birth rate is relatively high, while the survival rate for firms is below average (Figure 1.7). To some extent, this could indicate flexibility. In this perspective, market entry and exit may be encouraged by the newly improved bankruptcy regime. On the other hand, the relatively low survival rate probably reflects the exiting of least productive firms as well as residual operational impediments. Progress towards a lighter regulatory regime has been slower at local level, and in many areas the processes that provoke the most complaints are often handled by municipalities. The cost of doing

Figure 1.6. **Barriers to entrepreneurship**



1. Average of the OECD countries for which data are available in 2013.

Source: OECD, "The 2013 Update of the OECD Product Market Regulation Indicators: Policy Insights for OECD and non-OECD Countries", ECO/CPE/WP1(2013)14; World Bank (2013), *Ease of Doing Business*.

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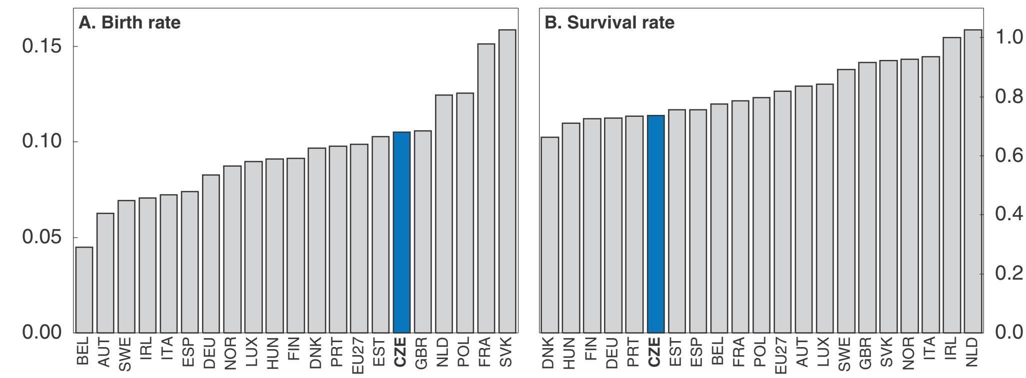
business may be further inflated by the difficulties of obtaining legal recourse for breach of contract, investor protection or liquidation (World Bank and IBRD, 2009). The judicial system scores relatively highly for integrity, but can be slow and expensive. Moreover, cost estimates of contract enforcement, in terms of both time and money, are high compared with most of the EU. Reducing legal delays with respect to contract enforcement should be a priority, as should reducing local authority interference with business.

A common complaint from Czech business is about "gold-plating" regulation, where the Czech implementation of European regulations exceeds the terms of European Community directives. There is no official policy in the Czech Republic related to "gold plating" *per se*; however, generally, the requirements of EC law are strictly kept and national standards are usually above the minimum standard level. This can lead to industry competitiveness impairments if this leads to more burdensome regulation than in other EU countries. Against this background, and following practice elsewhere in the OECD,

Figure 1.7. **Birth and survival rates for enterprises**

In percentage of active enterprises



Source: Eurostat.

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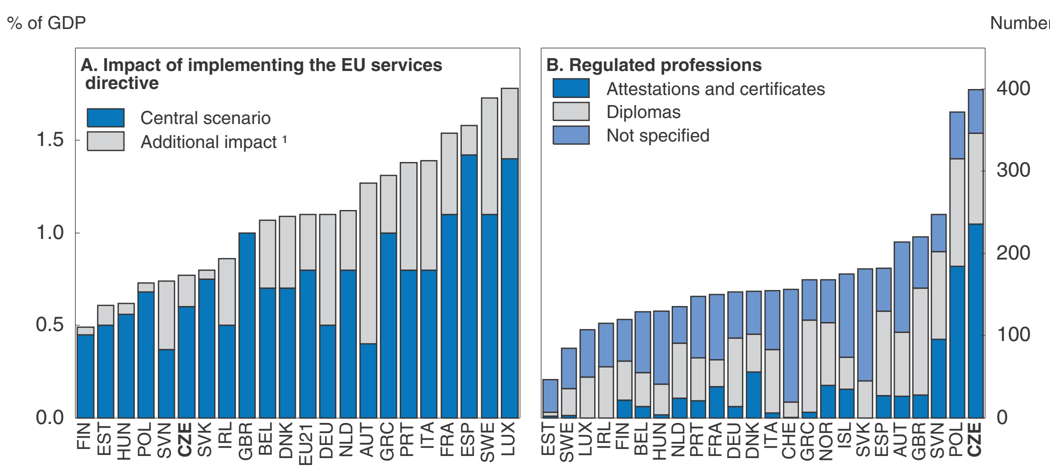
procedures have been put in place to analyse legislation *ex ante* for its regulatory impact. Regulatory impact assessments (RIA) were first adopted in 2007. However, the original process had several weaknesses; including a formalistic approach and verbal evaluation of regulatory alternatives, preventing *ex ante* and notably *ex post* efficiency assessment of the proposed and adopted regulations and a weak level of independence in assessing quality (Vitek, 2012). Another weakness was the option to perform only a reduced version – the so-called small RIA – which required only a qualitative assessment without comparing benefits and costs of various options.

In December 2011 the rules and institutions of RIA were reformed with a view to reducing the formality of the RIA process, removing exemptions from the obligation to carry it out, bringing forward RIA to the initial stages of the debate – summary impact assessments must be carried out even before the work on a new regulation is initiated – and strengthening the independence of the RIA committee. Regulatory impact is still assessed mainly *ex ante*, but results from 2012 indicate a shift in a positive direction, both in terms of the quality of the processed RIA by individual departments and in their approach to RIA (fewer exemptions being allowed, with greater understanding of the process as a way to improve regulation). The Committee is now staffed only by experts (notably academics) outside of the state administration and its activities are overseen by the secretariat of the Office of the government. A definitive assessment of the effectiveness of the rules in reconciling non-economic regulations with legitimate business concerns about the commercial burden of compliance requires more time. However, the strengthening of the Committee's independence should provide a means to make the regulatory impact assessment process more effective.

Many of the regulatory barriers to entry into services, as defined under the EU Services Directive (in force since end-2009) have been abolished. The full implementation of the services directive is projected to yield benefits of 0.6% in terms of GDP growth and employment – slightly less than the EU average. Moving beyond the services directive and achieving the level of restrictions of the five best countries would bring additional gains of ¼ per cent of GDP (Figure 1.8, panel A) (European Commission, 2012b). In terms of the severity of barriers, the Czech Republic is amongst the member states with the highest number of regulated professions (Figure 1.8, panel B).

The most problematic aspect of regulation of professions is confusing legislation, arising from the fact that many professions are regulated by separate legislation for individual sectors (World Bank and IBRD, 2013). According to the survey, the desired way forward should be to prioritise practical skills and outcomes over formal education (e.g. by introducing minimum quality requirements), and to streamline and clarify job requirements. At the same time, demands for the quality of professions should not be lowered. There have been already some tangible results of the survey: several regulated professions were merged into a more general one (e.g. revision of electrical appliances and maintenance of these into just one profession) with another 13 mergers in the pipeline. The Czech Republic could go further in reducing domestic barriers to entry in services, including opening up sectors not covered by the Services Directive. More profound changes are particularly required in some professional services, which would require changes in legislation.

Figure 1.8. **Services liberalisation**



1. Effects of reducing service restriction to the level of the five best countries in the European Union.
Source: EU Single Market Regulated Professions Database.

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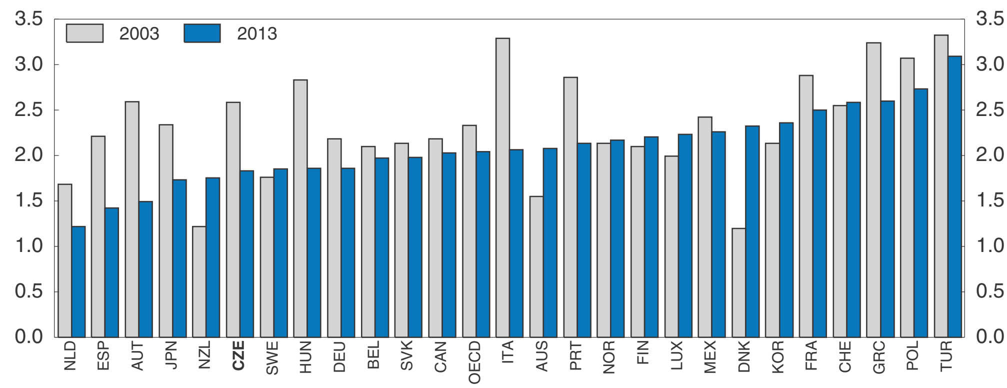
State ownership and market interference is still significant in a number of sectors

The state-owned enterprise sector has been reduced by successive waves of privatisation, but public ownership remains substantial. Telecoms, banking and gas are now in private hands, but there is still significant state ownership in the energy and transport sectors (railways, airports and the airline industry) (Figure 1.9). There are also a significant number of smaller SOE's, some of which are involved in commercial activities – most notably the brewing industry and military equipment and engineering production – and others involved in administering state assets, such as the management of the state-owned *Forests of the Czech Republic*. Municipalities may also be involved in quasi business operations, such as waste disposal. From a competition point of view, the presence of SOEs in commercial market raises issues of level playing fields, including problems of implicit subsidies, cross-subsidies from protected to market activities, and political risks – all acting as barriers to entry.

Figure 1.9. **State-owned enterprises**

OECD Product market regulation (PMR) state-control indicator, index scale of 0-6 from least to most restrictive



Note: The OECD average includes only countries for which data are available in 2013.
Source: OECD, "The 2013 Update of the OECD Product Market Regulation Indicators: Policy Insights for OECD and non-OECD Countries" (ECO/CPE/WP1(2013)14).

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Czech SOEs have had governance problems with negative impacts on competitive conditions in the public procurement market. State-owned enterprises' executive and supervisory boards are effectively controlled by political nominees (at times with multiple positions), many of whom have few qualifications or experiences in this area. Contrary to the OECD recommendations, there are no rules for securing transparent and responsible appointments and replacements. The Supreme Audit Office (SAO) finds that among the most serious shortcomings in the management of state assets are disadvantageous contract settlements, uneconomical approaches to outsourcing consultancy, advisory, legal and other services and manipulation of tender conditions – frequently with the division of public contracts into two or more independent small-scale contracts to avoid a tender (SAO, 2013).

State enterprises engaged in commercial activities should either divest such activities or themselves be divested. The governance of the remaining SOEs needs to be more effective and public control more transparent. In particular, state-ownership policy needs to define measurable goals of these enterprises, establish legal accountability of managers and criteria for rewarding them. A harmonised management model respecting competitive neutrality (OECD, 2012), in line with the OECD Guidelines on Corporate Governance of State-Owned Enterprises, could help to address these problems. In particular, the responsibility for corporate governance of SOEs should be moved from line ministries to a single authority, which should focus on a hands-off corporate governance system with professional boards and management and requirements of profitability that are in line with those prevailing in the sector.

The public procurement market has been distorted by corrupt anti-competitive behaviour, through the breach of procedures and standards during the awarding procedure, suppressing of economic criteria and calculated misuse of legal exceptions. Issues related to irregularities in public tendering have increased since 2010 (OPC, 2012). In 2011, the Competition Authority (responsible for oversight of the Public Procurement Act) received a record number of petitions and submissions to initiate administrative proceedings and issued a near-50% higher number of fines. Contracting authorities were most frequently guilty of failing to observe rules and regulations, setting discriminatory and non-transparent tender terms and conditions, and requiring inappropriate qualifications. In recent years, the state has spent a significant share of resources on public ICT contracts, which have tended to be awarded in the form of negotiated procedure without publication (NPWP) – increasing the risks of cost ineffectiveness, restriction of competition and discrimination. These risks are enhanced by insufficient contract specification, failure to use pricing directives and breaches of the prohibition to discriminate against bidders.

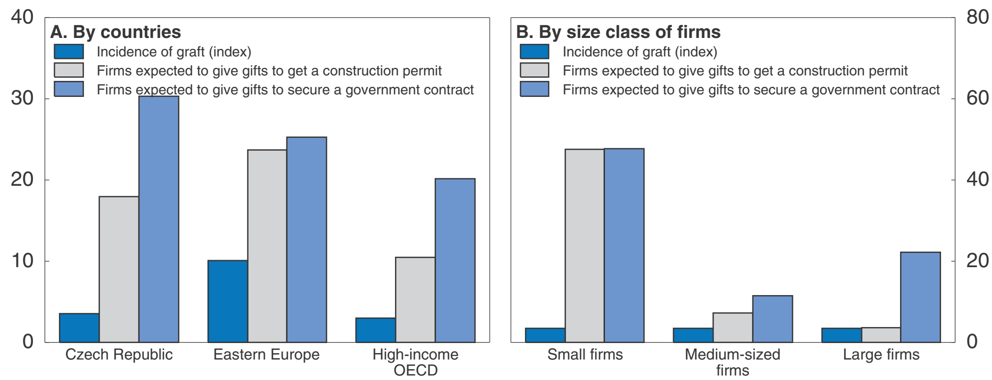
Irregularities in public procurement partly arose from a lack of transparency in the tendering process itself. Amendments to the Public Procurement Act in April 2012 aim at making the tendering process more open to invigilation in order to make corruption easier to deter and detect as well as opening up for greater co-operation between contracting authorities, tenderers and line ministries to create a more competitive and transparent tender environment. Key changes include an obligation for the contracting authority to publish tender documentation, the price actually paid for an entire contract and the role of subcontractors. As a result, surveillance should become more effective, but administrative demands on both contracting authorities and suppliers have increased and difficulties in implementation have been reported by local authorities. While a strengthening of competition oversight is to be welcomed, this comes at the risk of added implementation problems, which have blighted, for example, the disbursement of EU structural funds: since 2007, only slightly more than half of the allocated EU funds have been paid out. Improving spending efficiency in this area has necessitated the adoption of an action plan to strengthen the management and control system for the implementation of EU funds, to counter complaints about complicated and lengthy administration and other barriers to realisation of projects. Ensuring efficiency and value for money in public contracting remains an important ongoing challenge.

Irregularities in the disbursement of public funds also concern the professional integrity of civil servants, pointing to a need for a new Public Servants Act to separate political appointees from non-political staff, guarantee independence of state officials and create a well-functioning career system to reduce high staff turnover. Moreover, the Czech Republic has an unfavourable ranking in Transparency International's corruption index (Figure 1.10) as is the case with the scores concerning perceptions and actual experiences of corruption reported in a recent EU report (European Commission, 2014). Also, there is low awareness of international bribery risks as addressed by the OECD anti-bribery convention (OECD, 2013a).

Prison sentences for bribery were raised in 2011 and police have been given expanded investigation tools, such as wiretap authority, to investigate bribery. These changes have increased prosecutions of high-level public corruption. Also, new senior leadership in the state prosecutor service in 2011 and 2012 has significantly improved its effectiveness and reduced its susceptibility to political pressure. However, achieving convictions is difficult due to the absence of a system for granting immunity to persons willing to testify, the lack of a specialised prosecutorial body, inadequate legislation with respect to disclosure of source of assets and the use of anonymous bearer bonds – tools that have been used to hide the true ownership of companies winning public contracts (USDS, 2013). The 2006 Conflict of Interest Act obliges legislators, members of the Cabinet, and other selected public officials to make annual asset declarations, but they are often general in nature and lacking in detailed information, and third parties can only view such declarations in person based on a written request.

Figure 1.10. **Transparency International corruption index, 2009**

In percentage of total firms



Source: World Bank and IBRD (2009), *Enterprise Surveys: Czech Republic.*

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Competition law and its enforcement

Czech competition law is fully harmonised with EU competition rules (Box 1.1). It has three basic provisions: the *ex ante* vetting and approving of mergers; the prosecution of cartels involved in collusive anti-competitive behaviour, and the prosecution of abuses of dominant market positions. The agency responsible for competition enforcement is the Office for the Protection of Competition (OPC) (OPC, 2012b). Agency resources are somewhat inferior to the OECD average (OECD, 2008). However, a more salient issue is the skewed allocation of resources: the OPC allocates three quarters of its 200 staff to public procurement, state aid and abuse of significant market power (typically an issue in network sectors), leaving only a quarter on fighting cartels, investigating notified mergers and reviewing other competition issues. An additional concern is that the staff tends to be relatively young (with an average age of 35) and turnover quite rapid as average tenure is 5 years. Hiring outside experts is complicated as contracts exceeding CZK 750 000 have to be approved (as is the case for all government entities) by the government. Overall, competition policy enforcement has faced resource problems, requiring some increase in its capabilities in recent years. In 2012, OPC was expanded with 12 new staff, which together with an increased budget, could suggest that enforcement is in the process of becoming more rigorous.

There is a right of appeal against decisions of the competition authority and a possibility of judicial review by the Administrative Regional Court in Brno. However, the process of competition law enforcement can become very long and drawn-out, especially when the OPC and the court have markedly different opinions, as for example is the case over the definition of the relevant market. Indeed, the rate of success of the OPC in the courts has gone down at the same time as delays have gone up: the Court is currently reviewing cases from 2001. Until 2010, a single judge was responsible for all competition cases, but these are now allocated equally between the Court's chambers. Whether this will make it less difficult to tackle large complicated cases in an effective and timely manner remains to be seen. Moreover, as discussed below, the OPC is adopting a more economic and less formal approach to competition law enforcement, which may not reduce the scope for judicial debate. Under all circumstances, a more effective competition policy requires a markedly shorter judicial review process.

Box 1.1. **Anti-trust legislation and enforcement in the Czech Republic**

Legislative framework for competition policy

Competition legislation includes three basic provisions: the duty to notify mergers and have them cleared before they can be executed; the prohibition of anti-competitive agreements and the prohibition of abuses of dominant positions.

With respect to *mergers, the* Competition Act imposes the so-called SIEC (Substantial Impediment to Effective Competition) test, a combination of the SLC (Substantial Lessening of Competition) test and a dominance test. The key element is whether there is a significant impediment to competition as a result of a concentration. Concentrations are seen as not liable to impede effective competition if a combined market share of undertakings concerned does not exceed 25%. To measure concentration levels, the Office applies the Herfindahl-Hirschmann Index (HHI) and its pre-merger to post-merger change ("delta") as first indications of an alteration in competitive constraints in the market following the merger, similar to EU practice.

Anti-competitive agreements: Prohibitions include direct or indirect price fixing (including resale price maintenance); direct or indirect fixing of other terms and conditions; restrictions on production, sales, purchases, R&D or investment; division of markets or sources of supply; the application of dissimilar conditions to identical or equivalent transactions with other undertakings; tying clauses, and group boycotts. Prohibited agreements exclude agreements that contribute to an improvement in the production or distribution of goods and allot an adequate part of the advantages resulting from it to consumers.

Abuses of dominant positions: The Competition Act prohibits abuse of dominant position, including direct or indirect enforcement of unfair conditions in agreements with other participants in the market, especially contracts which are conspicuously inadequate to the counter-performance provided. An assumption is made that an undertaking that does not exceed a combined market share of 40% does not hold a dominant position in the relevant market. Moreover, it is not prohibited *per se* by the Competition Act and the undertaking has no obligation to inform the OPC of such a position. Only conduct that may be classified as exploitative, exclusionary (predatory) or structurally abusive is prohibited.

Enforcement

The Office for the Protection of Competition (OPC) has extensive powers to request documentation and information, while its employees have the power to enter premises, inspect commercial documentation, etc., including dawn raids. It may require that an infringement is stopped; order interim measures; accept commitments; and impose fines of up to 10% of the net turnover. From January 2010, prison sentences of up to three years can be imposed for price fixing, market sharing or other (horizontal) agreements with anti-competitive effects (increased to between six months and five years if such act has been committed as part of an organised group or has been repeated, or considerable damage or profit for the guilty party was made). In practice, fines have been infrequent because concluded cases have been infrequent – there was only one anti-cartel verdict in 2012, leading to a fine of EUR 3.7 million. There have not been any cases leading to the actual use of criminal sanctions.

Mergers and concentration

No merger transaction for which notification is mandatory can be executed until cleared by the OPC. Transactions carried out in breach of the notification duty are null and void; the Office can even issue demerger orders (although this has never happened). Merger control proceedings have been simplified in recent years, with fewer requirements if the parties are not active on the same relevant market or their joint market share is below 15% (or in the case of vertical integration below 25%). Above that level, the so-called SIEC (substantial impediment to effective competition) test is imposed to reveal if there is a significant impediment of competition as a result of a concentration. When assessing possible impacts, the OPC takes into account the benefits to productive efficiency, via innovation, development and creation of new products, etc. This makes for a flexible and effective approach, as the Office is not strictly bound to the criterion of the creation or the strengthening of a dominant position and therefore the process is less vulnerable to erroneously prohibit welfare-enhancing mergers.

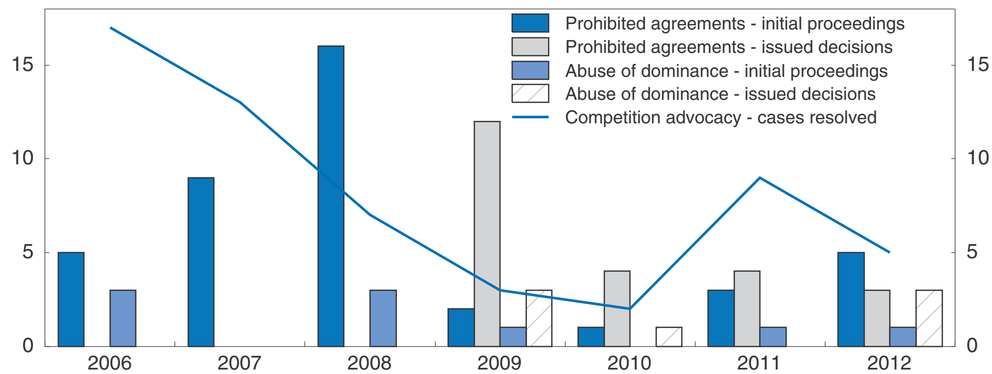
Overall, merger control operates at or near to best practice (OECD, 2008, 2009 and 2011). The criteria for assessing concentrations under the SIEC test are quite well-established and OPC's merger management is regarded as being highly competent by legal circles, the division tending to review deals in a "timely and appropriate" manner (GCR, 2013). The number of merger notifications has been running at around 50 per year in the last three years and of these around 6% led to in-depth review and 7% were challenged. In 2012, none of the challenged mergers were blocked or abandoned, though a majority were resolved with remedies. This acceptance rate cannot be considered as symptomatic of a bias towards erroneously cleared welfare-reducing or competition-reducing mergers, though there may be a bias towards larger firms in certain sectors with possible adverse implications for consumer prices (as discussed above). But it is difficult to be categorical in the absence of *ex post* impact assessments, which are not mandated by legislation. As the OPC's brief is evolving towards a more economic approach, with an emphasis on the impact on the market rather than the conduct in question, *ex post* impact evaluation studies become essential to the illumination of the *ex ante* decision finding process (Budzinsky, 2012). Retrospective assessments would also enhance transparency.

