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CZECH REPUBLIC

Selected Issues

Prepared by Robert Tchaidze and Ann-Margret Westin (both EUR)

Approved by the European Department

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I. Estimating Potential Output in the Czech Republic[1]

A. Methodology

1. **In the environment of the global financial crisis, estimating developments in potential output has become even more challenging and important.** Correct assessment of the cyclical position is now complicated by sharp drops in actual output, large increases in unemployment, and overall uncertainty surrounding the medium-term outlook. Yet implications of such an assessment play crucial role in guiding monetary and fiscal policies in the near term as well as structural reforms in the long run.

2. **The crisis affects potential output in several ways.** Decline in investment—due to lower profits, worsened business prospects, rising interest rates in the case of large fiscal deficits, credit tightening, and in the case of the Czech Republic lower inflows of foreign direct investment—slows down capital accumulation, while bankruptcies and restructuring negatively affect productivity of the already existing stock. Meanwhile, increases in unemployment may lead to higher natural rate of unemployment as longer unemployment spells lead to discouragement and deterioration of already existing skills. Lower profits, leading to lower R&D spending, would negatively affect future productivity.

3. **Two different methods are used to evaluate developments in potential output for the Czech Republic.**

- The first one is the *production function* approach (PF), the most appealing from an intuitive point of view, and thus, the most commonly used. Under this approach movements in output are decomposed into movements of capital stock, labor,[2] and total factor productivity (TFP). Time series for labor and TFP are then replaced with respective "long-run values" (often obtained using smoothing techniques, such as the Hodrick-Prescott filter), allowing to construct the potential output series.[3] One of the main difficulties in this approach is interpretation of TFP time series, as empirically it is a basket of stochastic disturbances affecting output, capital, labor, and productivity, as well as all sorts of measurement errors—a particularly acute issue when measuring the capital stock. This makes interpretation of the results, as well as forecasting, rather difficult.

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[1] Prepared by Robert Tchaidze (EUR).

[2] In the case of the Czech Republic, changes in labor input are decomposed further—into changes in working age population, labor force participation, hours worked, and unemployment rate.

[3] To avoid the "end-point" problem, 2010-15 forecasts are incorporated into calculations.

- An alternative method proposed by RES is *multivariate filtering technique* (MV) that uses the very definition of potential output—the level of production at which resources are utilized so that inflationary (and deflationary) pressures are absent. This technique isolates co-movements in output, inflation, unemployment, and capacity utilization, while allowing for the potential output series to be a flexible statistical process that can be moved by shocks both to its level and growth rate. The method, however, relies to a large degree on assumptions of the long-run growth rate of potential output, as well as the natural rate of unemployment.[4] It is also more difficult to interpret using economic intuition.

B. Results

4. **Both methods suggest that the Czech economy will remain below its potential over the medium term, but that in the long run the growth will resume to its pre-crisis level (Figure 1).** The output gap will turn positive in 2014 (PF) or 2016 (MV) and the cumulative loss in output is estimated to be 12.2 percent of GPD (PF) or 15.3 percent of GDP (MV). The slowdown in the growth of potential output in 2007–10 is estimated to be 2.7 (PF) or 3.5 (MV) percentage points, while the output gap in 2010 is estimated to be -3.5 (PF) or -3.7 (MV) percent.

5. **The estimates used by staff are those obtained using the MV approach as they seem more plausible.** In particular, the MV method suggests smaller output gaps in the late 1990s and the early 2000s, implying that most of the time the Czech economy was somewhat below its potential level. In contrast, the PF approach suggests very large negative output gaps in 2001–03 that are deeper than in 2009–11 during the global financial crisis (a rather implausible result) and very large positive output gaps in 2006-8, suggesting significant overheating of the economy.[5]

6. **The differences in the output gap estimates reflect differences in volatility of the estimated potential output growth.** Under the MV approach, the potential output growth is more volatile than under the PF approach. That happens because under the MV approach the volatility in the actual output growth is “split equally” between the output gap and the potential output growth, while under the PF approach most of the volatility is concentrated in the output gap. However, it is reasonable to expect substantial volatility in the potential output growth rates in the economy that is undergoing substantial structural changes. For example, following the EU accession in 2004, the Czech economy attracted substantial inflow of FDI, which is likely to have stimulated the potential output growth, in line with

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[4] Under the MV approach, the long-run growth level for the Czech Republic is assumed to be 2.5 percent (see Appendix I) while the natural rate of unemployment is assumed to be 6.6 percent.

[5] The output gap peaks at 4.8 percent in 2007, inconsistent with low CPI inflation (2.8 percent).

results obtained using the MV approach. The PF approach, on the contrary, suggests a slowdown in the growth of potential output.