Prohibited agreements: Enforcing anti-cartel rules

The institutional background to anti-cartel horizontal agreements is also near to best practice (OECD, 2008). However, in practical terms the OPC has been criticised for focusing on easier cases and for being ineffective in addressing "real" cartels. Over the past 4 years, on average three administrative proceedings against prohibited agreements were initiated (Figure 1.11) and most were focused on bid rigging in public tenders. A leniency programme has been in operation for more than 10 years, but was not integrated with other legislation (the Administrative Procedure Code and Criminal Code), implying no real influence on the final court decision and little value in promises of leniency. Unsurprisingly, the programme has not unearthed any domestic cartels and the few applications for leniency have been related to EU antitrust proceedings. In 2012, the leniency programme was amended to increase its efficiency by making it an integral part of the Competition Act and applying it to individuals (who are subject to criminal sanctions). In addition, the redesigned programme grants individuals co-operating with the agency full protection from criminal prosecution and introduces the possibility of reduced fines for second, third and fourth leniency applicants, making the leniency programme a more powerful tool for unearthing cartels.

Figure 1.11. **Administrative proceedings initiated, decisions issued and competition advocacy**

Number



Source: Office for the Protection of Competition (OPC) (2012), *Annual Report 2011*.

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The increased attention given to fighting hard-core cartels is combined with a growing emphasis on resolving cases by "competition advocacy": where the OPC decides not to initiate administrative proceedings in less serious cases, such as those with limited effects on competition or where participants were unaware of breaches, as long as the undertaking voluntarily commits to measures that eliminate the competition problem. On top of the existing *de minimis* rule on market shares, the OPC has gained greater discretion not to proceed against cases it considers less damaging, even where there is evidence of a prohibited agreement. To reduce the time needed to conclude administrative proceedings, the Competition Act now allows a competitor to admit responsibility for and cease anti-competitive conduct in exchange for a reduced fine. A danger here is that if the OPC never issues hard sanctions, firms may come to believe that everything can be negotiated and deterrence become weaker, particularly if enforcement is seen as subjected to industrial policy considerations. A recent revision of advocacy tools (see below) helps in countering this danger.

Better prioritisation, a higher staffing level, bigger fines and the strengthening of the leniency and settlement programmes could pave the way for more active and effective enforcement. As a sign of a tougher approach, the Office conducted a total of 18 dawn-raids in 2012. There is, nevertheless, a problem in that the investigatory rights of the OPC sometimes conflict with due process, such as protecting the privacy of legal entities (competitors) against the unannounced inspections of officials and against self-incrimination. Proving anti-cartel behaviour will thus remain difficult and ensuring a balance between the deterrent effect of enforcement and the protection of the rights of the affected parties remains a challenge.

The increased focus on bid-rigging may have significant effects. According to OPC estimates, the existence of a bid rigging agreement can typically make a public contract 10-50% more expensive. In the absence of agreement, each additional bidder in a tender reduces prices by up to 5%. The 2011 Public Procurement Act stipulates that the procurement process is suspended (i.e. no procurement takes place) if there are fewer than two tenders available for evaluation. At the same time, the OPC initiated the project Education and Transparency of Public Contracting Authorities to increase the awareness of bid rigging behavioural patterns among public procurement suppliers. As of 2012, suppliers are required to submit an extract from the Corporate Criminal Register as part of fulfilment of their basic qualification prerequisites. The increased awareness of the profile of corrupt bids, together with severer sanctions, is an essential first step in bringing the problem of bid-rigging under control.

Identifying abuse of dominant position

The OPC initiated 12 cases against abuse of dominant position during 2005-11, a relatively small number (Figure 1.11) (Box 1.1). The OPC responds to complaints of abuse, such as predatory pricing. In 2011, it dealt with 171 submissions objecting to abuse of dominant position, but initiated administrative proceedings in only one of these cases. Abuse, particularly where it is collective, is difficult to prove. In evaluating whether a dominant position exists, the OPC examines whether there are legal or other barriers to enter the market, the market structure and the size of the market shares of the undertakings' immediate competitors. Generally, the OPC refers to decisions of the European Commission in order to define a relevant market, the juridical definition of which is a necessary prerequisite for resolving a case: importantly, there is a tendency to extend the relevant geographic market beyond the borders of the Czech Republic. The low ratio of case initiation to complaints presumably reflects a misunderstanding about the principle and definition of dominance on the part of the complainants, as well as enforcement difficulties related to insufficient market information.

Enforcement difficulties related to insufficient market information can be repaired by market, or sectoral, studies, which in other countries are considered an important part of competition advocacy and a tool to uncover abuses. In the Czech Republic, market studies have been few, but have become one of the priorities of the Office (as in the EU), aimed at identifying and subsequently eliminating long-term competition problems, especially in markets with a traditionally high concentration of large enterprises. The retail sector has been one of the first to be investigated, while a study of the brown coal market is now under way and a new inquiry into the gasoline retail market is under preparation.

A sector inquiry is a powerful tool for unearthing abuses of competition law. Econometric techniques based on large scale data – compiled from compulsorily provided enterprise data – can be used to identify both regulatory failures and competition law abuses (Box 1.2). They can thus be used as a basis for identifying structural reform needs and legal pursuit – as has proved the case in EU enquiries into the energy and pharmaceutical sectors. The principal drawbacks are the potential compliance costs to businesses and the due process problems of requiring information that can be self-incriminating. Provided these drawbacks can be overcome, the use of sector inquiries to bolster competition law enforcement is welcomed for its effects in identifying and eliminating existing abuses and in acting as a deterrent.

Box 1.2. **Sector inquiries**

Market studies and sector inquiries have become a common competition policy tool for the majority of competition authorities to investigate the functioning of markets or sectors when there are high prices or other symptoms of inadequate competition, but no specific evidence of collusion or abuse. A sector inquiry usually concerns the whole market and all its participants, and includes a wide scale of topics and relies on micro data, usually compiled by means of questionnaires, to identify market aberrations via econometric techniques. Depending on the specific circumstances, the authority may subsequently try to eliminate the identified regulatory barriers to competition by competition advocacy or commence an inquiry focused on a particular company for a specific suspected anti-competitive behaviour. EU experiences with inquiries have revealed that they can have policy and legal implications, the former leading to legislation to correct structural obstacles to competition, the latter leading to prosecutions for breaches of competition law by the relevant market participants.

The OPC enjoys considerable liberty and rights with respect to initiating inquiries. It is authorised to require the provision of information, commercial books, and records, relating to the subject of the inquiry, in any quantity and form (electronic or paper) as well as to conduct dawn raids in commercial (or private, subject to court permission) premises of the competitors in order to collect any commercial records located in these premises. A competitor who has failed to provide the required information or assistance during a dawn raid may be fined up to 1% of its annual turnover. As this fine is of a procedural nature, it may be imposed repeatedly, reaching 10% of the annual turnover in total.

However, unclear rules for the selection of sectors, the commercial costs of inquiries and the unlimited legal powers of competition authorities have led to criticisms. In particular, the grounds for deciding to commence a sector inquiry in a specific area need to be transparent and the costs incurred by businesses in supplying large data files for its economic and econometric tests need to be taken into account. The OECD has calculated that, in a model sector inquiry conducted by the UK OFT, the costs incurred in connection with such an inquiry may amount to up to EUR 7 750 million. There is an additional problem of due process: the current legislation for sector inquiries conducted by the OPC does not guarantee that the information obtained from an undertaking during a sector inquiry will not be used against them in subsequent administrative proceedings (Havel Holasek Partners, 2011).

Encouraging private enforcement

As is the experience of other EU countries and at the EU level, private enforcement of the antitrust law has faced difficulties, particularly in proving the facts, and is limited by the lack of provision in the competition law for third-party claims. The EU Court of Justice has recognised the right for all victims of antitrust infringements to be compensated for the harm suffered. However, due to procedural obstacles and legal uncertainty, few victims actually manage to obtain compensation. Indeed, determining the exact amount of damage suffered by consumers and businesses is often costly and difficult. Moreover, in the Czech Republic there appears to be a general distrust of the court system, due to its slowness and the low quality of judgments, particularly when it comes to stating lost profit, which leads to an unwillingness to pursue claims in civil courts. This situation particularly affects consumers and SMEs, which most often do not engage in legal action for reparation.

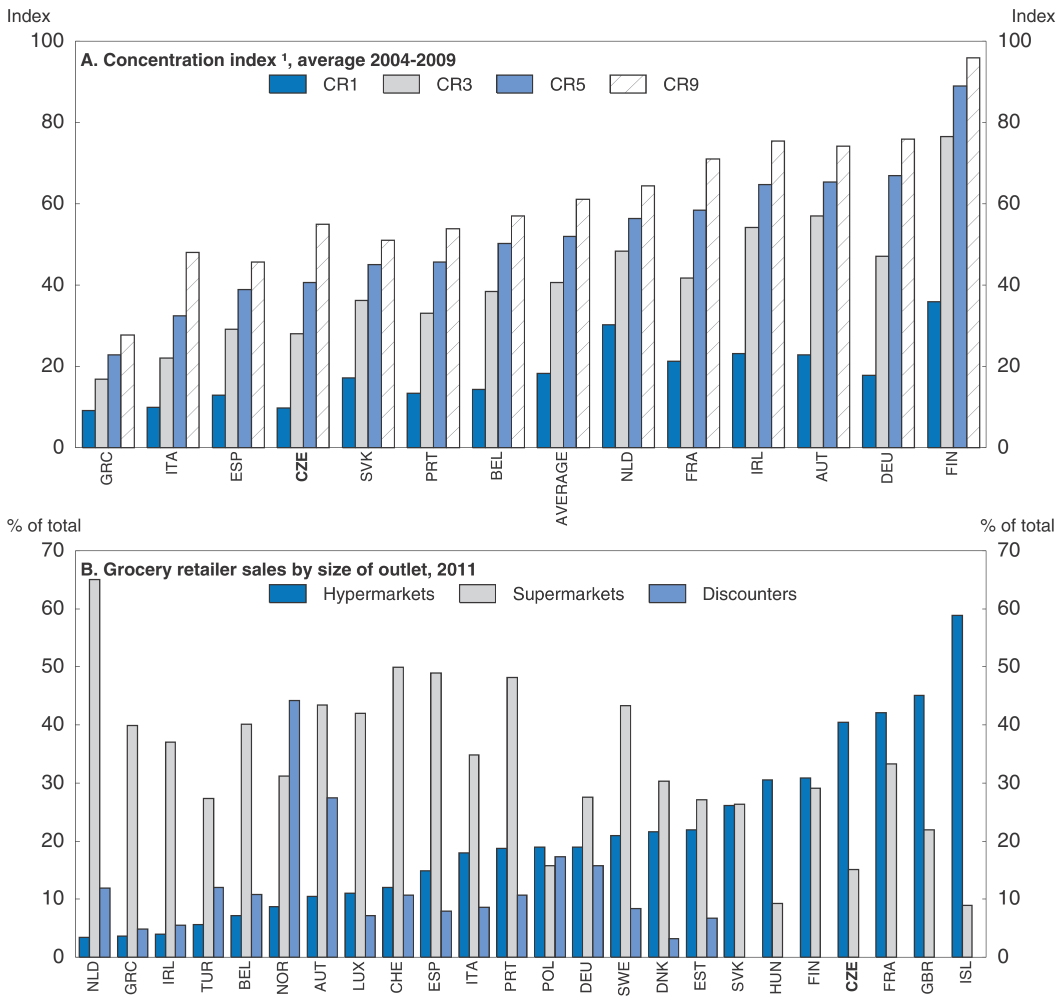
The OPC has a goal of increasing the use of private enforcement, while the Czech legislature is awaiting an EU Directive on the subject, after which member states will have two years to implement its provisions. The EU Commission proposals from mid-2013 aim to remove the practical difficulties which victims face when trying to receive compensation for damages, including giving national courts the power to order companies to disclose evidence, allowing decisions by national competition authorities to constitute automatic proof before the national courts and easing the time limits for third parties initiating procedures. In addition, rules to facilitate consensual settlements, together with (non-binding) guidance for assessing damages, allow a faster and less costly resolution of disputes. In parallel, the Commission has adopted a recommendation encouraging member states to set up collective redress mechanisms (European Commission, 2013). Overall, the proposals do not seek to leave the punishment and deterrence to private litigation, but rather aim to facilitate full and fair compensation for victims once a public authority has found and sanctioned an infringement. A problem in this respect is how the proposals interact with the leniency rules, as there is an inherent conflict between granting leniency and awarding compensation.

Application of the competition law to the retail sector

The retail sector, and more precisely the agro-food chain, has been the subject of a relatively high degree of competition policy activity, as elsewhere in the EU (ECN, 2012). Between 2004 and 2011, European competition authorities undertook a total of 182 antitrust cases in this sector, of which 9 in the Czech Republic were related to collusion (vertical and horizontal) and to abuse of dominant position within the producer/distributor supply chain (ECN, 2012). The OPC has taken the view that the modernisation process based on foreign direct investment (by the mid-2000s foreign firms accounted for over 40% of turnover) (ECB, 2011) and a switch to larger outlets (Figure 1.12), has allowed consumers to benefit from scale economies and rapid productivity growth (European Commission, 2009a), while leaving sufficient number of players for robust competition. The largest retail chains have a lower market share than in most other EU countries. In addition, none of the large retail chains has a market share above 15%, as compared with 20 to 30% in many other EU countries, and most Czechs live in districts where at least seven retail chains are active.

A cause of concern, however, is that relatively high retail-sector gross operating margins reflect a widening gap between producer and retail prices and is associated with a deteriorating market performance indicator for the fast-moving retail sector (as discussed above). As elsewhere, the atomistic farming sector is the weakest link in the supply chain, while the retail chains have acquired significant upstream market power. As a result, the retail sector has been criticised for keeping producer prices low while increasing margins (Bukeviciute et al., 2009). This has prompted an extended debate about market failures in the food sector, particularly relating to farmers obtaining a decreasing share of the wealth generated by the sector. This debate has led to competition policy in the retail sector being increasingly focused on producer-distributor relations rather than consumer interests.

Figure 1.12. **Concentration in the grocery sector**



1. A concentration ratio (CR) is a measure of the total output produced in an industry by a given number of firms in the industry. CR1, CR3, CR5 and CR9 concentration ratios refer to the market shares of the largest, three largest, five largest and nine largest firms respectively.

Source: ECB (2011); Euromonitor International, *European Market Data and Statistics 2013*.

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In 2012 the Supreme Administrative Court issued a cartel judgment in a case (initiated in 2002) concerning an agreement between two retail chains on the purchase prices for goods and the commercial terms they applied in relation to their suppliers. This is a reminder that undertakings that operate within a business relationship on the purchase side are not exempted from competition rules. The 2009 introduction of sector specific regulation (the *Act on Significant Market Power in the Sale of Agricultural and Food Products and Its Abuse*) aimed at curbing the market power of large food retailers (defined to effectively include many medium-sized retailers as any distributor with a CZK 5 billion net turnover is presumed to have significant market strength) *vis-à-vis* small suppliers of food and other agricultural products. The most important prohibitions are requiring listing fees, bearing of the retailer's marketing costs, sale below purchase price, or unjustified and sudden termination of a long-term commercial relationship. Violation can leads to suppliers claiming damages and fines up to 10% of turnover. The new Act is rather prescriptive and brings a multiplicity of actions within the purview of competition law, including non-payment of invoices within 30 days of delivery, *ad hoc* changes to contractual terms, upfront payments for entry to negotiations, etc.

The Act is disruptive and may damage those it is intended to protect. Its effect has been to increase tensions between the retail chains and their suppliers. The OPC conducted a survey of the retail sector that did, indeed, unearth problems of payment delays, discount demands and complex and unclear systems of reductions and bonuses on the part of the chains (OPC, 2012). Currently, four administrative proceedings for violations of the Act are under way, looking at abusive terms in contracts. In addition, the OPC is considering more than 30 proceeding requests from market participants. All the cases require relatively wide-ranging investigations involving gathering information from a very large number of entities. This reflects that the Act is administratively unwieldy and has increased legal insecurity and uncertainty about its application. In addition, many retailers prefer to avoid potential problems by minimising their dealings with small suppliers and sourcing supplies from large organisations or requiring suppliers to sign non-dependence declarations. The regulation should not be part of the competition policy framework. Legitimate concerns over consumer protection should be addressed through health and safety regulation. Industrial policy and sector concerns should also be addressed directly. Contractual imbalances associated with unequal bargaining power should be tackled through other policy tools, such as contract and unfair commercial practices laws.

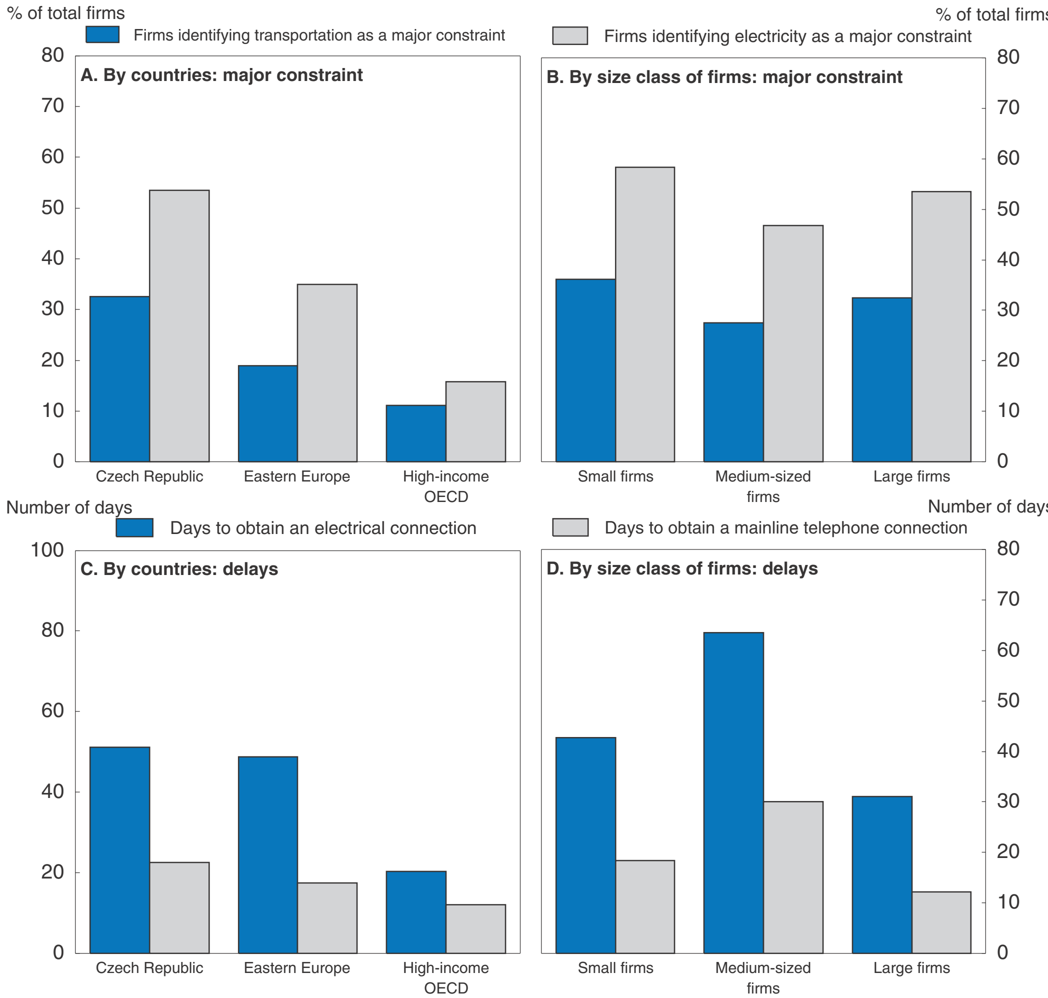
Ensuring competition in the network sectors

Because of strong natural monopoly elements, network sectors need special attention to promote competition in areas that are not natural monopolies and to prevent abuses of dominant position in natural monopoly areas. In the Czech Republic, the sectors (particularly transport, electricity and telecommunication) are frequently cited as problem areas with respect to infrastructure access (Figure 1.13). There is also a popular perception that some of these industries have been performing poorly with respect to consumers' interests (as discussed above). The OPC has a duty to oversee investigate abuses of dominant positions in the regulated sectors, but its jurisdiction has been somewhat blunted by overlapping mandates with the sector regulators. Indeed, a problem is that at times the OPC and the network regulators come to different conclusions concerning the degree of competition in the market. A related issue has been the lack of effective independence, accountability and transparency of some regulators, which may sometimes lead to them implementing changes without having a prior open consulting process or a lack of action due to the natural antipathy between public ownership and market contestability. Some of the state-owned enterprises are under the responsibility of individual line ministries, who also are responsible for some sector regulators, leading to political risks for new entrants, particularly if sector regulators appear to be engaged in industrial policy.

The electricity market is highly concentrated

The Czech Republic is the third-largest net electricity exporter in the European Union and with well integrated wholesale markets with neighbouring countries, ensuring a high degree of market discipline. To prevent cross-subsidisation, the energy regulator requires cost reporting directly allocated to each regulated activity. However, pre-tax prices for

Figure 1.13. **Problems in infrastructure delivery**



Source: World Bank and IBRD (2013), *Doing Business 2014, Economy Profile: Czech Republic*, *www.doingbusiness.org/~/media/giawb/doing%20business/documents/profiles/country/CZE.pdf*.

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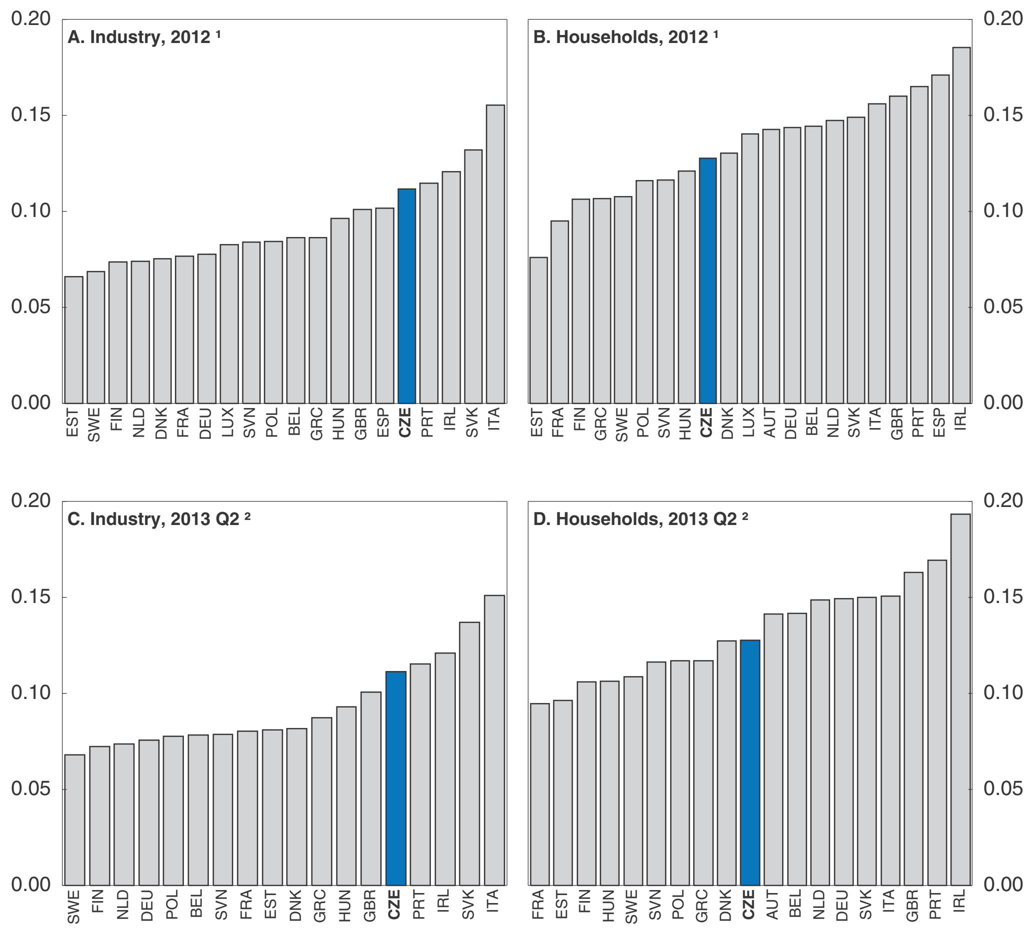
industry are relatively high (particularly when compared with neighbouring countries), while post-tax prices are in line with those in neighbouring countries, suggesting that the public purse is compensating for a lack of competition (Figure 1.14). In addition, surveys show that over half of Czech firms see electricity infrastructure pricing and provision as a major business constraint. For consumers, pre-tax prices are at par with the EU average and post-tax prices are relatively low, helping to explain that consumer surveys suggest that households have no particular problems with electricity provision. Moreover, in most countries prices for industry are lower than for households, reflecting relative cost of provision, while in the Czech Republic prices are very similar, indicating effective cross-subsidisation.

Competition may be impaired by the high concentration of the Czech electricity market, which is dominated by three vertically integrated companies whose subsidiaries hold licences for both electricity distribution and electricity trading. In addition, there are dozens of other traders. As for distribution system operators (DSOs), their combined share

Figure 1.14. **Electricity prices**

Price in EUR per kWh, 2012[1]



1. 2011 data for Spain.

Source: *IEA Energy Prices and Taxes Database* and OECD calculations.

StatLink http://dx.doi.org/10.1787/888933007373

of the electricity market accounts for more than 95% of final consumption; in the case of customers connected to the low voltage level their share is more than 99%. Within this structure, the incumbent CEZ, which is 70% owned by the state, controls five out of eight local distribution companies, serving two-thirds of final customers (Table 1.1). Because of this concentration, prices for transmission, distribution and ancillary services are regulated, but commercial activities related to electricity supply to final customers are fully subject to market mechanisms since 2007 (ERO, 2013).

EU Directives require the separation of networks from generation and supply activities. In the Czech Republic, this has been achieved through legal separation, fulfilling the requirements in the EU third energy packages, which is a relatively weak form of unbundling compared with ownership separation (van Koten and Ortmann, 2007). Only the transmission system operator is ownership unblundled. The weak unbundling puts CEZ in a position to influence the overall market in a non-competitive way (World Bank, 2013); on the retail side, it could also potentially deny non-discriminatory access to its low-voltage

Table 1.1. **Concentrated and vertically integrated electricity market**

	Lignite mining	Generation	Transmission	Distribution	Supply
CEZ	54% 25.1 million tons	72% 63.3 TWh	100% 58.7 TWh	5 out of 8 distribution regions 61% of customers	39% 23 TWh
Others	46% 21.5 million tons	28% 24.3 million tons		39% of customers	61% 35.7 TWh
	CEZ fully owns the largest Czech mining company (SD) covering 63% of CEZ's lignite needs		The Czech transmission grid is owned and operated by CEPs, 100% owned by the Czech state		
	Remaining 2 coal companies are privately owned	Other competitors – individual IPPS			Other competitors E.ON, RWE/enBW

networks. The market power of the incumbent has been weakened by the entry of new energy distribution companies with consequent considerable supplier switching among customers (*Working Group Report on Transparency in EU Retail Energy Market*, 2012), but not sufficiently to secure similar prices for industry as in neighbouring countries in the integrated wholesale markets, such as Germany. Another concern, given the complaints about infrastructure, is whether the regulatory system ensures adequate incentives to invest in the distribution network.*

Another problem is CEZ's dominance (accounting for nearly three-fourths) of the generation market, which has allowed it to influence prices in certain supply and demand situations via capacity blocking or withholding. In 2009, the European Commission started to investigate CEZ on suspicion of anticompetitive behaviour, following a pan-European enquiry into the energy sector in 2005-07. The allegations against CEZ included deliberately reserving future transmission grid capacity for intended CEZ-owned gas-fired generation, thereby shutting out competing generators; preventing competing generators from building new generation capacity and deliberately withholding lignite from them. Of these, the EC continued the investigation into the blocking of transmission capacity. In 2012, to forestall a possibly damaging anti-trust investigation, CEZ proposed certain commitments, including the sale of one of its generation assets.

The fact that there has been no instance of domestically instigated competition investigations could be interpreted as a symptom of weak competition oversight. Previously, this reflected the fact that the electricity regulator (ERO) could not sanction anti-competitive behaviour. The 2011 amendment of the Energy Act boosted the ERO's independence and effectiveness while enhancing OPC's capacity to investigate competition abuses (ERO, 2012a and 2012b). The Act's new section provides for the ERO's co-operation with the OPC, the two Offices being obliged to provide suggestions and information to one another, and to collaborate. The reform took place when the relevant provisions of the EU third energy package were transposed into law, an aim of which is to achieve more effective regulatory oversight. This included the establishment of an agency

* The regulatory formula for distribution is based on a revenue cap which depends heavily on the regulated asset base (RAB). One objective of the RAB system is to reduce the cost of capital by reducing the risk of stranded assets. However, investment depends more heavily on where the regulated return is set. There have been complaints that CEZ invests too much abroad.

for the co-operation of national energy regulators (ACER), which should help bolster the effectiveness of regulation in this area.

These measures should result in greater competition policy effectiveness in downstream markets, but problems have been accumulating in upstream activities. The OPC has initiated an inquiry into the brown coal sector, where a long-term issue is a recent 60 years agreement between the incumbent electricity generator and the dominant coal producer, which seems to have important lock-in effects. Since ČEZ is both the dominant generator and the mining company's sole shareholder, this can hardly be called an arm's-length transaction. However, competition issues are not the dominant ones here. The main fear of the regulator (or Czech state as the case may be) in regard to opening the competition in this sector has been the social impact of a free energy market. Currently there is growing pressure on the government to revoke the decrees dating from the early 1990s that limit coal mining on environmental grounds.

The situation is further complicated by the impact of green energy policies on the input mix and national self-sufficiency (Box 1.3). Generous subsidies for solar power plants have not just been linked to energy supply-price distortions, but also to lapses in regulatory and financial control: in one instance, the regulator set excessive prices for purchasing

Box 1.3. **Energy policies and competition policy enforcement**

A factor making competition oversight difficult has been the promotion of green energy. At the retail level, a major issue has been the charge to cover the extra costs incurred in support for electricity production from renewable energy sources, where a state-support-induced boom in the installation of photovoltaic plants, as well as plants generating energy from biomass and biogas, has had a significant upward impact on electricity prices, despite a budgetary subsidy of CZK 11.7 billion.

At the generation level, the problem of competitive distortions has been brought to a head by disruptive cross-border energy flows, linked to renewable energy policies in Germany. Generation prices have been under downward pressure, as the market has been preferentially flooded with green electricity *based increasingly on photovoltaic solar and onshore wind* power, mainly from Germany. More fundamentally, the implementation of sustainable energy generation makes generation more dependent on weather-dependent generation, raising issues about energy security and transmission grid capacity, while relative price signals become distorted, making future investment planning difficult. The economic return on investments of conventional sources of energy has decreased heavily, but the need for reliable base load capacity to fill in gaps in solar- and wind-based generation capacity has actually increased.

Negative public perceptions of the costs of green energy have been increasingly linked to the debate about the need for national energy self-sufficiency, making the energy policy background increasingly volatile and leading to uncertainty being used to extract new economic rents. With respect to nuclear energy expansion, for example, CEZ is demanding the establishment of a stabilisation mechanism under which the company would receive funds from the government should market prices fall. The Ministry of Industry and Trade is resisting and lack of agreement on this issue could halt the construction of the new nuclear reactors. Market dominance could mean that the extension of the nuclear power plant Temelin is disadvantageous for taxpayers or energy consumers, but may be very advantageous for producer interests.

energy from solar farms. An important recipient of the support system for renewable sources of energy has actually been CEZ. In fact, the impact of competition distortions on the electricity price is of second order compared with the effects of support for renewable energy resources with the costs per capita among the highest in the world (ERO, 2012a). Fees for renewables are part of regulated distribution tariffs charged to final customers. The ERO has started preparations for stopping subsidies to renewable energy as from 2014 on the grounds that they were beyond the limits of the Czech Republic's economic capacities.

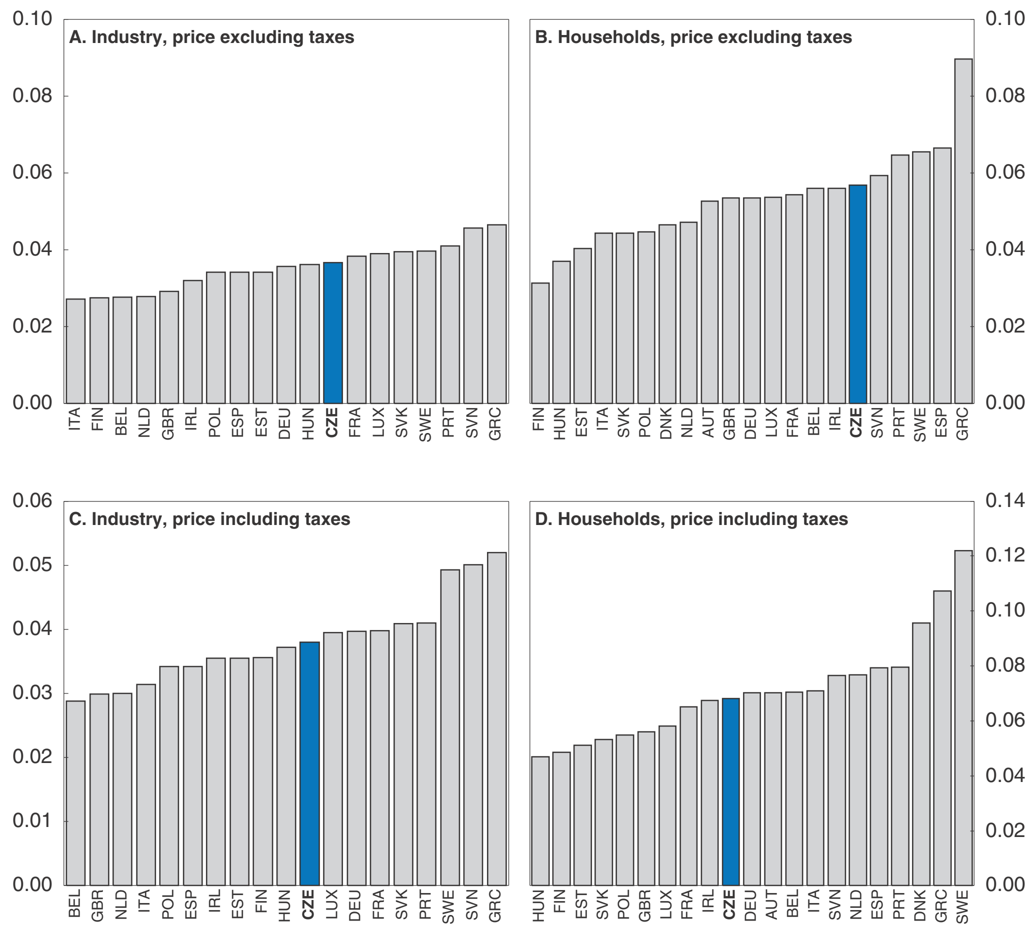
The gas market

The Czech gas market has been one of the fastest developing in the European Union, following the initial competition difficulties associated with market opening. Privatisation resulted in a highly concentrated and vertically integrated market which, though fully legally unbundled since the end of 2006, has been dominated by a single private player, RWE. Both the energy regulator (ERO) and OPC were active during the mid-to-late 2000s, ensuring that the dominant player did not hinder market access via its control over the majority of regional distribution companies and national storage facilities. These interventions, which included temporary caps on the gas trade and storage prices, fines and administrative proceedings, appear to have been successful in creating a competitive market, though most recently the ERO has had to introduce a Code of Conduct to eliminate unfair and illegal selling practices. Since the opening of the gas market in 2007, an increasing number of gas suppliers and/or additional gas importers is competing with the dominant incumbents at the local distribution level, stimulating a significant increase in supplier switching. A counterpart to the switching is a somewhat below-average consumer satisfaction with gas services and a relatively high pre-tax price for households, and noticeably so when compared with neighbouring countries, albeit post-tax prices are similar, while industrial customers enjoy relatively low prices (Figure 1.15).

The stable and transparent conditions for gas trading have been very favourable in comparison with the other countries. The industry has been characterised by low but reliable returns, which has brought inward investment from long-term financial investors and increasing ownership diversification: RWE has now divested its gas transmission business because of pressures on margins. Most recently, however, the regulator has decided that gas revenues, and hence prices, have been allowed to rise too fast. End user prices are composed of a regulated transmission and distribution part and an unregulated gas and storage part. The ERO proposed to cut short the current regulatory agreement for gas at the end of 2013, after four years instead of five, to curb allegedly excessive earnings by gas market players accused of re-valuing their assets to increase the book value of their investments (i.e. the regulated asset base, RAB) and therefore the regulated earnings they could qualify for. A regrettable proposal as the effectiveness of a RABs system as a regulatory commitment device for infrastructure industries depends heavily on the security of the regulatory setting (Stern, 2013). In the end, the proposal was not accepted and it is important to remain vigilant that regulatory interventions do not undermine the credibility of the regulatory system as it may raise the cost of capital and deterring future investment in the sector.

Figure 1.15. **Natural gas prices**

Price in EUR per kWh, 2012[1]



1. 2010 data for Italy.

Source: *IEA Energy Prices and Taxes Database* and OECD calculations.

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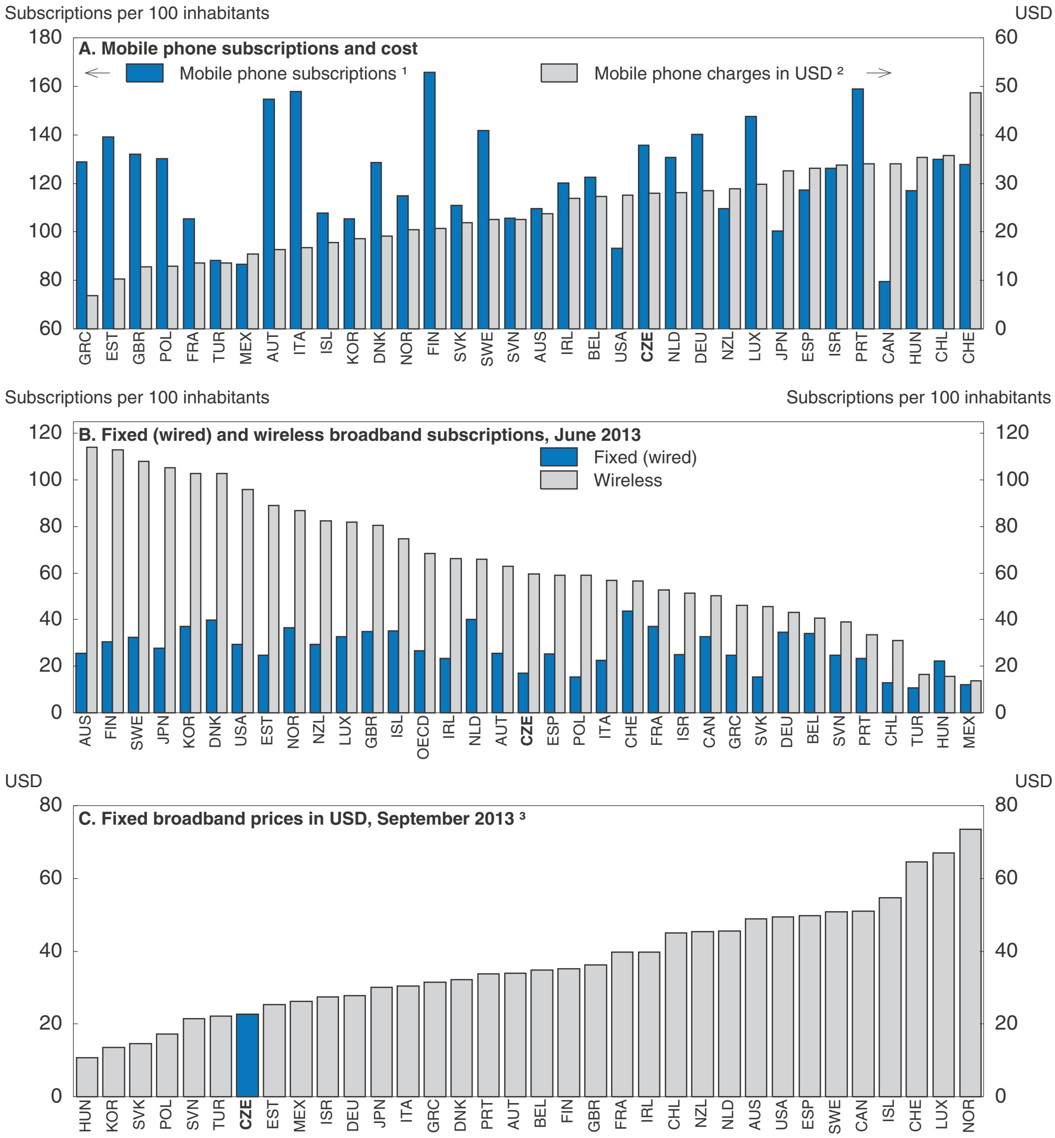
Telecommunications

Mobile phone prices were among the highest in the OECD in mid-2012. Since then prices have come down, but remain well above the most competitive telecommunications markets in the OECD (Figure 1.16, panel A). Also, standard subscriptions for packages with unlimited voice and SMS and limited data are still considerably higher than in competitive markets like France. Combined with a relatively high mobile phone subscription rate, this indicates a relatively large loss in consumer welfare. The fixed-line broadband market is not particularly well developed, as the number of subscribers is relatively low despite relatively low charges and the quality is poor (panels B and C). Indeed, the take-up of very high speed broadband lines is lower than the EU average with only 4.5% of fixed broadband connections having speed of at least 30 Mbps and only 0.3% with at least 100 Mbps, compared to the EU average of 7.2% and 1.3% respectively (European Commission, 2012c). In addition, according to media reports only 3% of Czech businesses are connected to high-speed internet (download capacity of +30 MBits/s) and only 30% are connected to fibre optic or cable networks; the majority rely on wireless connections.

Figure 1.16. **ICT coverage and charges**



1. Mobile phone subscriptions per 100 inhabitants, December 2011.
2. OECD basket of mobile telephone charges, 100 calls, per month, VAT included, November 2013.
3. The OECD basket of fixed broadband services includes the total charges for a subscription of an average low usage with a minimum speed of 15 Mbit/s and 11 GB of usage per month, September 2013.

Source: *OECD Broadband statistics.*

StatLink http://dx.doi.org/10.1787/888933007734

The structure and history of the sector suggest that oligopolistic behaviour may be an issue. Nearly two thirds of telecommunication revenues are generated in the mobile market – a higher share than in most other OECD countries (OECD, 2013b). The Czech Republic has three main mobile network operators, among which the former state-owned monopoly. The latter was formerly fully owned by the Spanish Telefónica and recently sold to a domestic investor. Compared with more developed and competitive markets in EU15, both concentration (particularly for the three largest operators) and operating income are relatively high (and investments are lower than in most other OECD countries) (APMS, 2012; Information Institute, 2012; OECD, 2013b).

The powers of the OPC over the sector were strengthened in 2007, when parliament repealed a provision of the telecommunications law that had effectively prohibited OPC from taking action where the sectoral regulator had the power to set fines or regulate conduct. Subsequently, the sector has been the subject of a number of competition policy investigations for abuse of dominance in telecoms and broadband sectors, one such investigation being currently under way (OPC, 2013). However, cases, including long-term contracts and margin squeeze, tend to be very slow-moving and difficult to prove. Where the OPC has acted, there have also been differences of legal interpretation between the various judicial levels – first instance (OPC), regional and Supreme Administrative Courts. This has made the application of competition law protracted (see above). A 10-year long case of Telefónica luring customers into contracts with limited possibilities for termination landed three times before the Regional Court in Brno and three times before the Supreme Administrative Court before being concluded. The Office then increased the fine imposed in its original decision, which is once more under appeal.

The definition of the "relevant market" has taken on great importance and is subject to widely different interpretation: for example, the infrastructure owner has argued that with Wi-Fi growing rapidly dominance on fixed wires is of diminishing consequence for competition in the overall telecoms market. Meanwhile, the resistance to new entrants on the part of the incumbent is being tested by private actions in the court as a competitor has declared it is suing for damages in a case from 2005, where an OPC investigation about abuse of dominant position started in March 2011.

Until spring 2013, there was only a single mobile virtual network operators (MVNOs), i.e. wireless communications services providers that purchase bulk access from a *mobile network operator* and then resell. Since then the number of MVNOs has expanded rapidly and by end-2013 there were 50 registered MVNOs. However, the combined market share of active MVNOs remains at less than 0.5% of telecommunication traffic, reflecting a relatively new and dynamic market as well as the fact that the MVNOs have little data transmission. Effectively, the market depends on the mobile network operators. The effectiveness of competition among these three is questionable. Particularly as the network regulator considers the three to have joint market power, as is the case in some other EU countries (CTU, 2013). The Czech Telecommunications Office (CTU) planned to reserve a block of spectrum for a new entrant when auctioning its 4G licences. In the end, three licences were granted as the fourth bidder took over the incumbent operator (Telefónica Czech Republic). Thus, the market structure remains unchanged.