Standard Deviations of Output Growth and Output Gap, 1996-2015			
	Actual	The MV Approach	The PF Approach
Output Growth	2.7	1.8	0.8
Output Gap	--	1.5	2.9

7. **The PF approach allows for an evaluation of the sources of potential output growth.**

- ***Improvements in TFP*** have been driving potential growth in the sample period, though its role has diminished overtime (from more than 4 percent of GDP in the late 1990s to less than 2 percent in 2014).[6]

- ***Contributions of the capital stock*** were either negative or negligible until 2005, but increased following the EU accession in 2004, reflecting large FDI inflows and sharp increase in investment.[7] In the aftermath of the current crisis, as investment falls, capital stock is projected to continue to shrink until 2012.

- ***Contributions of the labor input*** are negative or negligible throughout the sample with the exception of 2007-08 when unemployment rates declined from 8.1 percent in 2006 to 5.4 percent. They are expected to remain below 0.06 percent of GDP, as the growth in working age populations slows down, highlighting the need for structural reforms in labor markets.

8. **The crisis implies loss of potential output of 7 (MV) or 8 (PF) percent of GDP over the medium-term.** This is by how much the potential output will be below the pre-crisis output trend in 2015. This number is consistent with the findings of the latest WEO study, which suggests that for an average country seven years after crisis the output level is 10 percent below its pre-crisis trend, though large variation exists across crisis episodes.[8]

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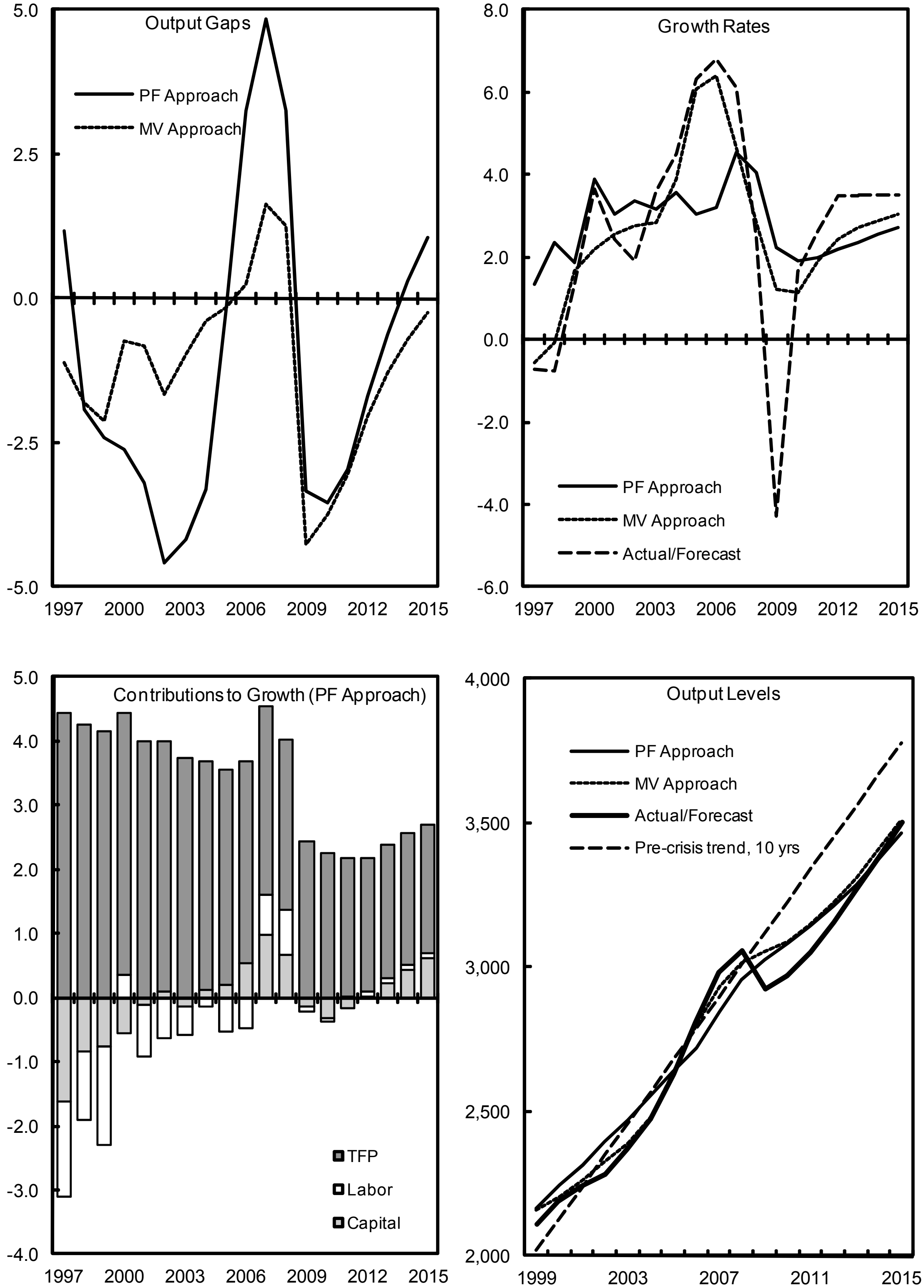
[6] Schadler et al (2007) find the similar result, contributions of TFP to growth that are large initially and decline afterwards. They suggest this to be a "catch-up," a reflection of elimination of inefficiencies inherited from the central-planning system. They also find that countries that recovered earliest from the transition shock have seen a more substantial diminution in the TFP growth.