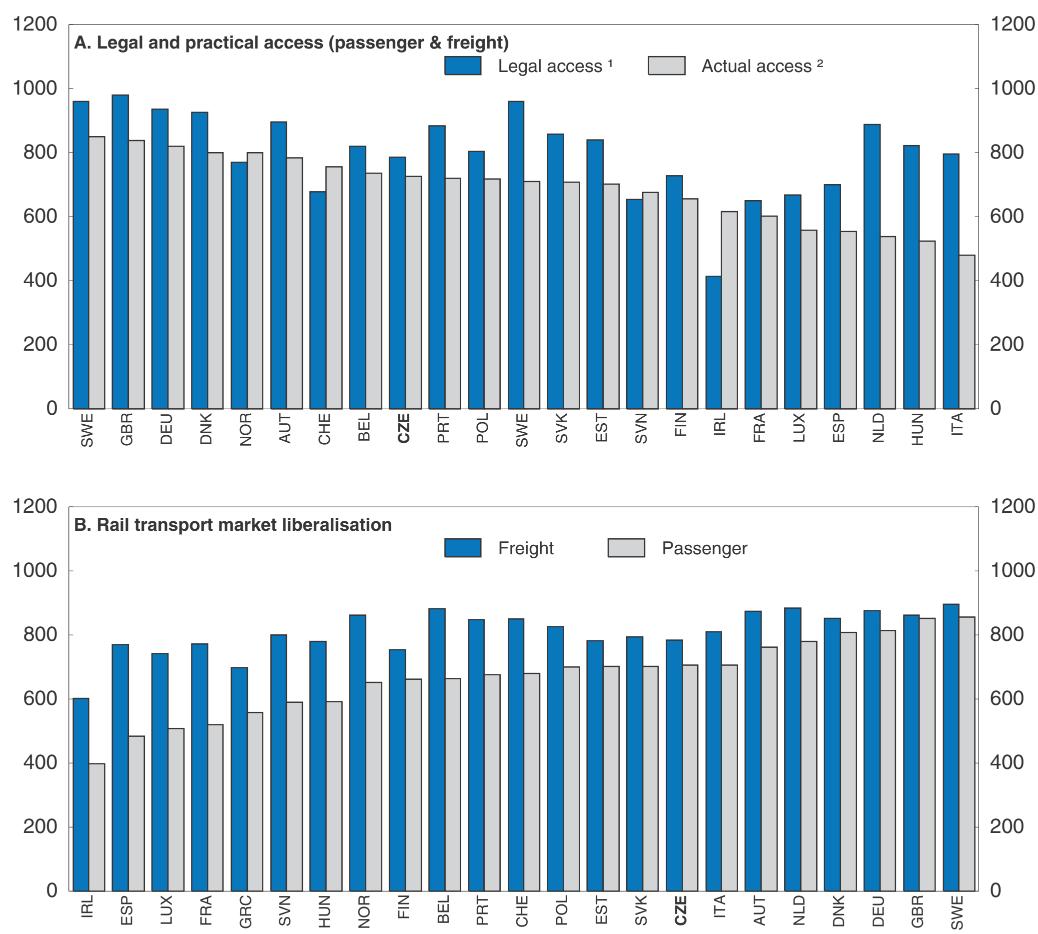
Given the impediments to rapid competition law enforcement, the onus of ensuring robust competition in the absence of a fourth operator needs to fall on structural measures, such as securing non-discriminatory access for MVNOs, either through regulation or investigations of abuse of dominant position. The introduction of MVNOs in the Czech telecom market is a positive development. So far, however, no Full-MVNOs have developed that manage their own Mobile Network Codes (MNCs) and can change host network without having to issue new SIM-cards to their customers. The government is advised to investigate whether there are regulatory or competitive barriers that preclude MVNOs to choose to become Full MVNO independent of their host network. In addition, the same regulations should enable non-telecom companies such as car companies, energy companies and the central government to become independent of mobile operators.

Transport infrastructure

The Czech Republic is classed as 'on schedule' as far as EU-driven railway market opening is concerned (Figure 1.17): i.e. in terms of organisational structure of incumbent, regulation of market access and competencies of the regulatory body (IBM, 2011). Markets for rail freight services have been fully opened to competition since January 2007 and those for international passenger transport services as of January 2010. EU law allows that national domestic passenger markets remain closed, and the Czech Republic is one of a few countries (including Denmark, Germany and Sweden) that have opened up for competition. The benefits of opening up the rail network are currently reflected in fierce competition for passengers that is driving down ticket prices on a few main lines.

Figure 1.17. **Railways liberalisation**

Indexes, 2011



1. Legal access: Organisational structure of incumbent (25%), regulation of market access (45%), competencies of the regulatory body.
2. Actual access: Information barriers (5%), administrative barriers (20%), operational barriers (45%), share of accessible domestic market (25%), sales services in passenger transport (5%).

Source: IBM Global Business Services (2011), *Market Opening: Rail Markets of the Member States of the European Union, Switzerland and Norway in comparison.*

StatLink http://dx.doi.org/10.1787/888933007753

There remain severe obstacles to competition in railway services. Domestically, information asymmetries, technical and safety regulations, and operational barriers restrict the practical level of access in passenger services (IBM, 2012). For example, the incumbent (*České dráhy* – ČD) is allowed to charge commissions of up to 25% of new entrants' ticket sales for running the nationwide ticketing systems.

Structural impediments to competition arises from the ambiguous separation of the infrastructure from the train operations makes ČD's pricing structure opaque in terms of how much of the price reflect the infrastructure charge and how much the transport service provided. Indeed, securing competition in network industries hinges on infrastructure charges that secure non-discriminatory access. The opaque price structure also means that the competition authority has problems of investigating complaints of predatory pricing, as ČD claims that it is impossible to establish the cost of provision on specific lines.

In 2011, the Czech Republic separated infrastructure management from railway operations, in line with EU rules. However, the incumbent service provider remains in control of exercising day-to-day train traffic management and can influence infrastructure developments, which has an inherent risk to competition as these powers can be used to covertly discriminate against newcomers (European Commission, 2013). Moreover, infrastructure managers may not always react to the needs of the market and evidence from users suggests that the current governance system does not provide sufficient incentives for them to respond to their needs (European Commission, 2012a).

Moreover, the lack of effective separation creates a persistent risk of cross-subsidisation, with assets or operational funds being diverted to provide a competitive advantage to the transport activities of ČD. Ownership unbundling would be the first-best option, but a back-up option could be the creation of a holding structure that would clarify the financial separation of fixed assets and operational infrastructure would be a step towards preventing such cross-subsidisation and creating a level playing field for new entrants (Høj et al., 2007). The EU's fourth railways package points to institutional separation (ownership unbundling) as the simplest and most transparent way to achieve the necessary independence and if a vertically integrated or "holding structure" is chosen, then financial separation of all activities should be designed in a way to counter the risk of cross-subsidisation. The Transport Ministry has proposed selling all the railway stations and property of ČD to the Railway Infrastructure Administration (SŽDC) or municipalities and regions. The regulator should ensure that ČD is not using the revenues from selling its non-transport assets to disadvantage the operations of new entrants. Another regulatory issue is the fact that the regulatory body is located within the railway authority, which reduces its independence, accountability and transparency.

Coach transport provides the rail sector with competition: its share of all passenger kilometres is about half that of rail (European Commission, 2009b). There is little European legislation applying to the bus or coach sectors and, as a result, there are significant differences in the regulatory environment within which the bus and coach sector operates in different member states. In the Czech Republic, the OPC reached its first decision to penalise predatory pricing in 2010, the culprit being the dominant operator of public passenger coach services between the two largest Czech cities, Prague and Brno. The decision was reversed by Administrative Regional Court in Brno, but subsequently confirmed by the Supreme Administrative Court, who returned the case to the Regional

Court for further assessment. As in other sectors (telecommunications for example), whether a market is narrowly or broadly defined to include near-competing modes makes an important difference to how predatory pricing, and hence market access, is treated.

The Czech airline sector is fully integrated into the EU single market. Compared with other sectors, air transport has been a relatively easy industry to liberalise – monopolies in air transport have always been legal rather than "natural". While the industry features network effects and economies of density, it is not subject to large economies of scale or barriers in the form of huge sunk investments. The Czech Republic has thus not been at any inherent disadvantage over size of location and it ranks relatively high in terms of air connectivity according to the World Bank Index (ACI). Over the past four decades, the cost of air transport services has fallen and the market has expanded rapidly. Liberalisation has increased competition from low-cost carriers, which together with the economic crisis and high fuel costs has driven the state-owned carrier Czech Airlines (CSA) close to bankruptcy, requiring state aid. Subsequently, Korean Air took a 44% stake in Czech Airlines, but is prevented by EU rules from a full take-over. The state thus remains liable for potential losses and further restructuring is needed to generate efficiency improvements. Complete privatisation should be pursued to avoid more state aid with potentially distortions to competition.

In most EU member states, postal services were to be completely liberalised as of 1 January 2011, but some, including the Czech Republic, were afforded a two years postponement. From January 2013 the monopoly held by the state enterprise Czech Post (CP) over deliveries of postal items that weigh up to 50 grammes with stamps up to EUR 0.7 was removed. In the next five years, Czech Post will be the sole holder of the postal licence, responsible for the universal service obligation, after which the postal licence will be awarded by tender. Competing businesses may only provide the more profitable postal services, such as offering their services to bigger cities. As a result, the postal licence holder may find it difficult to generate profit. Based on the decision of the Czech Telecommunications Office, other postal services providers may be obliged to contribute to the reimbursement of costs for the postal licence holder. Depending on the level at which this tax or subsidy is set, the new scheme may limit or expand the number of new postal services providers that enter the market. In other countries, such as Sweden, incumbents have foregone such compensation as the value of having a nation-wide network was considered larger than the cost of universal service provision.

This is an example of network liberalisation where the incumbent is struggling, with a danger of cross-subsidisation from profits in monopoly areas to competitive markets. CP has been contending with significant year-on-year declines in mail volume for the last few years, as customers switch to electronic communications. However, the sector has not undergone the same modernisation (closing down offices and provide services through other outlets) as in many other countries. Instead, CP is providing an increasing range of non-postal services, such as paying out pensions and banking, and is branching out into ICT services to public sector organisations. At the same time, the company has responded to market liberalisation with a new pricing strategy and product innovations, including in parcel delivery. With profitability increasingly depending on diversification from its core activities, it will be a difficult challenge for the regulator to ensure a level playing field for potential market entrants.

Main competition policy recommendations

Create a completely open and competition-friendly market

- Lower the regulatory burden for business by reducing legal delays with respect to contract enforcement and local authority regulatory interference as well as achieve best practice with respect to documentation, administrative delays and costs. Further reduce domestic barriers to entry in services, including professional services. Strengthen the RIA Committee's independence to make the regulatory impact assessment process more timely and effective.
- Improve the managerial integrity of remaining state-owned enterprises by concentrating control within a single authority that focusses on professional corporate governance and agreed performance targets. Privatise and divest business-related state-owned enterprises and activities.
- Bring in a new Public Servants Act to separate political appointees from non-political staff.

Reinforce competition law enforcement

- Enhance enforcement and deterrence by monitoring the leniency programme to ensure it is working effectively in unearthing cartels, improve the scope for private litigation, and increase administrative awareness of and sanctions for bid-rigging, tackle the problem of anonymous share-holders in tendering companies, and use sector inquiries to bolster competition law enforcement.
- Remove the special sector regulation for food retailing from the competition policy framework Further increase the reliance on competition policy by introducing *ex post* merger impact assessments.

Ensuring competition in the regulated network sectors

- Secure effective independence of all network regulators, improve the co-ordination between the competition authority and sector regulators and have a common approach to what constitutes a proper definition of market dominance.
- Tackle vertical constraints on competition via effective ownership unbundling or – as a second best solution – via holding structures. The latter approach requires financial separation of all activities that are designed in a way to counter the risk of cross-subsidisation.
- In telecommunication, secure cost-based rental prices for MVNOs through regulation or subjecting the incumbents to investigations of abuse of dominant position. Investigate if there are regulatory or competitive barriers that preclude MVNOs and non-telecom companies to choose to become Full MVNO independent of their host network.
- Ensure that entry into the liberalised postal market is not distorted by the subsidisation of the public service obligation or cross-subsidisation of market based activities.

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Chapter 2

Strengthening skill use and school-to-work transitions

The education system has reacted slowly to changes in labour market needs, leading to an increasing number of school leavers without sufficient qualification. In addition, declining PISA scores and a rising share of low achievers are raising concerns about the quality of the future labour force. These factors play a role in the stalled income convergence process. Indeed, practices such as early tracking, streaming and low transferability between academic tracks hamper employability, human capital accumulation and social mobility. In the vocational education and training system, resources continue to be allocated on a historical basis. A more endogenous adjustment of the system to better align students' qualifications with labour market needs requires active participation of social partners, students and education institutions. The rapid expansion of tertiary education without a corresponding increase in resources has led to fears about declining quality. Measures to better balance family and work lives can improve career options for women and therefore reduce the current tensions between having children and full time labour market participation of younger women. This could also ease the coming labour shortages associated with population ageing.

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

The labour market has undergone marked changes in recent years as the structure of the economy and labour demand, in terms of occupations and skill requirements within specific occupations, have continued to evolve as has been the case since transition started. The service sector has expanded and manufacturing has become tightly integrated into global value chains, changing the skill set needed in the labour market. However, public education has not kept pace. Streaming and early tracking hampers social mobility and human capital accumulation, vocational training has reacted slowly to the changing needs of the labour market, and there is little workplace training.

Pockets of underutilised resources have arisen and convergence, productivity and real wages have slowed. Long term unemployment is high among low skilled workers, in part reflecting low labour mobility, and the crisis has pushed up youth unemployment. Also, elements of the tax and benefit system discourage female labour market participation, which is low and declining, representing a waste of human capital when the economy is facing an ageing labour force.

This chapter looks at the labour market and makes recommendations to increase skill use in the economy through higher employment rates, including by strengthening school-to-work transitions. By assessing skill development over citizens' lifetime, aiming at strengthening the links between the education system and the labour market and putting existing skills to effective use, this chapter follows closely the OECD strategic approach to skills policies (OECD, 2012a).

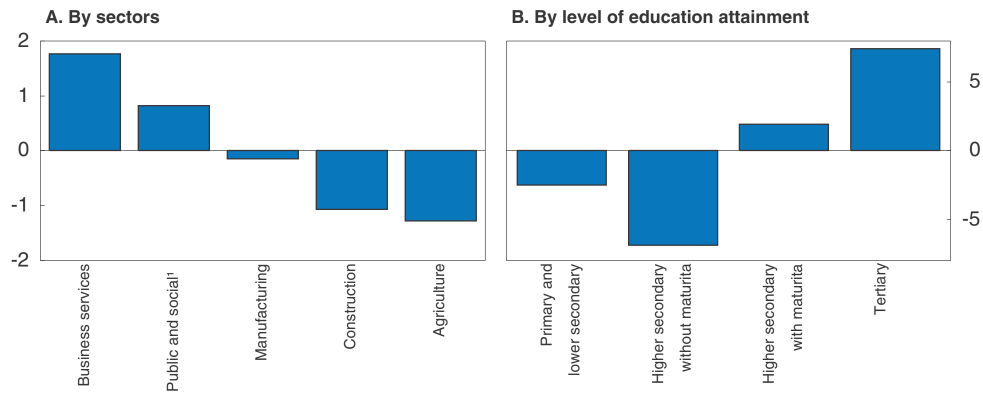
The integration in the global-value chain has changed the skill set needed in the labour market

In the past decade, as since transition started, employment continued to decline in agriculture while rising in the service sector, particularly in business services (Figure 2.1, panel A). In manufacturing, important job losses occurred in some industries – such as food, beverages and tobacco, textiles, leather and apparel, metallurgy and mineral products – while the integration in global value chains led to the strong expansion of motor vehicles and electronics, computer and optics industries (Table 2.1). Changes in the sectoral composition of output and employment steered important changes in the occupation structure of the labour force, with an increase in the share of professionals and technicians relative to total employment. This process also increased the share of workers with tertiary education in total employment by more than 7 percentage points and reduced the share of workers with upper secondary vocational graduation by a similar amount, while employment opportunities for unskilled workers declined less (Figure 2.1, panel B).

The Czech Republic has a well-educated labour force, with 92% of the working age population having attained at least upper secondary education, compared to the OECD average of 76% (OECD, 2013a). Education attainment is associated with good labour market outcomes (Table 2.2). Employment rates are particularly low for those with less than upper secondary education and increase with the level of education. The unemployment rate is closely linked to educational attainment with those having less than upper secondary education (a small fraction of the labour force) having particularly high unemployment.

Figure 2.1. **Structural change has led to an increase in the skill content of employment**

Change 2003-12 in shares of employment, in percentage points



1. Public administration and defence; compulsory social security; education; human health and social work activities.

Source: Eurostat and Czech Statistical Office.

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Table 2.1. **Employment in manufacturing**

Sectors	Shares in total employment (%)	
	2003	2012
Food, beverages, tobacco	3.0	2.3
Textiles, leather and apparel	2.7	1.2
Paper, coke, petroleum, rubber, plastics	2.2	2.1
Chemicals, pharmaceuticals	0.9	1.1
Metallurgy and mineral products	6.9	6.2
Electronics, computer, optics	2.6	3.7
Motor vehicles	1.8	3.5
Total manufacturing	**27.8**	**27.6**

Source: Eurostat.

Table 2.2. **Labour market outcomes by educational attainment**

Persons aged 25-64, %, 2012

	Unemployment rate	Employment rate	Share of labour force	Share of registered unemployed[1]
Primary and lower secondary education	28.8	21.1	5.6	29.3
Upper secondary education:	6.5	71.8	74.6	64.9
Apprenticeships	8.0	72.6	37.6	41.5
Technical vocational training	5.0	71.0	36.8	21.2
Gymnasia	7.4	51.5	0.2	2.2
Tertiary education	2.9	81.1	19.8	5.8
Total	**7.0**	**66.5**	**100**	**100**

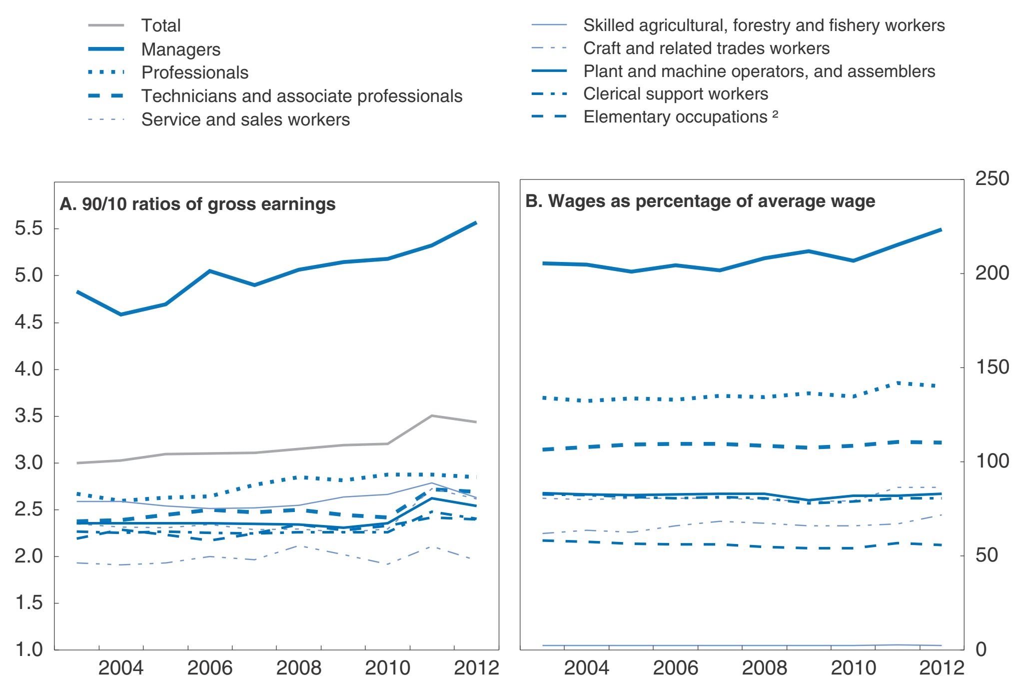
1. As of Q4/2012. These figures reflect unemployed persons registered at employment offices, as opposed to the self-reported unemployed in the *Labour Force Survey*.

Source: OECD; LSO Network (Labour market, economic and social outcomes of learning), *Labour Force Survey*.

Real wages have increased as part of the income convergence process, rising from 40% of the average in euro area countries in 1995 to almost 80% in 2012. However, the transformation in employment patterns has not been accompanied by changes in relative wages across occupations or by a dispersion of wages within occupations, reflecting the fact that wage increases tend to be very similar for all workers, with the exception of managers (Figure 2.2). As a consequence, relative wages constitute poor signals to students when they choose their studies, with the exception of the high net private returns for tertiary education. Against this background, relative demand for skills is reflected more through lower unemployment rates for the more skilled rather than wage developments.

Figure 2.2. **The wage distribution has not followed changes in the structure of employment**

By occupations (ISCO)[1]



1. A change in the classification of occupations from ISCO-88 to ISCO-08 precludes meaningful comparisons of changes in the occupation structure of employment from 2011 onwards relative to previous years.
2. "Elementary occupations" is the title of major group 9 in the ILO classification system of occupations. It comprises, inter alia, street vendors, shoe cleaners, domestic helpers, building caretakers, messengers, doorkeepers, garbage collectors, hand labourers, etc.

Source: Czech Statistical Office.

StatLink http://dx.doi.org/10.1787/888933007791

This is a somewhat surprising outcome as wage determination seems to be quite decentralised, with collective bargaining taking place at the company or sector level and covering only around 40% of employees, although involving a great majority of large firms (Box 2.1; Visser, 2013). However, in recent years the bargained minimum wage has risen well above the statutory minimum wage, and was 25% higher by 2012, reducing the signalling effect of wages and thus not stimulating demand for unskilled labour (Box 2.1).

Box 2.1. **Wage formation in the Czech Republic**

The Czech wage bargaining system is quite decentralised, with collective bargaining covering a minor part of employees and taking place at a company or industry level. The government determines the general legal framework, and its direct interventions are mostly limited to the setting of the statutory minimum wage. Similar bargaining systems are found in Slovakia, Hungary and France (Visser, 2013). Wage growth is often settled in terms of wage tariffs, with a possibility to differentiate between employees (Brádler et al., 2010). Non-member companies are not covered, unless requested by an employer association or trade union and approved by MoLSA – a process that has been used since 2005. There has been a steady decline in unionization, from 64.4% of employees in 1993 to 30% in 1999 and then to 17.3% in 2009 (Myant, 2010; Visser, 2013). However, the percentage of employees covered by collective bargaining is higher, estimated to be at least 30% but possibly as much as 41% (Myant, 2013; Visser, 2013).

Slightly more than half of collective agreements consider increases in nominal wages, while agreements involving real wage increases are relatively uncommon (Table 2.3). Nominal wage increases achieved through collective bargaining agreements have broadly mirrored aggregate wage growth in the business sector since 2010 (Table 2.4). On the other hand, bargained real wages were significantly higher as compared to the aggregate, but with a limited impact on the economy due to their small prevalence. Notably, collective agreements have allowed for a gradual rise of the bargained minimum wage to a level that is about ¼ higher than the statutory minimum wage. The percentage of collective agreements that specify details of uneven working hours has been rising quite substantially. This measure was largely inspired by German companies and allows for flexible working hours depending on employers' fluctuation in demand (Myant, 2013). According to the Labour Code, working hours can be distributed in such a way that average working hours have to be reached within a maximum of 52 consecutive weeks.

Table 2.3. **Main characteristics of wage bargaining in the business sector**

	2007	2008	2009	2010	2011	2012	2013
Bargained minimum wage as a % of statutory	109.6	116.6	118.9	121.5	122.8	125.6	120.5
Pay increases considered (% of collective agreements), *of which:*[1]	66.4	74.0	56.2	42.4	56.1	59.7	59.4
Increase in wage tariffs	19.7	28.0	20.9	12.5	18.4	20.8	20.4
Increase in nominal wages	41.9	41.3	26.1	15.6	21.7	22.8	22.1
Increase in real wages	3.4	4.0	1.9	1.4	1.9	1.9	1.7
Limits for agency workers (% of collective agreements)	0.9	1.7	1.5	2.1	1.8	2.2	2.2
Specification of uneven working hours (% of collective agreements)	23.6	30.6	31.0	35.9	36.8	40.8	39.4

1. The table shows the most common types of collective agreements.
Source: Ministry of Labour and Social Affairs, *Working Conditions Information System Surveys*, 2007-2013.

Table 2.4. **Outcome of wage bargaining in the business sector (%)**

	2007	2008	2009	2010	2011	2012
Bargained nominal wage growth	4.2	5.4	4.4	3.1	2.9	2.8
Actual nominal wage growth	7.4	8.6	3.0	2.7	3.0	2.8
Bargained real wage growth	2.4	2.2	2.4	2.2	2.3	2.0
Actual real wage growth	4.5	2.2	2.0	1.2	1.1	-0.5

Source: Ministry of Labour and Social Affairs, *Working Conditions Information System surveys*, 2007-2012, Czech Statistical Office.

The government influences wage bargaining by providing the institutional framework of consultation and information exchange and by extending private sectoral agreements to cover the whole sector in question. Nevertheless, tripartite negotiations between the government and social partners typically do not extend to norms for wages increases. In the past years, government intervention in wage setting has been largely limited to determining the statutory minimum wage, which was kept constant from January 2007 until July 2013, when it increased from CZK 8 000/month to CZK 8 500/month, representing 38% of the median wage, one of the lowest ratios among OECD countries. With effect from 1 January 2013, the government abolished the youth minimum wage, which consisted of two differentiated levels, corresponding to 80% and 90% of the statutory minimum wage for those less than 18 and those between 18 and 21 years old, respectively. This measure is likely to have had a small negative effect on youth employment, as only around 4.5% of workers aged between 15-21 years old were receiving compensation at or close to the youth minimum wage (Czech Statistical Office, 2012; Laporšek, 2013).

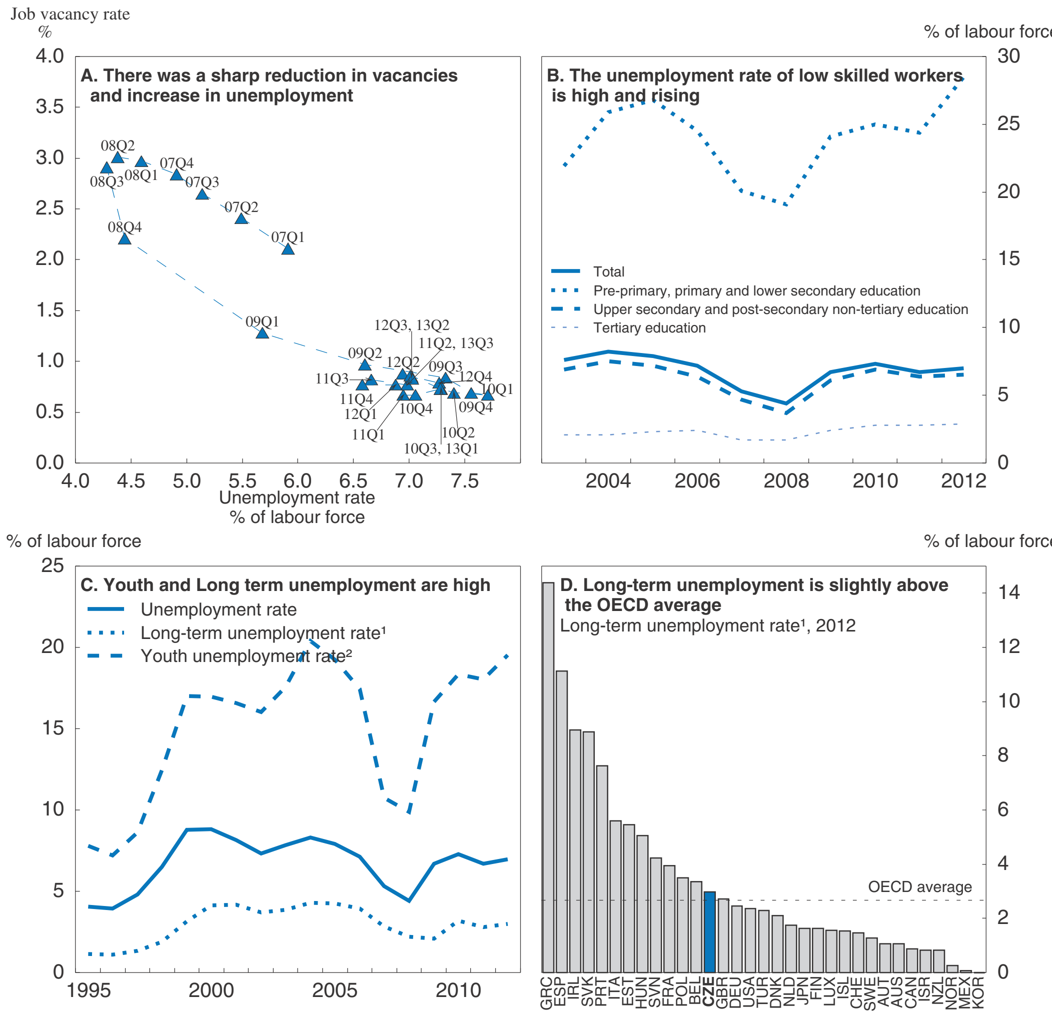
There may be informal wage coordination, as a frequent survey by the Ministry of Labour and Social Affairs (MoLSA) and the Czech Statistical Office provides human resource departments with valuable information on wage levels for different occupations. In addition, the largest and most influential trade union, the Czech-Moravian Confederation of Trade Unions (ČMKOS) also makes regular recommendations on wage increases based on its inflation forecast and expected economic developments.

The deterioration in the labour market revealed underlying structural problems

The economic crisis revealed underlying structural problems arising from the change in labour demand towards a more qualified labour force with only a slow reaction in the education system to this change. Vacancies dropped and the unemployment rate rose to historically high levels, affecting disproportionately low-skilled workers and youth (Figure 2.3, panels A, B and C; OECD, 2013b). The youth unemployment rate (15-24 years old) rose to 20% in 2012, against a national average of 7%. Although youth unemployment is linked to developments in the business cycle, there has been a structural change in the composition of youth unemployment in the past decade, which has been driven by the continuous increase in tertiary education enrolment rates, leading to a decrease in youth labour force participation. Workers with low qualifications are less demanded in the labour market, hence also contributing to high youth unemployment rates.

The government plans to implement a youth guarantee in 2014 to reduce the youth unemployment rate. The Employment Office will be in charge of implementing the programme, which entails: smoother mechanisms for young people with low or no qualifications to return to formal education; better career guidance; improved provision of information about local labour market conditions; and facilitation of participation in active labour market policies (ALMPs) involving workplace training (see below). As it stands, the proposal includes many key elements of successful youth guarantees, the most relevant being its comprehensiveness, covering both skills upgrading and work experience for low skilled youth, as evidence from Austria suggests that formal qualifications are important to secure stable jobs for young people. However, there is scope to improve other elements of the guarantee, such as the provision of information on labour market developments which is currently rather narrow and should be widened to regional and national levels. The programme should put stronger emphasis on monitoring implementation and defining outcomes with clear objectives and identifiable targets. For example, the stated

Figure 2.3. **The labour market has deteriorated since the onset of the economic crisis**



1. Long-term unemployment rate refers to unemployment duration of one year and over.
2. Youth unemployment rate is the proportion of unemployed aged 15-24 in the labour force aged 15-24.

Source: Czech Statistical Office; Ministry of Labour and Social Affairs; *OECD Economic Outlook Database* and *OECD Labour Force Statistics Database*.

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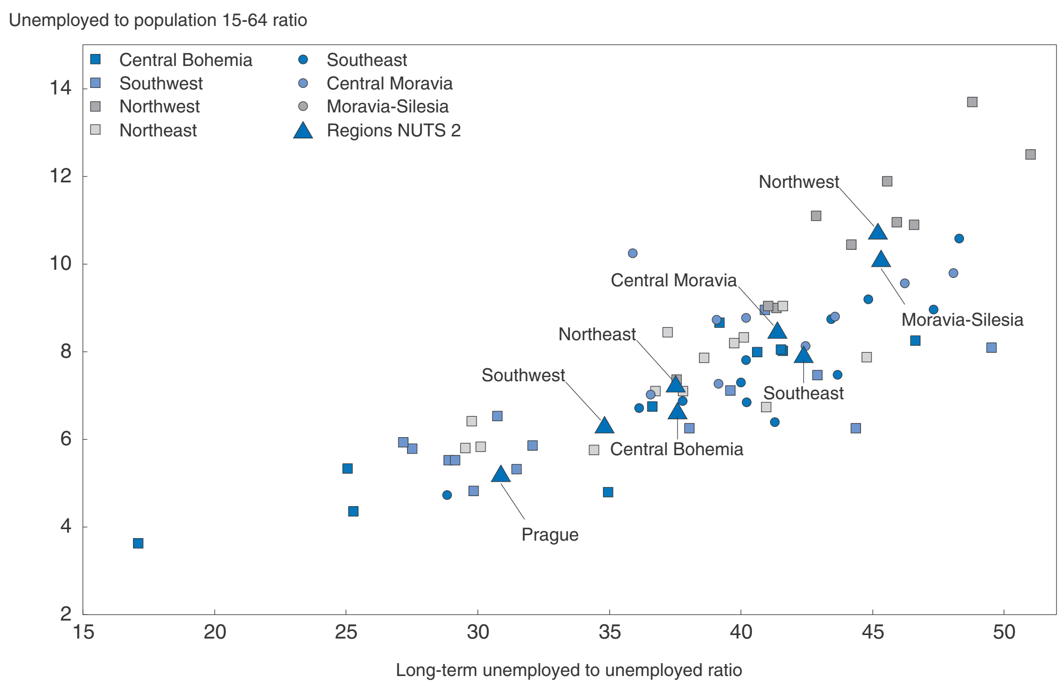
objective of improving co-operation between employers and schools is a welcome measure given the difficulties in vocational educational and training (VET) to respond to labour market needs. This is considered to be key for a well-functioning youth guarantee scheme, but regrettably the Czech youth guarantee has no explicit target outcomes against which performance can be assessed (ILO, 2013).

The persistently high long-term unemployment rate has increased during the crisis to a level slightly above the OECD average (Figure 2.3, panels C and D). In 2012, more than 40% of the unemployed had been without a job for longer than 12 months. Long-term unemployment has an important regional dimension, as regions experiencing above average unemployment also register a higher share of long-term unemployment

(Figure 2.4). The concentration of long-term unemployment in regions such as the north-west and Moravia-Silesia reflects the loss of heavy industries during transition and their high proportion of low-skilled workers.

Figure 2.4. **Regions with high unemployment also have higher incidence of long-term unemployment**

Q3 2013, in percentages



Source: Ministry of Labour and Social Affairs.

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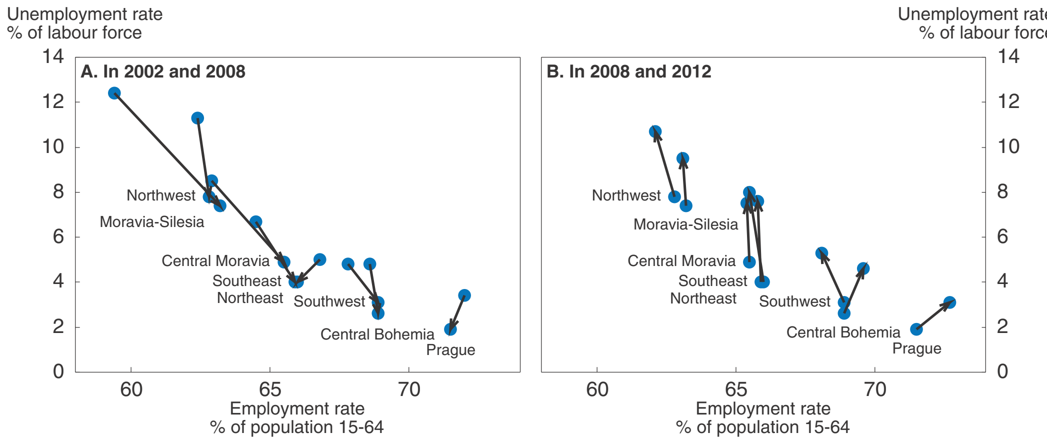
The economic crisis has reversed the trend towards an equalisation of labour market outcomes observed during the boom years (Figure 2.5). Low-skilled workers fail to take jobs even in cities within commuting distance. Examples of such pairs include Kladno-Praha (40 minutes by bus), Kolín-Praha (40 minutes by train), Ústí nad Labem-Děčín (15 minutes by train), and Brno-city and the Brno-Country district (30 minutes by train). The coincidence of registered unemployed and vacancies with similar skill requirements in nearby cities occurs only for those with a low level of education attainment, suggesting that commuting costs may be too high for low-income earners to search for jobs in neighbouring areas. As an example, public transport costs from Kladno to Praha amount to 7% of the minimum wage, as compared with average passenger transportation spending by rail and road of 1.3% for all households, as measured in the 2013 Czech HICP basket.

Spending on active labour policies is low and is not adequately well-targeted or monitored

Looking ahead, an emerging labour market problem is an ageing labour force, which further compromises income convergence via higher employment (Figure 2.6). Utilising

Figure 2.5. **Differences in employment and unemployment rates across regions have widened**

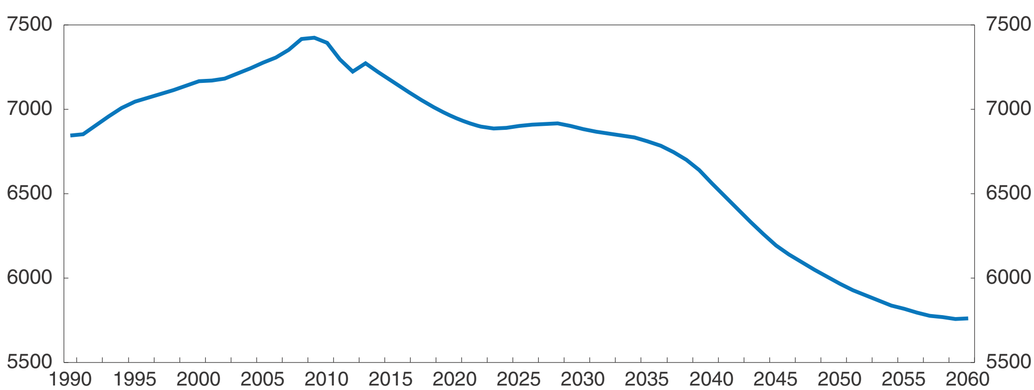


Source: Eurostat.

StatLink http://dx.doi.org/10.1787/888933007848

Figure 2.6. **Working age population is projected to shrink**

Population aged 15-64 year-old, thousand persons



Source: OECD, *Population Statistics Database.*

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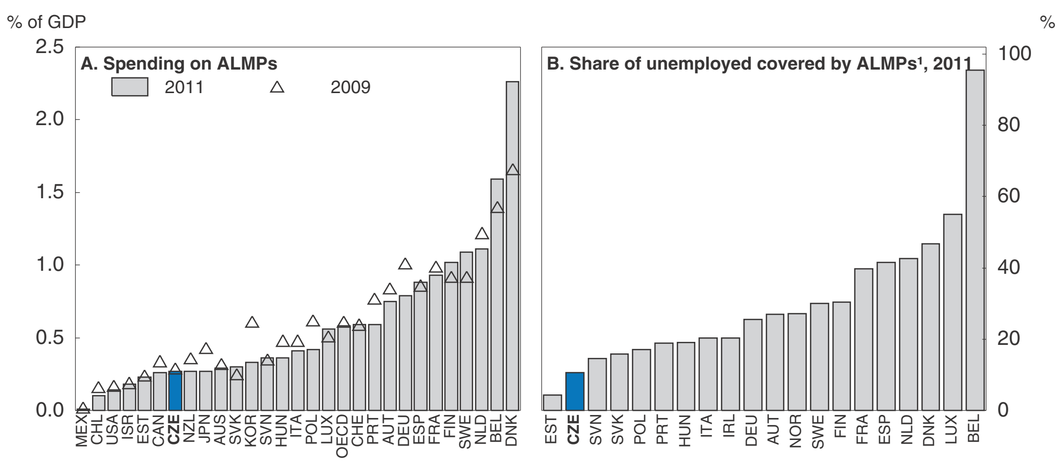
remaining pockets of under-used resources will thus become increasingly important. Active labour market policies (ALMPs) can help to raise the employability of low-skilled workers and youth who left the education system without the skills needed in the labour market. In the current situation of a prolonged economic downturn and weak recovery, ALMPs can also be instrumental to prevent human capital losses and unemployment becoming structural. In this respect, youth unemployment is particulary worrisome and should be given priority, not only because of its immediate negative impact, but also because, on top of progressively losing competencies learnt while in the education system, young people are deprived of accumulating relevant on-the-job skills, increasing the probability of unemployment throughout most of their career (Schmillen and Umkehrer, 2013). Over the medium term, increasing young people's employment prospects requires smoothing the transition from school to the workplace, making sure that the education system effectively equips youth with the set of skills required by the business sector, thereby supporting the rise in long-run productivity and income convergence.

Spending on ALMPs is one of the lowest in the OECD and has been decreasing since the onset of the crisis, in spite of rising unemployment (Figure 2.7, panel A). This situation reflects not only a low level of spending per participant, but also a low participation of those unemployed, even though there is evidence that participation in activation programmes increases the likelihood of leaving unemployment (Figure 2.7, panel B; Sirovátka and Hora, 2012). The Employment Office targets the groups most affected by unemployment, i.e. the young, older-workers and the long-term unemployed as well as at-risk groups identified as being young mothers and workers with disabilities, with the latter absorbing more than half of ALMP spending. A recent assessment has also found that the use of ALMPs differs across these well-identified targets, as unskilled and older workers (50+ year olds) are under-represented in activation programmes (Sirovátka and Hora, 2012).

Figure 2.7. **Spending and participation in active labour market policies is low**



1. Except Public Employment Services (PES) and administration programmes.

Source: OECD, *Public expenditure on labour market programmes Database*; and Eurostat.

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Research shows that favouring an intensive approach, with high cost per head, is more likely to succeed in bringing the unemployed back to the labour market than an extensive approach that covers a large share of the unemployed with low intensity (Martin and Grubb, 2001; Meager, 2009). Changes in the Employment Act in 2009, imposing detailed Individual Action Plans (IAP), have not surprisingly had little impact in raising employability, as an overly burdened staff in regional offices has reduced contact with each individual jobseeker, also as more time is spent in more bureaucratic activities such as the disbursement of social benefits, which became part of the responsibilities of regional employment offices in 2011 (Váňová, 2010).[1] As a result, the share of the unemployed who found work with the help of employment offices decreased from 12% in September 2010 to 8.5% in September 2013. In early 2010, the number of clients per full-time advisor ranged from 237 to 2 877, which appears relatively high as not fully compatible data from Germany and France indicate a caseload at least 40% lower than the minimum number of cases held by placement officers in the Czech Republic (Váňová, 2010). Also, the wide variation in caseloads suggests that resources are not adequately distributed across local employment offices. In view of the weak labour market, the new government has announced a significant increase in ALMP spending and enhancing the capacity of the Employment Office will be a priority over the next four years. The latter should privilege more direct contact with the unemployed, as well as a more balanced share of caseloads.

To curb the effects of the economic crisis on the labour market, the Employment Office is putting in place a number of programmes intended to increase the exposure of the unemployed, including young people, to professional experiences through internships, using the financial aid of the European Social Fund (ESF). The introduction of company internships is aligned with best practices, as research shows that programmes with a strong market orientation, encompassing training in the workplace, are more likely to raise employability (Martin and Grubb, 2001). However, the many projects proposing company internships sometimes overlap in their target group while others have wide objectives, which in the absence of coordination risks programme-hopping by job seekers, dispersing valuable resources and compromising the success of these initiatives.[2]

Very little is known about the labour market impact of activation programmes, including success rates by targeted groups. One of the few assessments finds that participation in ALMP programmes increases the chance of leaving unemployment, but the time horizon of the study, one to eighteen months after termination of ALMP programmes, did not allow for a more informed appraisal of their lasting effects on employment levels, which should also consider the stability of jobs created (Sirovátka and Hora, 2012). It is crucial to monitor systematically and more thoroughly labour market developments and the impact of activation measures so that early interventions can be designed and programmes can be adjusted. Data collection should include information on the characteristics of the unemployed in order to evaluate programmes' success in overcoming the weaknesses of vulnerable groups (e.g. age, gender, detailed level of educational attainment, occupation, socio-economic background, disabilities and unemployment spells). Reliable information on existing vacancies eases the placement of job seekers and allows for a better matching of supply and demand in activation programmes. In this regard, the 2012 decision to discontinue the obligation to report vacancies to employment offices needs to be closely monitored, as the unavailability of reliable information on the number and distribution of vacancies hinders the quality of job search assistance and counselling. Indeed, there is evidence that job search assistance has a relatively large positive impact on labour market outcomes, and it was previously identified as one of the strengths of the Czech Public Employment Service (Boeri and Burda, 1996; OECD, 2005a; Kluve, 2010).

The current pool of labour market activation projects could be reconsidered and rationalized by focusing on: i) clearly identified target groups; and ii) specific skill needs of both job seekers and employers, as international experience of training interventions shows that these are criteria for ALMPs to succeed in raising employment (Meager, 2009). In this respect, internships in companies should last long enough to allow the trainee to master fully the competencies learned. A certificate acknowledging the completion of the traineeship programme should be issued to increase employability outside the firm. Setting specific performance targets would help to maintain focus on primary groups, ensuring that each is well-covered, and could in turn lead to efficiency gains as policy actions are prioritised and tailored to match the needs of these disadvantaged groups. Adoption of more sophisticated support software could also help the Employment Office to reap efficiency gains, namely by supporting profiling and better data collection, in turn freeing time for staff in regional employment offices to undertake direct contact with the registered unemployed.

Moving beyond the current crisis-related mechanisms to support employment, a more permanent way to incentivise employers to provide training to young unskilled workers would be to provide tax subsidies or a targeted reduction in employers' social security contributions which, at 25.4% of labour costs, is the third highest rate in the OECD (OECD, 2013c). Lowering taxation on labour could be financed by raising less distortive environmental and real estate taxes. Indeed, recurrent taxes on immovable property are at 0.2% of GDP, compared to 1.1% of GDP on average in the OECD (OECD 2012b, *Revenue Statistics Database*). To support low-skilled unemployed workers resuming work, it should be investigated whether employment offices could temporarily make more use of mobility support measures. Looking ahead, if the statutory minimum wage increases sufficiently, an additional measure could be the introduction of a reduced youth minimum wage linked to training, as is the current practice in several countries. For instance, in France, the minimum wage for apprentices depends on their age as well as the year of training they are in, starting at 25% of the national minimum wage for an 18-year-old in their first year and rising to 93% for those aged 21+ in their 4th year. In Germany, a "training allowance" is agreed upon by the social partners, which also varies by the apprentice's age and experience with the firm (OECD, 2014).

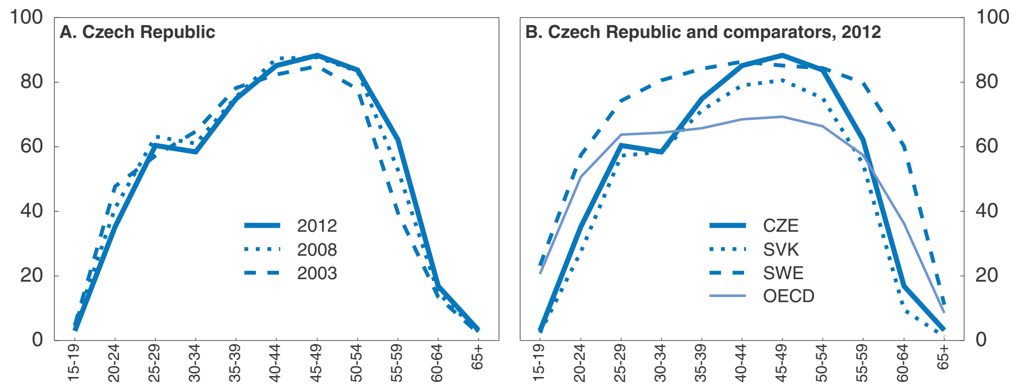
Female labour market participation is low

Women constitute untapped human capital. Also, making it more attractive for women to participate in economic activity can have important well-being advantages. Female employment rates are low at both ends of the age spectrum and well below the OECD average and countries with high female employment rates such as Iceland, Norway, Switzerland and Sweden (Figure 2.8). Older age female employment rates have been increasing in the last decade, reflecting, *inter alia*, changes in pension rules. In contrast, younger women employment rates have decreased, reflecting both delayed entry to the labour market as they pursue higher education studies and exit from the labour market for child caring reasons. Although tertiary education attainment rates are similar for men and women, there is a sizeable gap in employment between genders: in 2011, tertiary educated women employment rate stood at 74%, below the OECD average of 79% and that of tertiary educated Czech men of 92% (OECD, 2013a). OECD estimates show that closing the gender employment gap by 2030 would increase the annual growth rate of GDP per capita by 0.5 percentage points (OECD, 2011a).

Gender employment differentials are especially large for the age group 30-34 and reflect large work disincentives for mothers with young children, as discussed in the *2010 Economic Survey* (Hrdlička et al., 2010; OECD, 2010a) as well as in numerous studies (Figure 2.9; Galuščák and Pavel, 2007; Pavel, 2009; Kalíšková and Münich, 2012). From an economic point of view, this is particularly worrisome as long absences from the labour market lead to a deterioration in skills and productivity, with negative impacts on female career paths, the gender pay gap and the pay-as-you-go pension pillar, as mothers on parental leave do not pay social security contributions but have their parental leave period credited in their pension entitlement. As a consequence, an increase in the labour market participation by women aged 20-40 years could decrease the deficit in the defined benefit pension pillar by CZK 10 billion per year (0.26% of GDP) or more than one third of the estimated annual deficit in the next 20 to 30 years (Münich, 2010).

Figure 2.8. **Female employment rates are low at both ends of the age distribution**

In percentage of the population



Source: OECD, *Labour Force Statistics Database*.

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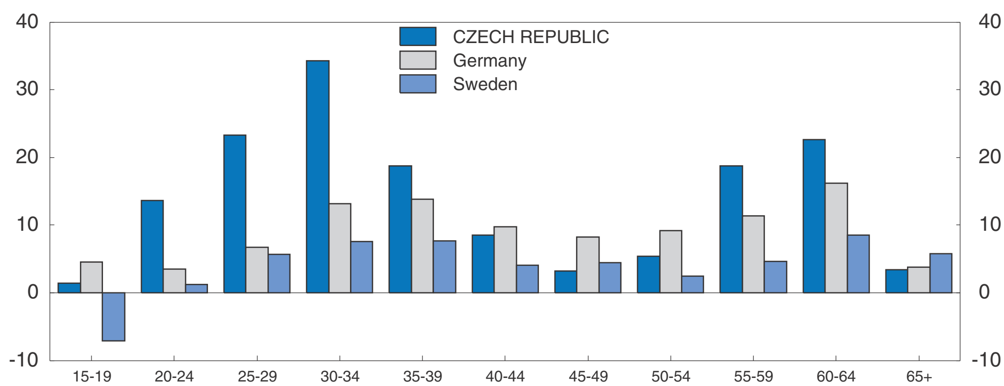
Figure 2.9. **There are large differences in gender employment rates among younger age groups**

In percentage of the population, 2012



Note: Differences in gender employment rates are calculated as the difference between male and female employment rates in the relevant age groups.
Source: OECD, *Labour Force Statistics Database*.

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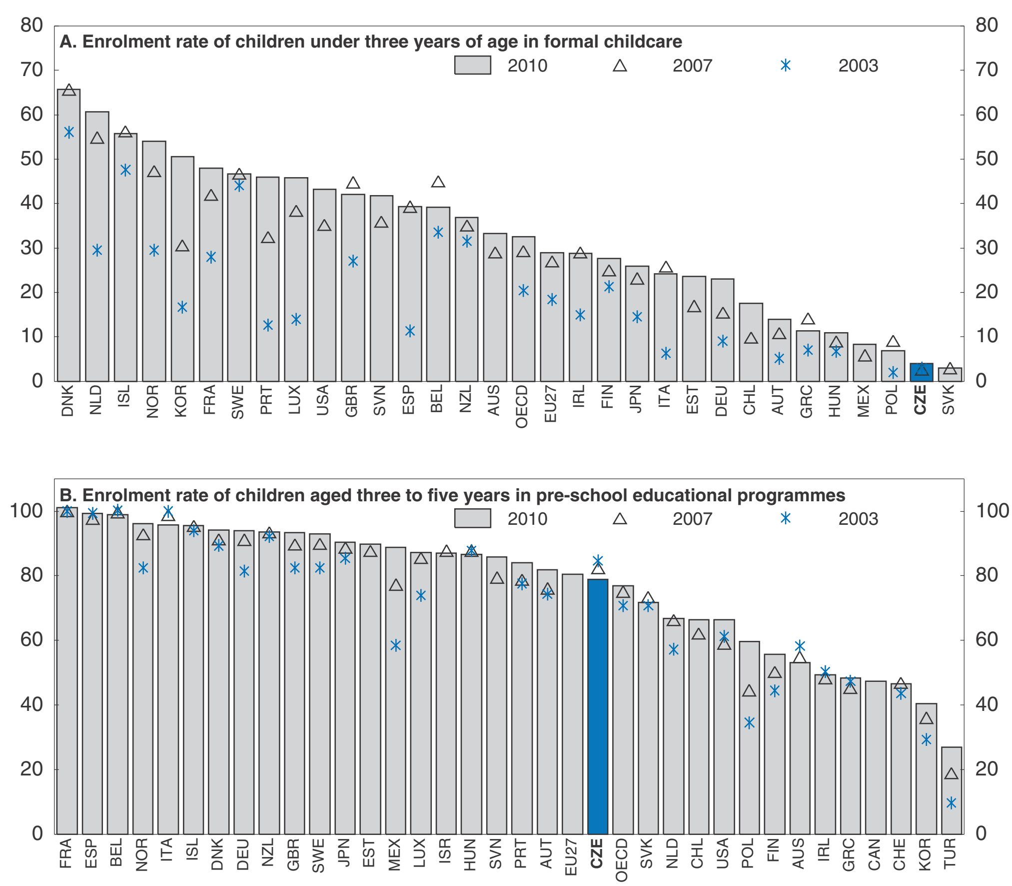
Declining employment rates of women in childbearing age have been accompanied by a sharp reduction in childcare facilities from more than 1 000 crèches in 1990 to less than 50 two decades later (Paloncyová, 2013). There are currently more higher education institutions than crèches in the Czech Republic. This situation reflects generous parental leave conditions and the transfer of pre-school childcare to municipalities without an equivalent fiscal transfer from the central government. Also, the previous classification of crèches as healthcare facilities, which have stringent health and safety rules, raised operational costs, contributing to lower service provision, including private sector provision.[3] Municipalities are free to set entry rules and pricing policy. Even though fees account for only 15% to 20% of the total costs of running a crèche, they represent a significant share of household's income, varying between CZK 1 000 to 7 000 a month, which corresponds to between 5 and 36% of the female median wage. Most schools also require an additional contribution towards food expenses. Private crèches can be up to nearly three times more costly. An additional hurdle for parents wishing to conciliate working and family life is that opening hours in pre-school facilities have not followed the changes in the working habits that accompanied the economic transition.

As a result, enrolment in formal childcare for children under the age of three is one of the lowest in the OECD (in countries for which data are available) and has been decreasing over time (Figure 2.10, panel A; OECD, 2013a). Enrolment in kindergartens is higher, as they are more widely available and fees charged are much lower, limited to CZE 800 and free of charge in the last year (Figure 2.10, panel B). Nonetheless, there is evidence of bottlenecks in the provision of pre-school care for children between 3 and 6 years old as kindergartens are not distributed evenly, and larger cities face significant capacity constraints. Hence, the number of rejected applications is increasing quite fast. For most mothers the only realistic option to resume work is to have child care provided by other family members, severely constraining work and family choices. Not surprisingly, the gap in employment rates between women with children and those without is among the largest in the EU (Figure 2.11).

Figure 2.10. **Enrolment in formal childcare is low**

Average, in percentage



Source: OECD, *Family Statistics Database.*

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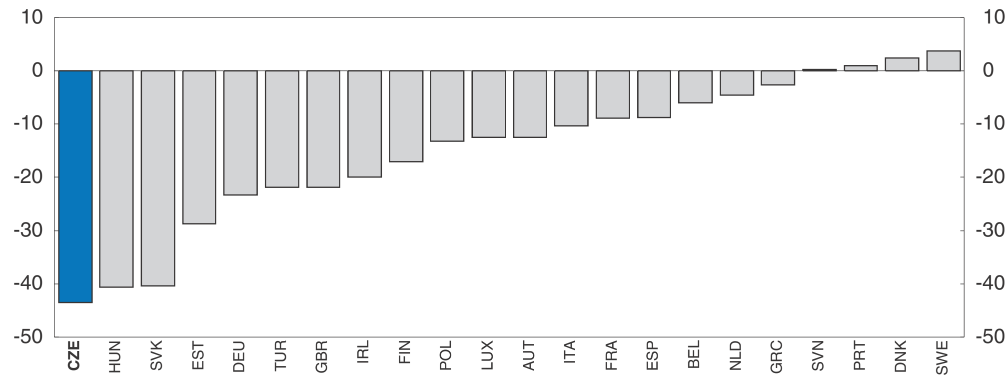
Figure 2.11. **The impact of motherhood on employment is very high**

Difference between employment rates of women aged 20-49 with children up to 6 years old, and without children, 2012, percentage point difference



Source: Eurostat.

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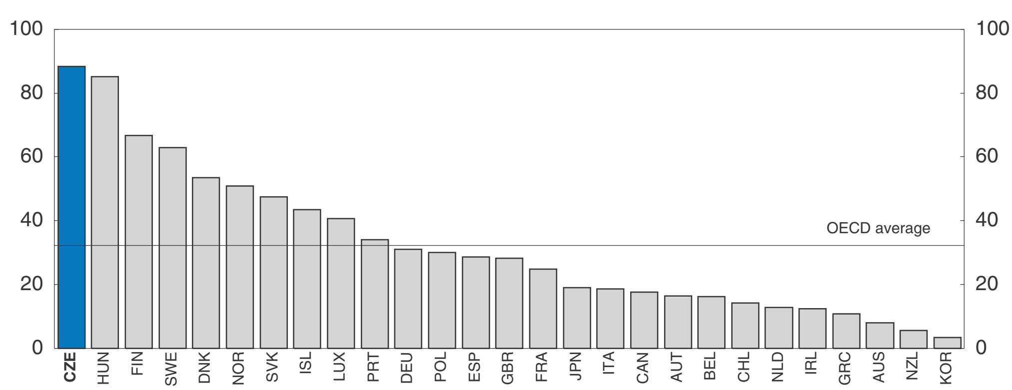
Another barrier inhibiting young mothers' employment is that parental leave rules do not incentivise resuming work. Spending on maternity and parental leave is the highest among OECD countries, reflecting a public policy preference for home care over formal childcare, as argued in the *2010 Economic Survey* (Figure 2.12; Hrdlička et al., 2010; OECD, 2010a). After an initial 6 months of maternity leave with benefits based on the mother's wage, parents are entitled to a lump sum (equal to nearly half of an average annual income) which they can choose to have paid out in equal instalments for a minimum of 19 months and a maximum of 42 months (corresponding to the child completing 4 years of age). By selecting the period of support, parents also select the amount of the monthly parental allowance. As of 2004, parents can work without losing their entitlement to the parental allowance. However, doing so before the child is two years and attending a pre-school facility for more than 46 hours/month prevent parents from receiving the full amount. Combined with the lack of crèches, most working mothers have to rely on family provided childcare.

Figure 2.12. **Spending on maternity and parental leave is the highest among OECD countries**

Spending on maternity and parental leave payments per child, as percentage of GDP per capita, 2009



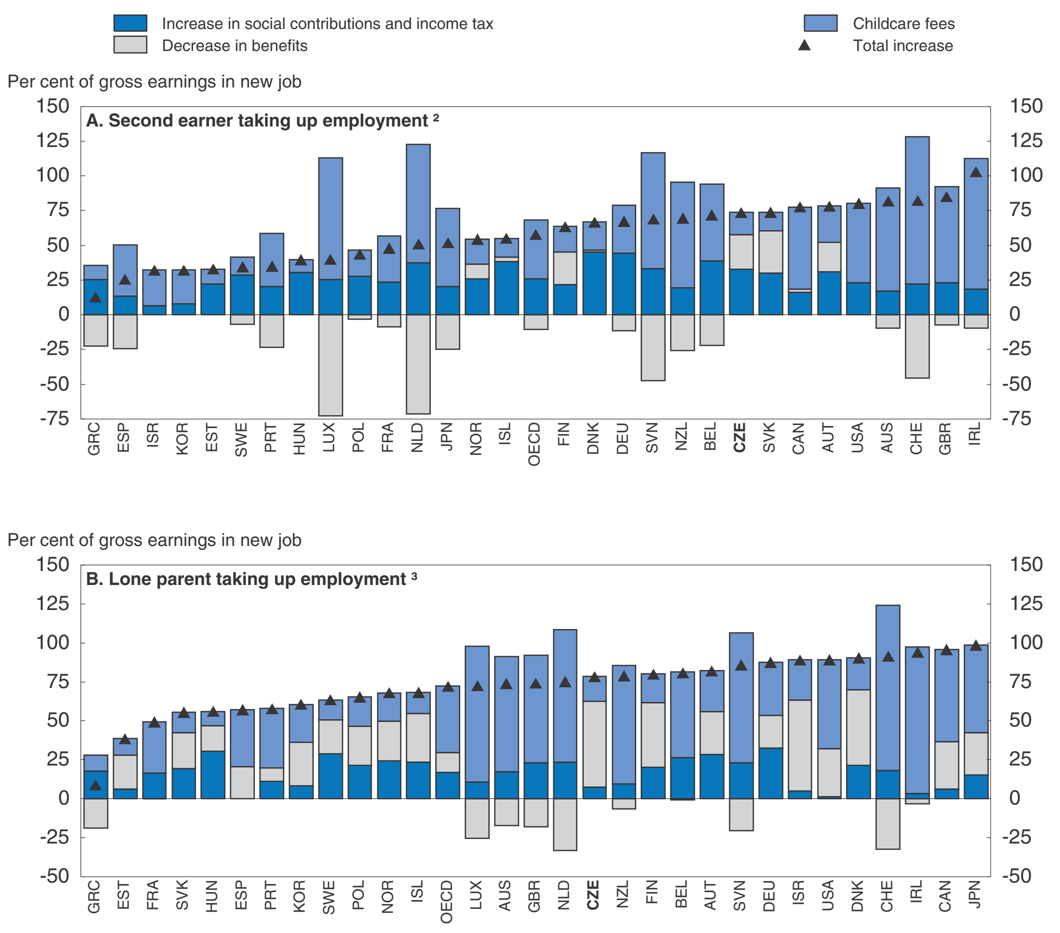
Source: OECD, *Family Statistics Database*.

StatLink http://dx.doi.org/10.1787/888933007981

A further hindrance for mothers resuming work is that together with the parental leave, other elements of the tax and benefit system produce high effective tax rates. The favourable fiscal treatment of families with children implies that, when cash benefits are taken into account, the tax burden for the average one-earner married couple with two children becomes negative because cash benefits exceed the income tax and social security payments otherwise due. Lower wage single parents with two children also face a negative tax burden for similar reasons (OECD, 2013c). This results in a high implicit tax on returning to work, due to the income tax and social contributions that would have to be paid, the elimination of the parental allowance and other income related benefits such as the housing allowance for low-wage earners, and the childcare fees that would have to be paid in the unlikely event that a place in a crèche is available (Figure 2.13).

Figure 2.13. **There are high implicit taxes on returning to work**

Net transfers and childcare fees for households with two children aged 2 and 3, 2008[1]



Note: The OECD average excludes Chile, Estonia, Israel, Italy, Mexico, Turkey and Slovenia.

1. The 2012 update is currently under-way but the changes in benefits and taxation in the Czech Republic are expected to leave implicit taxes on returning to work broadly unchanged.
2. Second earner taking up employment at 67% of average wage and the first earner earns 100% of average wage.
3. Lone parent taking up employment at 67% of average wage.

Source: OECD (2012), *Benefits and Wages Database*.

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The tax and benefit system should be made more neutral to support the choice of women resuming work, instead of favouring labour-force withdrawal. One way would be to gradually reduce the duration of the parental allowance so as to limit the combined maternity and parental leave period. In many other OECD countries with high female labour market participation, the combined maternity and paternity leave period is around one year (OECD, 2012b). The practice of withdrawing childcare benefits if working mothers use (public) childcare facilities should be discontinued. To reduce the existing bias towards women taking parental leave – less than 3% of Czech fathers take parental leave (Moss, 2011) – a share of the parental allowance could be made conditional on fathers taking part of the parental leave, as it is the case in Germany and Austria. After one year, the amount spent on the parental allowance could be transformed into a voucher for purchasing childcare services, which could stimulate private sector provision of childcare (OECD, 2007). The reduction in the parental leave combined with good quality early childcare education could benefit the child as well. Indeed, OECD evidence suggests that child development benefits from full-time personal care for at least 6-12 months, but the latter is not necessarily synonymous with maternal care (OECD, 2007). Cognitive development of a child is enhanced by good-quality formal care and interaction with peers from around two years of age. Some studies indicate that there are significant and lasting effects in student performance and socio-emotional competence even when the child enrols in formal care during the second year of life (Andersson, 1992). In addition, child development may also benefit from a more balanced share of time spent with each of the parents (OECD, 2007).

Gradually reducing the duration of the parental allowance needs to be accompanied by an adequate supply of affordable and high quality early childcare facilities, as is the current practice in many OECD countries with high female labour market participation. Recent legislation eliminates the classification of crèches as institutions providing healthcare, which will reduce staff qualification requirements and lower operating costs. In January 2014, the government adopted the Act on Child Group, which should significantly decrease obstacles to the establishment of not-for-profit public and private providers (employers, regions, municipalities, universities and NGOs), contributing to the expansion and diversification of childcare provision as recommended in the *2010 Economic Survey* (Hrdlička et al., 2010; OECD, 2010a). The Act, which constitutes a good step forward, awaits to be approved by the parliament. Measures to promote greater flexibility in working hours were introduced in the labour code in early 2012, as recommended by the *2010 Economic Survey* (Hrdlička et al., 2010; OECD, 2010a). To support a better balance of work and family life for parents with young children, flexibility in working hours needs to be accompanied by the extension of opening hours of early childhood education and care (ECEC) facilities. Finally, given the very low number of crèches, expanding the availability of places in kindergartens for children less than 3-year old should be considered.

Strengthening the education system to improve school-to-work transitions

The Czech Republic has a highly educated labour force, with about three quarters of the population having attained upper-secondary education, the highest share among OECD countries (OECD, 2013a). By contrast, tertiary education attainment is low by international comparison, as only 25% of 25-34 year olds has attained tertiary education, compared with the OECD average of 39%. The situation is however gradually improving, as enrolment rates have been increasing in the past decade.

Education, which is compulsory for those from 6 to 15 years old, is highly differentiated. Tracking into prestigious general education pathways in multi-year grammar schools (gymnasium) occurs very early, at age 11/12, when students can apply for a long academic track, the 8-year gymnasium. A second tracking stage occurs at age 13/14 (6-year gymnasium). Around 13% of students in the relevant age group are enrolled in these tracks (Straková et al., 2011). Students are selected into the different pathways by admission examinations and aptitude tests, and those with the strongest academic performance usually opt for general tracks such as gymnasium and lyceum. The majority of students move from basic schools (*základní škola*) to upper secondary education at the age of 15, either into the general track or the technical track, attended by 50% of the age cohort, both leading to a school-leaving examination necessary for transition into tertiary education (the maturita exam). Students may also opt for a vocational track which leads to an apprenticeship certificate (*výuční list*), preparing them directly for the labour market, without direct access to tertiary education. Apprentice graduates may then take two year follow-up courses that lead to the maturita exam. A key feature of the Vocational Education and Training (VET) system in the Czech Republic is that students graduate without real workplace experience. In the last decade, enrolment in apprenticeship programmes has fallen to around 25% of students in the relevant age group, and the share of students in programmes with the maturita exam has been increasing.

The system is quite decentralised: pre-primary (for children between 3 and 6 years old) and basic schools (typically ages 6 to 15) are administered by municipalities, while secondary schools are administered by regions (Box 2.2). In an effort to bring harmonisation of students' performance in a decentralised system that lacks school benchmarking, the Ministry of Education, Youth and Sports (MoEYS) has recently introduced targeted standards against which the performance of students in particular grades should be assessed, as well as standardised tests in grades 5 and 9 (OECD, 2012c). With the same aim, MoEYS has introduced standardised tests covering the practical component of apprenticeships programmes in upper secondary education in the academic year of 2009/10, and plans to make them compulsory from 2014/15 onwards. MoEYS is also planning to introduce standardised tests in the technical track. Public schools are dominant, enrolling nearly 99% of students in basic education and 84% in secondary education. Public spending in education is relatively low. The Czech Republic ranks among the countries with the lowest amount of public resources devoted to basic, secondary, and tertiary education, which in 2010 represented respectively about 50%, 70% and 56% of the OECD average (Figure 2.14).

Student learning outcomes in the Czech Republic are around the OECD average, depending on the skills assessed. Czech students performed below the OECD average in reading literacy in PISA 2009, which assessed specifically this skill. More worryingly, reading literacy results declined significantly relative to 2000, the year of the first PISA study, which also had a special focus on reading literacy. The PISA 2012 survey focused on mathematics and Czech students performed around the OECD average but performance deteriorated with respect to PISA 2003, when this skill was last assessed in detail

Box 2.2. **Institutional characteristics of the Czech education system**

The central government determines the national education policy. It defines long term objectives of the system at all educational levels every four years and a curricular framework, in accordance with which schools are expected to design their own education programmes, taking also into account the needs of the local community. Fourteen regional governments (corresponding to NUTS 3 regions) steer education and its objectives within their region for upper secondary and tertiary professional schools. Higher education institutions are autonomous.

Funding to schools occurs via two funding streams: capital and operating expenditures are financed by regions and municipalities using regional/municipal budgets (from general tax allocation to regions and municipalities and grants received from the MoEYS) and are strongly earmarked; staff costs and learning material are covered by the state budget via the regional administration. Private schools can receive state subsidies for teachers and running costs of up to 100% for pre-primary and primary schools and up to 90% for secondary schools. There is little private funding for vocational education and training programmes.

Schools can receive extra national funding for students with special needs on a per-student basis, and they can apply for grants for socio-economically disadvantaged students or additional funding for extra materials or personnel. School principals are responsible for schools' financial management. School principals receive initial management training, have administrative and some pedagogical responsibilities, including appointing and dismissing teachers, defining and organising teacher training and proposing salary bonuses.

Public higher education institutions receive funding directly from the national government in the form of a subsidy for education and research.

Other institutions shaping education policy include:

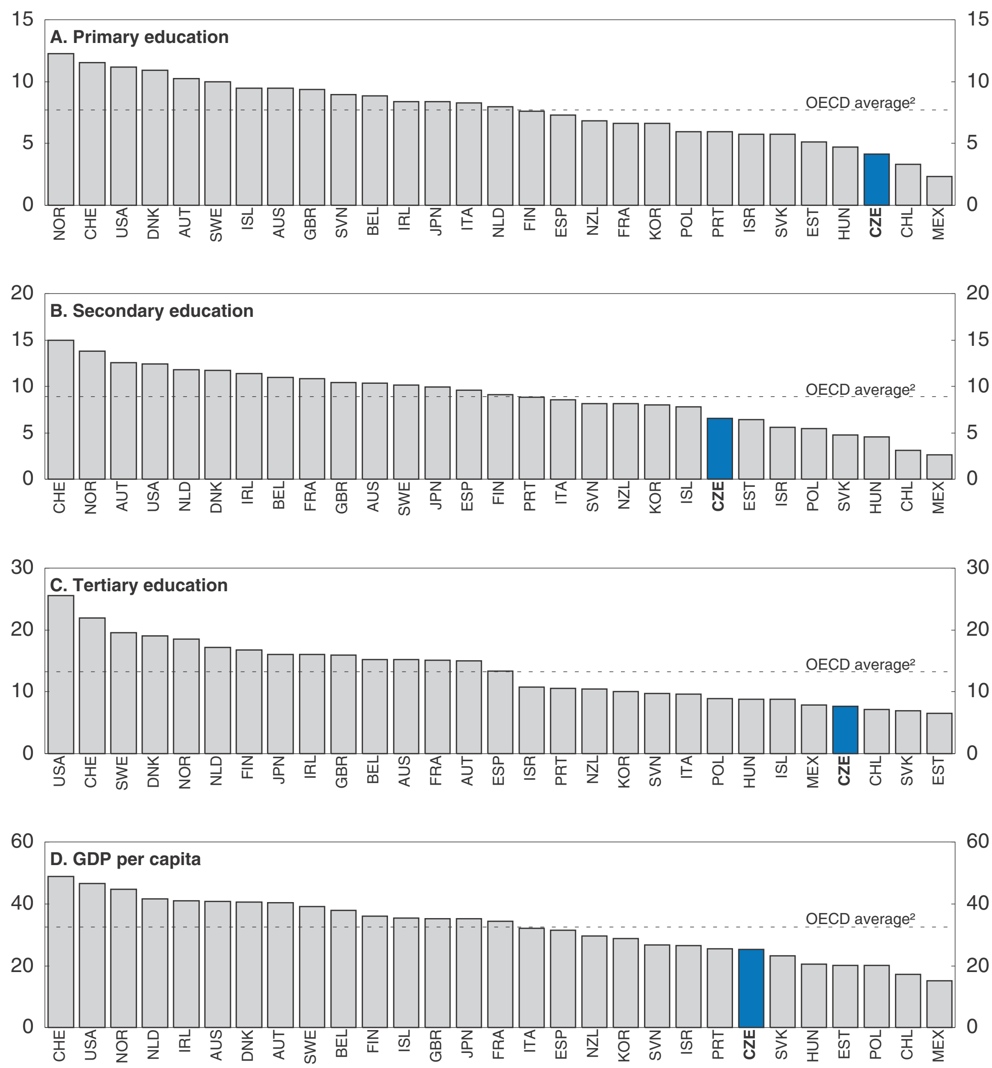
- The Czech School Inspectorate (CSI) monitors and analyses the primary and secondary education system and its quality.
- The National Institute of Education (NUV) is responsible for developing information on issues pertaining to pre-primary up to upper secondary education, including VET, guidance and counselling. It is also responsible for formulating system frameworks and guiding individual schools' programmes.
- The National Institute for Further Education focuses on in-service teacher training.
- The Centre for Higher Education Studies develops policy and strategy for higher education.
- Other ministries, such as MoLSA, collaborate with MoEYS on issues of labour market and vocational guidance.

Consultation with advisory bodies (e.g. teachers' professional associations and employers' associations) is required for certain actions, such as negotiation of the national educational programme, the framework of educational programmes, and also on long-term policy objectives at national and regional levels.

Source: OECD (2010b, 2012c); Straková et al. (2011).

Figure 2.14. **Annual expenditure per student in education services is low**

In thousand equivalent USD converted using PPPs, based on full-time equivalents, 2010[1]



1. Public institutions only for Canada (in tertiary education only), Hungary, Ireland, Italy (except in tertiary education), Poland, Portugal and Switzerland.
2. OECD average computed excluding Luxembourg and Turkey.

Source: OECD (2013), *Education at a Glance 2013*, Chart B1.2 and Table X2.1.

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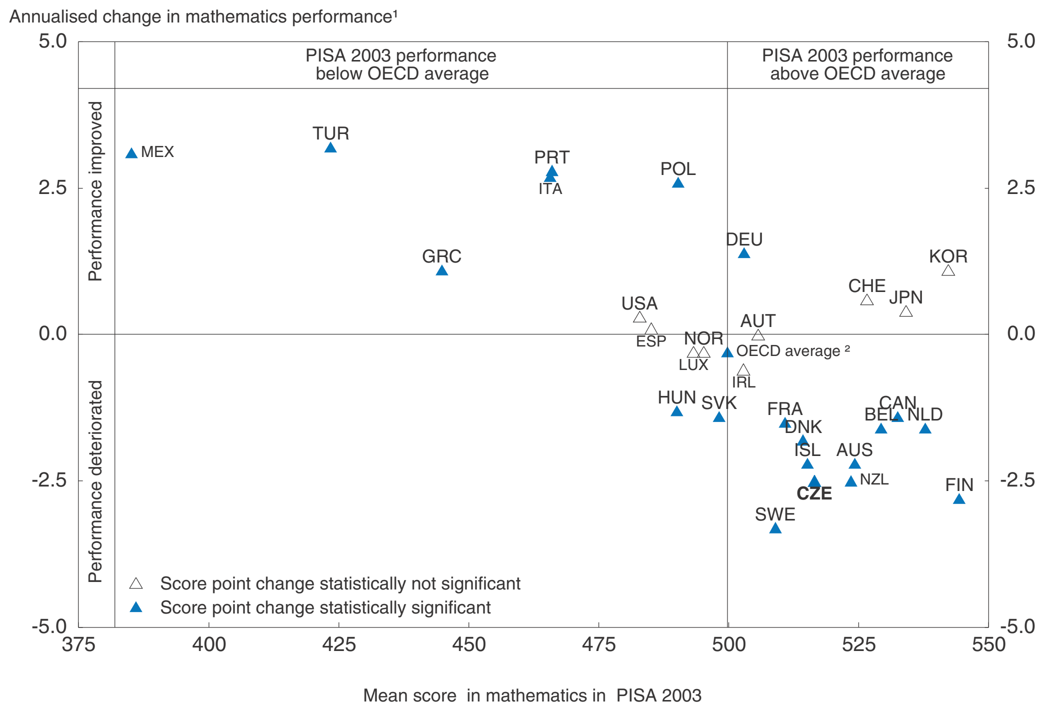
(Figure 2.15). Another indicator of declining performance is the share of low achievers (defined as the proportion of students who failed to reach Level 2, at the lower end of the proficiency scale), which increased both in reading literacy as well as in mathematics proficiency.

Strong selectivity in the education system hampers a solid skill foundation of the labour force

Declining student performance raises concerns about skill formation of the labour force as more than 20% of Czech students are shown to be lacking basic skills in PISA 2009

Figure 2.15. **Student performance in mathematics in PISA 2012 has deteriorated**



1. The annualised change is the average annual change in PISA score points from a country/economy's earliest participation in PISA to PISA 2012. It is calculated taking into account all countries/economies participation in PISA.
2. OECD average considers only those countries with comparable data since PISA 2003.

Source: OECD, *PISA 2012 Database*, Table I.2.3b.

StatLink http://dx.doi.org/10.1787/888933008038

and 2012. These students are likely to struggle to continue studying, facing a higher risk of dropping out of school and entering the labour force with low skills, which not only penalises these students for life, but also imposes a high burden on the economy as a whole, hampering productivity, including through the difficulty to adapt to new technologies and innovations. The challenge ahead is thus to raise overall student performance to boost productivity, by reducing the high proportion of underperforming students.

There is plenty of evidence that declining performance in PISA is associated with practices in the education system that reinforce students' socio-economic background, such as early tracking, streaming and low transferability between educational tracks (Koucký et al., 2004; Münich, 2005; OECD, 2013d and e). Such practices lead to student performance being more strongly influenced in the Czech Republic by families' socio-economic status than in most other OECD countries (OECD, 2010c; OECD, 2013d and f), hindering learning progress and leaving behind many Czech students without raising average performance (Straková et al., 2011; OECD, 2012d and 2013e).

Moreover, the recent OECD Adult Skills Outlook shows that, in contrast to the average among OECD countries, the relationship between the socio-economic background and literacy proficiency (also known as the socio-economic gradient) is stronger among young adults than the overall adult population, indicating a declining ability of the educational system to offer the vast majority of students the opportunity to attain high levels of skills regardless of their socio-economic circumstances (OECD, 2013g). These problems are preventing students from fulfilling their educational potential, which have negative effects on their labour market prospects and human capital accumulation (OECD, 2010b).

Early tracking and streaming into special schools largely reflect students' economic background, hindering intergenerational mobility. In 2009, 54% of students in gymnasiums in the final year of compulsory education had at least one parent with ISCED 5A tertiary education whereas the figure was only 16% among basic school students. Research indeed shows that family background matters more than academic ability in explaining access to a 6-year or 8-year gymnasium course (Koucký et al., 2004; Münich, 2005). Moreover, a large proportion of students without learning disabilities have been streamed into special schools, where admission is based on learning difficulties rather than on learning disabilities (OECD, 2012c). Some children have even been streamed into special schools without prior assessment. These are typically children from disadvantaged backgrounds, such as Roma children, who disproportionately attend special schools relative to their share in the population, notwithstanding the decision to progressively integrate disadvantaged students into mainstream schools (Box 2.3). Since special schools offer reduced curricula and there is very little opportunity to transfer to mainstream schools, future learning opportunities of misplaced children are severely impaired and they struggle to pursue education, holding back mobility and human capital accumulation. More recently, streaming into special schools is gradually being replaced by greater integration in mainstream schools, where streaming into special classes with a reduced curricula is nevertheless taking place.

To raise overall student performance, early tracking at the age of 11 should be abolished and the school system should permit more transferability between education tracks. International experience shows that high quality early childhood education is essential for ensuring equitable access to learning opportunities later in school, reducing the impact of socio-economic background and improving skill accumulation, employment prospects and earnings later in life (Cunha et al., 2005; Almond and Currie, 2011; Heckman et al., 2013). Children who attended pre-primary education perform better at school and achieve higher PISA results (GAC, 2009; OECD, 2013f). Hence, the government plans to expand ECEC are welcome and efforts should be made to ensure that children from disadvantaged backgrounds are included in this expansion. Increasing ECEC provision should also be accompanied by improved quality standards, which can be achieved by developing a common framework covering the whole ECEC age range, designing curriculums with age-appropriate content and practical tools to incentivise their effective implementation, and assessing the latter, as recommended in the *OECD Review of Early Childhood Education and Care in the Czech Republic* (OECD, 2012e).

Improving the quality of teaching can make a difference in schools with a disproportionate share of students from low socio-economic backgrounds (OECD, 2012d). The *2006 Economic Survey* identified poor management tools as a problem and recommended that school principals should be given more opportunities to reward individual efforts as well as being rewarded themselves for improving the quality of teaching (Goglio, 2006; OECD, 2006). Rewarding good quality teaching requires a transparent evaluation system. Incentives, including financial, could be provided to attract and retain good teachers in disadvantaged schools, as is the current practice in many OECD countries and recommended by the OECD's Education Directorate in its recent report on

Box 2.3. **Learning outcomes of Roma students**

The number of Roma students in Czech schools is not known with certainty but it is estimated they account for 1.5% to 3% of the school age population (Straková et al., 2011). Roma constitute the most socially and culturally disadvantaged ethnic minority in the Czech Republic. Unemployment is pervasive across all age groups and a feature of young Roma social background, (GAC, 2009) and those Roma who work have a pay gap *vis-à-vis* the non-Roma population of 39% to 45% of average earnings (World Bank, 2010).

Roma children receive less pre-primary education in kindergartens and in the form of preparatory classes, despite the fact that those who have attended kindergartens are more successful in their education paths (GAC, 2009). An estimated 40% of Roma children attend kindergartens in the last school year, against a national average of around 90%. Moreover, in the current context of shortages of places in kindergartens, there is evidence that children of unemployed parents with younger siblings, which is frequently the case of Roma families, have very little chance of being admitted (Straková et al., 2011).

Between 40% and 70% of Roma children are educated outside mainstream education, either in special schools or classrooms with reduced curricula, and are thus deprived of the chance even to start their primary education in school classes teaching a normal curriculum (European Commission, 2007). This situation often reflects the fact that Roma children start preparatory classes in special schools and usually continue in the same special school with only very few moving to mainstream education.

The streaming into special schools or classrooms has reflected the fact that schools were entitled for higher funding for disabled students but not for socially disadvantaged students, leading to 35% of Roma children being classified as mentally retarded, an outcome deemed as discriminatory by the Czech School Inspectorate. Moreover, many Roma students were recommended to practical schools by counselling centres without a diagnosis of mental retardation or any other disorder. In addition, the education programmes in 80% of the special schools were not in accordance with the Framework Education Programme (Straková et al., 2011). Since mid-2011, schools can also have higher funding for students from socially disadvantaged backgrounds. However, Roma children are often being taught in separate classes with a reduced “practical” curricula, which may reflect higher funding being for children diagnosed as requiring to study a reduced curriculum (Amnesty International, 2013).

The performance of Roma children in basic education has been declining and absences have been increasing (GAC, 2009). Students educated in the reduced curricula are entitled to continue their studies at upper secondary levels, but these students struggle in following the curricula due to their ill preparation in basic education. As a result, Roma children often leave upper secondary education early, failing to acquire the necessary skills to integrate the labour market (Trhlíková and Úlovcová, 2010). One quarter of Roma pupils do not receive any learning support from their parents although this is considered a key element of any education system (GAC, 2009; Straková et al., 2011). Additionally, a significant share of Roma pupils report facing difficulties in mastering the Czech language in the first years of compulsory schooling while difficulties in math are felt in later years.

how to achieve equity and quality in education in the Czech Republic (OECD, 2013e). The same report also recommends additional support and incentives to school leaders and teachers in the form of special training, improved working conditions and strong induction, coaching and mentoring of new teachers. Additionally, the recently introduced standardised tests in grades 5 and 9 should be used to introduce school benchmarking, linking performance with student characteristics and school management policies, thereby identifying which schools are more successful in raising attainment and performance of students, including those of low socio-economic background.

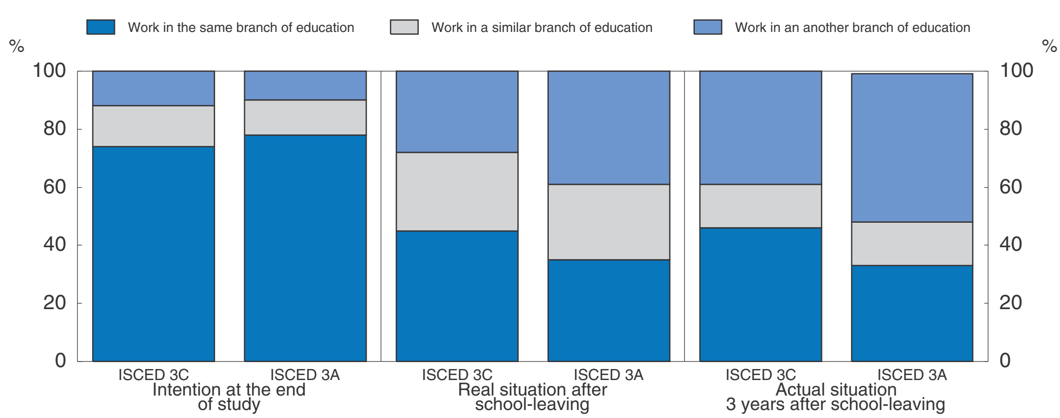
Vocational education has become increasingly unlinked from the labour market

About three out of four 25 to 64 year olds have followed VET programmes and today 73% of upper secondary students are enrolled in VET programmes, the highest share among OECD countries (OECD, 2013a). Upper secondary VET comprises two main programmes: technical education (ISCED 3A) and apprenticeship education (ISCED 3C). Technical education (*střední odborné školy* – SOS) are four year vocational programmes preparing the student either for the labour market or tertiary education. Apprenticeship programmes (*střední odborné učiliště* – SOU) are available in 18 specialisations and generally last three years.

Apprenticeship graduates are struggling in the labour market as they comprise a disproportionate share of the unemployed relative to the economically active population. More worryingly, for those who are employed, a recent survey reveals a serious occupation mismatch, both for those in apprenticeships and those following technical education programmes. Three years after having left school, only 33% of graduates in technical education programmes (ISCED 3A) and 46% of apprenticeship graduates (ISCED 3C) were working in an occupation directly related to their field of study (Figure 2.16). Furthermore, research has also found that students who opted for the apprenticeship track do not feel well prepared for the labour market, a sign of skill mismatches (OECD, 2013d).

Figure 2.16. **The occupation mismatch among VET school-leavers is severe**

Match between fields of study and branch of work, 2012



Source: National Institute for Education.

StatLink http://dx.doi.org/10.1787/888933008057

These findings suggest that the VET education system has not followed the pace of labour market developments and is neither providing the occupations demanded by the labour market nor the right set of skills within individual occupations, raising the risk of on-going and even worsening skill shortages. Indeed, a frequent complaint among employers is that graduates have not acquired the necessary skills to perform well their job tasks, indicating under-skilling (OECD, 2013d; Trhlíková, 2013). Some firms even prefer to have their own VET schools, to ensure students work with up-to-date machinery. Moreover, poor qualitative labour market outcomes, like earnings and career prospects, especially among those with apprenticeships, are sending important signals to students, discouraging them from enrolling in these programmes. Unsurprisingly, students' educational decisions in the past decade have moved away from apprenticeships towards technical programmes which, albeit academically weaker relative to gymnasium, grant access to tertiary education after completion of the school leaving exam (maturita) (OECD, 2010b and 2012c). However, the supply in education tracks with direct access to tertiary education has not followed the pace of demand. Streaming into vocational training does not always reflect pupils' choices, contributing to the higher dropout rates of poorly motivated students.

The system of quotas imposed on the maximum number of places offered in educational programmes and fields of study (e.g. hairdressing, construction, mechanics, tourism) does not support students' preferences and it is also unclear how well it responds to changes in labour market needs (OECD, 2010b). The fields of study on offer reflect historical developments in human resources and physical equipment available in each school with regional authorities tending to adjust them only marginally. The maximum number of students permitted in any particular field of study in a particular school is fixed in the National Register of School and School Facilities. At the request of each school, regions evaluate proposed changes in the maximum and approved changes are then sent to MoEYS, which normally adopts them unless there are flaws in the administrative procedure. However, the criteria determining changes to these maximums by regional authorities are not always transparent and it has occurred that a school was not permitted to open a programme for an occupation with low unemployment (OECD, 2010b). Failure to react to labour market needs by adjusting quotas in specific fields of study has been most likely hampered by the fact that a substantial part of practical training is provided in schools, and changes in provision impose extra costs on schools (related to the cost of new equipment and physical infrastructure).

Information on labour market outcomes influences student choice in many countries (OECD, 2010b). Therefore, to increase the flexibility of VET programmes to adapt to students' demands and also to labour market needs, more weight should be given to students' preferences in choosing fields of study by linking part of school financing directly to students. In such a system, students would make the decision of where and what to study, i.e. the choice of the particular VET programme (technical VET or apprenticeship) and the field of study, following which the school would be given the corresponding amount to finance their studies. In such a system of financing, students would exert pressure on VET schools by avoiding programmes of low quality or programmes with low employability prospects, thereby allowing a more endogenous adjustment of the supply of education. Providing regular information to basic schools and to the wider public on employment, unemployment trends and work compensation by field of study at the local, regional and national level would support better informed decisions.

Workplace training is an important element to ensure that students acquire the relevant skills demanded by the business sector. In the Czech Republic, training occurs far from the actual working environment, as only about 30% of VET students have practical training in companies (OECD, 2013a). An older study estimates that 35% of students in apprenticeship programmes benefit from workplace training, while in four year technical programmes around 90% of students receive training in companies, albeit the majority of work placements do not last more than three weeks (Czesaná et al., 2007). Workplace training is being hindered by an inadequate co-operation between schools and the business sector (OECD, 2010b). Schools cite lack of commitment by employers as one of the main obstacles to more efficient collaboration. In addition, legal obstacles and lack of funds to employers providing training to students may also contribute to companies' poor engagement (NOUV, 2008). On the other hand, employers complain about the poor preparation of graduates and ask for better training and closer co-operation.

Developing workplace training should get high priority as the skill sets acquired in school are often not following developments in the labour market. A particular concern is that low investment in equipment in some VET schools and a flat career system with compressed wages do not provide teachers with the incentives to update their knowledge, disconnecting them from technological developments, new production processes and working practices. Hence, moving the vocational content of VET programmes to the workplace would also facilitate the adjustment of the specialisations offered within VET to the labour market needs, as schools would not need to invest in acquiring new/different equipment. To encourage employers to engage more actively in VET, the government has amended the law on corporate taxation, with effect from 1 January 2014, introducing two new tax deductible items: *i)* for training in the workplace (CZK 200/person/hour); and *ii)* for assets purchased and used for training (up to 110% of acquisition costs according to the rate of utilisation for training purposes).

Expanding workplace training requires the development of binding standards, including rules defining how training is provided in terms of content, duration, requirements for trainers' qualifications and assessment criteria. Setting national rules would help to ensure that skills are transferable to other companies, while bearing in mind the importance of consensus building by including the private sector, trade unions as well as experts from VET schools, as recommended in the *OECD Review of the Czech Republic's Vocational Education and Training* (OECD, 2010b). Currently there are three separate channels at the national level through which employers and trade unions can communicate with the government on VET policy and three others at the regional level. These bodies are connected very loosely and informally, leaving the system as a whole fragmented (OECD, 2010b). Improving the communication with employers could be achieved by simplifying the institutional framework and making sure there are no overlapping responsibilities between the different bodies governing VET policies.

Given the very low level of workplace training, additional subsides incentivising firms to accept students with difficulties securing training could be considered. Subsidies can either be directly linked to apprenticeships or indirectly via tax credits and social security rebates. Box 2.4 provides examples of different policy alternatives in OECD countries aiming at encouraging employers to take on apprentices. In the Czech context, perhaps direct subsidies would be the way forward, as they can be directly linked to the formal apprenticeship contract. In turn, trainees should receive compensation to increase their sense of responsibility and encourage learning. This should be formalised by replacing the contracts between the schools and firms with training contracts between the apprentice and the employer, as is the case in many OECD countries (Austria, Denmark, Germany, Netherlands, Norway and Switzerland).

Improving the quality of teaching general skills in apprenticeships programmes can contribute to reducing dropout rates and increasing graduates' success in the labour

Box 2.4. **Providing subsidies to encourage apprenticeships – examples from OECD countries**

Direct subsidies

Several countries use direct subsidies to encourage employers to take on apprentices. In the United Kingdom, the National Apprenticeship Service provides Apprenticeship grants with a value of GBP 1 500 to employers with up to 1 000 employees per each 16-24 year-old recruited. Eligible employers are those who have never employed an apprentice before, or those who have not recruited one in the last 12 months. Up to ten grants can be made to any one employer. In Austria, companies are financially rewarded for every additional apprentice hired over and above the number hired in the previous year, or if they return to hiring apprentices after having taken a break. The Australian Apprenticeships Incentives Programme provides a wide range of employer incentives and benefits, which are larger if the apprenticeship place is created in a trade experiencing a skills shortage. Australia also provides additional incentives (AUD 3 350) for hiring young apprentices (under the age of 20). An evaluation of these subsidies (Deloitte, 2012) found that they had a significant effect on commencements, although more needs to be done to retain apprentices and prevent them from dropping out.

Tax credits and social security rebates

Another form of subsidising the provision of apprenticeship places is to grant tax credits and/or social security rebates. In France, certain firms receive a tax credit of EUR 1 600 per apprentice taken on, increasing to EUR 2 200 if the apprentice has a disability or is considered disadvantaged. Some firms are also exempt from social security contributions for the apprentices they take on. On top of this, each region in the country provides additional subsidies for the hiring of apprentices. In Canada, employers can claim up to CAD 2 000 per year for each eligible apprentice under the Apprenticeship Job Creation Tax Credit.

Source: OECD (2014), *Investing in Youth: Brazil*.

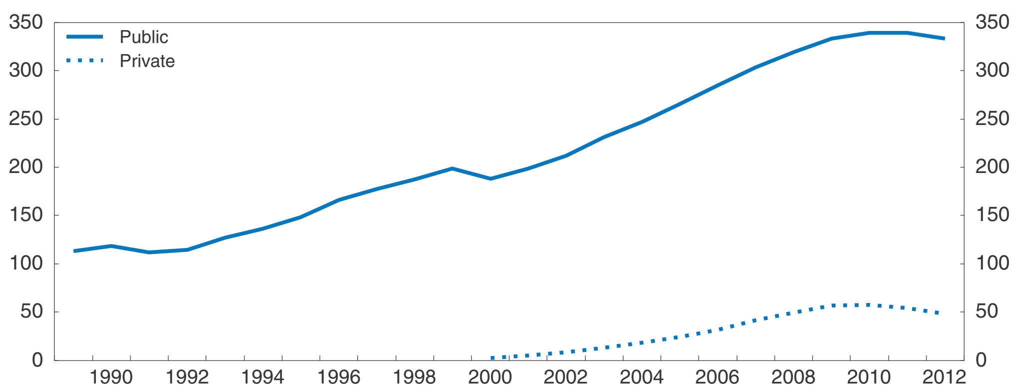
market as they are deemed crucial in guiding students to self-reliance, independent and critical thinking (OECD, 2010b). Strong general skills are also considered a very important element in supporting lifelong learning, addressing the needs of apprenticeship graduates to adapt to new technologies and innovations throughout their careers. Strengthening the general education component in apprenticeships does not necessarily require more time for instruction but rather more effective ways of teaching. Teaching of abstract concepts should be combined with practical applications, as connections between theoretical and practical learning are not strong enough even in technical programmes (NÚOV, 2008). Innovative practices should be explored, such as the approach developed in the United States by the National Research Center for Career and Technical Education, which adapted math concepts to the curricula of different VET courses which has proved successful in raising students' ability (OECD, 2010b).

There has been a rapid expansion of tertiary education

One of the most immediate consequences of the collapse of the communist system was an increase in the demand for higher education. The number of students enrolled in tertiary education has been rising steadily since the early 1990s, from little more than 100 000 in 1990 to almost 400 000 in 2012. The expansion of tertiary education has accelerated in the past decade, not least due to the emergence of several private higher education institutions (HEI), which have increased their intake from around 2 000 students to around 48 000 in 2012. In turn, the number of students enrolled in public institutions nearly doubled, constituting almost 90% of all students in higher education (Figure 2.17). Student enrolment has been dropping since the academic year of 2011/12, reflecting the demographic decline in the relevant age group. The expansion in tertiary education has been characterised by a rising share of students enrolled in humanities and social sciences, while the increase in enrolment in technical sciences, law and pedagogy courses has been more modest. As a consequence, the share of tertiary education graduates in technical fields has been shrinking over time and a concern is that they will not suffice to satisfy expected increases in demand in the coming years, although this has so far not been reflected in a higher wage premia.

Figure 2.17. **Expansion in tertiary education has been provided mainly by the public sector**

Number of students enrolled in tertiary education, in thousands



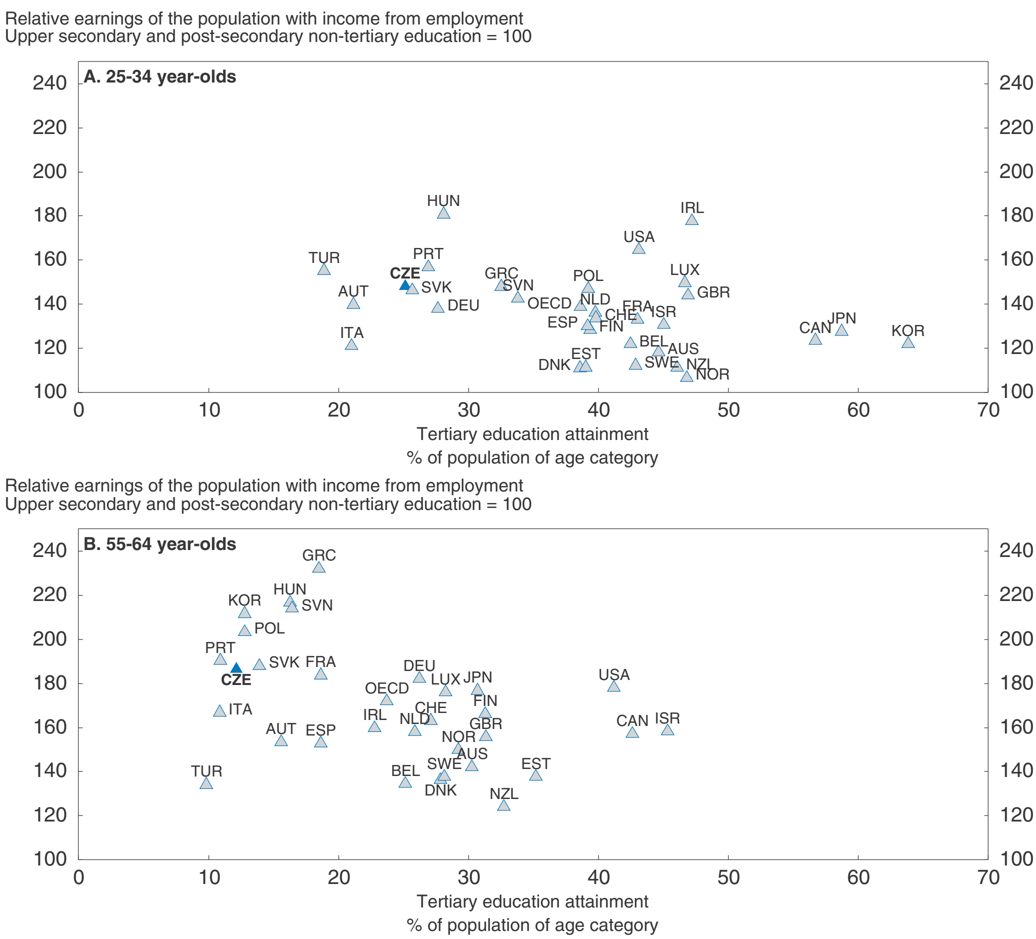
Source: Ministry of Education, Youth and Sports.

StatLink http://dx.doi.org/10.1787/888933008076

In spite of the expansion in tertiary education, attainment rates are still below the OECD average (Figure 2.18). Tertiary education graduates enjoy a favourable position in the labour market, not only in terms of their high employability prospects, but also in terms of job security and satisfaction, and higher income (Ryška and Zelenka, 2010). The high earnings premium from tertiary education also indicates that high enrolment rates are likely to continue or even rise further, and the concern is how to secure quality in an expanding tertiary education system, guaranteeing that graduates' skills address the business sector needs and contribute to raise productivity and accelerate economic convergence. Quality concerns are motivated by the fact that public funding has not gathered pace along with enrolment rates, which increased by 32% while expenditure only rose by 6% between 2005 and 2010 (OECD, 2013d). Tertiary education is reliant on public resources, as the share of private spending in tertiary education is 21% compared with an OECD average of 33%. As there is not much scope for a sustained growth given existing pressures on the Czech budget, the challenge that lies ahead is bringing more private resources into the system; in spite of the effort to raise public resources in tertiary education, expenditure per student is still below the OECD average. The involvement of private institutions in the expansion of tertiary education has created additional quality concerns, in terms of diverging standards between private and public HE institutions (OECD, 2009). At the same time, the higher intake in public institutions has neither increased connections with the private sector nor with international research networks, and they remain inward looking with a high level of inbreeding in the academic career. This also raises quality concerns *vis-à-vis* international standards.

Figure 2.18. **Tertiary education attainment is rising but the earnings premium is still high**

2011



Source: OECD, *Education at a Glance 2013*, Tables A1.3a and A6.1.

StatLink http://dx.doi.org/10.1787/888933008095

Quality concerns can be addressed by strengthening the governance of tertiary education. Quality assurance is carried out by the Accreditation Commission for Higher Education Institutions (AC/HEI), and the Accreditation Commission for Tertiary Professional Schools, which advise the MoEYS on the accreditation of study programmes of higher education institutions and tertiary professional schools. In particular, the role of the AC/HEI needs to be focused and structured around a narrower set of activities, focused on quality issues. The technical and financial resources of the AC/HEI did not reflect the rapid expansion of tertiary education, in terms of the increase in the number of institutions and in the programmes of study despite the legal framework obliging the AC/HEI to evaluate every single study programme, on top of its other responsibilities such as recommending to MoEYS the procedures for the appointment of professors. With respect to the former, capacity constraints have led in practice to formal assessment (a check list of generic input criteria) rather than a content based review of study programmes, which in turn has generated a very uniform tertiary education system, with underdeveloped professionally-oriented bachelor degrees relative to more research-intensive programmes (OECD, 2009). Quality and diversity of tertiary education programmes can be better supported by supplementing input based criteria (such as library collections, computers, the number of faculty publications and rank) with output-based criteria, such as graduation rates and students' labour market outcomes as recommended in the *OECD Review of Tertiary Education* (OECD, 2009).

As part of the input-based quality assessment, the accreditation system puts great emphasis on the numbers of senior academic staff – full and associate professors. In combination with low faculty compensation and a career system with long and strenuous career requirements based on the *habilitation* procedure, the accreditation system has created a structural imbalance between demand and supply of senior academics, which has led to many professors holding multiple appointments (the so-called phenomenon of "flying professors").[4] In particular, this practice has hampered the links with the private sector as it does not offer adequate compensation to its professionals, who remain in the positions of assistants with low financial remuneration, and has retarded the development of an academic staff that is fully engaged in and committed to the development of professionally-oriented bachelor degree education (OECD, 2009). Moreover, it also discourages foreign academics, thereby limiting the integration of Czech academic institutions in international research networks. Therefore, the system should allow for a more diverse academic career structure, and this can be achieved by re-structuring career progression based on teaching and research results, granting appropriate compensation, advancement, and status.

In 2013, the MoEYS prepared an amendment to the Higher Education Act which included the combination of input- and output-based accreditation criteria, as well as the introduction of a new academic position – "professor extraordinary" – which would enable HEIs to hire highly experienced foreign academics as well as professionals from the private sector by offering more attractive compensation and without obliging them to undergo complicated legal procedures. The amendment would not solve the structural mismatch between demand and supply of senior academics, but it would contribute to better integrating HEIs in international research networks, to approximate teaching and research to the private sector needs, as well as enhancing professionally-oriented bachelor degrees. The new government should reform higher education building on this proposal.

Countries which use more of a mix of public and private resources are in a better position to expand tertiary education and maintain or improve teaching quality, research and innovation than those that rely solely on public resources to fund their systems (OECD, 2009). Moreover, the high private returns to tertiary education and the willingness to pay for tertiary education, confirmed by the rapid expansion of private HE institutions, justifies the introduction of an element of cost sharing by students. Introducing fees for tertiary studies at public institutions will also force students to pay more attention to the economic consequences of their study choices, contributing to avoiding potential mismatches between fields of study and the needs of the labour market. To guarantee equity in access to tertiary education, a mixed system of means-tested grants and income-contingent repayment loans needs to be introduced (OECD, 2008). To support students making informed choices about study programmes, information about labour market outcomes by field of study and HEI should be made available to prospective students and the wider public. Furthermore, such a regular monitoring of the labour market outcomes of graduates could also assist the MoEYS in using information on labour market outcomes in its accreditation system.

Lifelong learning is not well developed

Lifelong learning is crucial for a catching-up economy to adapt efficiently to changing technologies and avoid skill mismatches due to structural changes in the labour market. Lifelong learning can also improve the employment prospects of the low skilled unemployed and early school leavers (OECD, 2011b).The Czech Republic scores well in adult skills. According to the *OECD Skills Outlook* (OECD, 2013g), the mean proficiency of 16-65 year olds is around the OECD average in literacy and problem solving, and significantly above the average in numeracy. Younger adults (adjusted for age effects) score higher than older cohorts, which is related to the fact that a higher share of younger adults has attended tertiary education. Country differences in average skill profile suggest that socio-economic factors affect the strength of the relationship between age and skills. Indeed, the onset of age-related skills loss occurs at the age of 33, the earliest in the countries covered in the survey.

Less than 30% of the adult population participates in further education and only 1.4% of the adult population participates in formal education at schools (Ministry of Education, Youth and Sports, 2007). Participation in non-formal education, such as foreign languages, and attendance at seminars and conferences, is low by international standards, both in terms of the participation rate and the number of hours per participant (OECD, 2011c). Recent increases from below 7% to 11.5% in adult education have occurred due to extensive European Social Fund funding as an anti-crisis measure targeting the unemployment and those with jobs at risk, and steps need to be taken to ensure lifelong learning persists in a continuous basis as the economy improves (CEDEFOP, 2012).

Most of the adult training is provided by employers and investment by individuals in their own education is much lower, in particular for low-skilled and older workers (CEDEFOP, 2012). As a result, adult learning is more common among employed than unemployed persons. Experience in other OECD countries indicates that individual learning accounts (used in Canada, the Netherlands, Spain, the United Kingdom and the United States) and grants (e.g. allowances and vouchers, as in Austria, Denmark, Germany, Switzerland among others) can be effective in facilitating adult learning for the low-skilled. Income tax deduction schemes are less likely to help these groups, due to the fact that they often pay little in income tax or none at all (OECD, 2005b).

Main recommendations to strengthen skill use and school-to-work transitions

Promote youth and low-skilled employment

- Encourage employers to provide training to young unskilled workers through tax subsidies or targeted reductions in social security contributions. Looking ahead, if the statutory minimum wage increases sufficiently, an additional measure could be the introduction of a youth minimum wage linked to training.
- Foster the employability of trainees by ensuring sufficiently long work place training to secure strong skills acquisition and by providing a certificate acknowledging competencies learnt.
- Increase the effectiveness of active labour market policies by focusing resources on clearly identified target groups and establish performance targets. Improve monitoring of active labour market programmes.

Boost female labour market participation by supporting choice in reconciling family and working life

- Provide an adequate supply of affordable and high quality early childcare facilities.
- Conditional on this development, reduce the maximum duration of the parental leave and replace part of the parental allowance with a system of childcare vouchers. Make a share of the parental allowance conditional on fathers taking part of the parental leave.
- Create legislation to facilitate the set-up of not-for-profit early childcare education and care facilities.
- Increase opening hours of early childhood and care facilities and expand the number of places in kindergartens for children less than 3 years old.

Provide a solid skill foundation by avoiding selectivity in education

- Expand access to early childhood education, including for children from disadvantaged backgrounds and develop good quality standards of service provision.
- Eliminate early tracking, avoid streaming into special needs schools and increase the possibility to transfer between education tracks.
- Improve teaching quality by providing school principals with more opportunities to reward good teaching performance conditional on the existence of a transparent evaluation system, providing new teachers with strong coaching (induction) and mentoring, and creating incentives to attract and retain good teachers in disadvantaged schools through financial rewards and more supportive working conditions.
- Use standardized national tests to introduce school benchmarking, linking student performance and characteristics with school specific policies.

Match vocational education and the needs of the labour market

- Increase participation of private employers in vocational education by simplifying institutional frameworks and governance. Introduce a contractual employment relationship between the apprentice and the employer.
- Expand workplace training by providing subsidies to the participating firms for difficult to place students.
- Improve the quality of general education in apprenticeships to reduce dropout rates and support further education. Modify school financing to ensure a more labour market related change in the supply of VET programmes.

Main recommendations to strengthen skill use and school-to-work transitions *(cont.)*

Ensure quality in the expansion of tertiary education

- Secure quality and support diversity of provision of tertiary education by introducing output based accreditation criteria.
- Introduce student fees to increase resources for the provision of public tertiary education, accompanied by a mixed system of means-tested grants and income-contingent repayment loans.
- Strengthen the links with the private sector and foreign research networks.
- Support student choices by publicising information on labour market outcomes by field of study and higher education institution. Use this information as an outcome indicator in the accreditation process.

Expand lifelong learning

- Incentivise participation of low-skilled workers through individual learning accounts or a system of grants.

Notes

1. An IAP is a mutual agreement between the job seeker and the Employment Office detailing a timetable of measures to be followed by the jobseeker. Non-compliance by the job seeker leads to exclusion from the register for at least 6-months and loss of unemployment benefits.
2. Examples of overlaps include two projects, launched in 2012, "Company Internships – Education through Experience" and "Internships for Young Job Seekers", the first one targeting all job-seekers and the second focusing on future school-leavers and young graduates entering the labour market for the first time. Yet, another programme targeting the latter group – "Professional Experience up to 30 years" – was initiated on 1 July 2013. These programmes are additions to the "Educate Yourself for Growth!" project focusing on retraining and open to all job seekers.
3. Although legislation did not stipulate in binding terms staff qualifications, methodological guidelines by the Ministry of Health recommended that children under the age of 3 in crèches should be under the care of nurses. Strict health and safety rules have also discouraged private sector provision of both crèches and kindergartens (Kuchařová et al., 2009).
4. The aim of the *habilitation* procedure ("*venia docendi*"), which is common in Central Europe, is to confirm the scholarly, scientific or artistic qualifications of the applicant. For associate professors, the procedure involves the delivery and defence of a *habilitation* thesis, other scholarly, scientific, specialist or artistic work, and the applicant's competence as a teacher, based on a *habilitation* lecture and previous teaching experience.

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