[7] FDI peaked at 9.3 percent of GDP in 2005. Investment grew by more than 9 percent in 2006–07.

[8] IMF (2009b).

Figure A1. The Czech Republic, Cyclical Position



Source: IMF staff calculations.

APPENDIX I. EVALUATING THE LONG-RUN GROWTH

9. **The MV approach assumes a long-run growth rate of 2.5 percent in potential output.** Four different approaches were used, and they generate a rather large range of estimates—historical averages (2.7 percent), the Solow model (1.6 percent), growth in trading partners (2.7 percent), and value added (2.4 percent). Given shortcomings of the first two methods, the assumption was based on the midpoint between the last two. This appendix describes these approaches in more details.

Historical averages

10. **The simplest approach is to use the average growth over a sufficiently long period of time.** This approach assumes that business cycle fluctuations move output around its potential, but that periods of faster growth are offset by periods of slower growth and suggests the long-term growth of 2.7 percent a year.

11. **This approach has, however, several drawbacks.** Firstly, availability of data for the Czech Republic limits the base of calculations to a period of just 15 years. Secondly, in boom periods the growth rates are based on a lower base and thus, are larger in absolute terms, while in recessions the growth rates are based on a higher base, and thus, are lower in absolute terms. Hence, the average growth rates are biased upwards: even if the movements leave output unchanged in the long run, the average would be positive.[9] Finally, the 1995–2009 period includes transition from the command economy to the market one and thus, is characterized by structural changes that positively affected both actual output and potential output growth rates. Thus, as long as the calculations incorporate a history of low potential output, i.e. a history of high growth rates, they introduce a further upward bias.

12. **Of course, this method does not incorporate changes in the structure of the economy,** whether on the supply side—where shares of certain industries would rise, while shares of others would decrease—or on the demand side, where the economy would re-orient itself from domestic consumption towards exports or vice versa. In this sense, this method is “unilateral” as it does not account for developments in the rest of the world, which produces a significant miscalculation for an export-oriented economy.

The Solow model

13. **Using the Solow model allows for useful cross-country comparisons.** The long-run growth rate surely reflects the technology growth rates that cannot differ significantly across countries, which are close in their levels of development. The Solow model suggests that the

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[9] For example, if output is 100 in the first period, 125 in the second, and subsequently 100, 75, and 100, then the average output over the cycle is 100 and thus, the growth rate of the potential output is zero. However, the average of growth rates—which are 25.0, -20.0, -25.0, and 33.3 percent—is 3.33.

long-term growth is driven by technology improvements and growth in population. Using the WEO projections of growth in 2014 as approximations for long-run growth, one can estimate a simple linear regression that would link potential output growth to population growth. If the model's predictions are correct, the intercept would then represent technology growth and the slope would be unity. The results of the regression for 26 developed countries,[10] even though not very convincing (with R-squared of only 0.24, and an intercept of 0.8 that is significantly lower than 1), are still informative, suggesting a long-run growth rate of just 1.6 percent a year.

Growth in trading partners

Export Markets of the Czech Republic

Country	2003-08 Export Share	Cumulative Share	2014 Growth 1/
Germany	33.4	33.4	1.2
Slovakia	8.6	42.0	3.9
Poland	5.6	47.6	4.3
Austria	5.4	53.0	1.7
France	5.1	58.1	1.3
UK	4.9	62.9	1.8
Italy	4.5	67.4	0.7
Netherlands	3.9	71.3	1.7
Hungary	2.8	74.1	2.4
Belgium	2.6	76.7	1.3
Spain	2.4	79.1	1.6
USA	2.2	81.3	2.0

1/ WEO

14. **As the Czech economy is heavily export-oriented, its potential growth rate has to depend on the growth rates of its trading partners.** In the mid 1990s, the Czech economy was exporting about half of its production. The exports-to-GDP ratio has since been increasing, jumping by 10 percentage points in 2004 and peaking at 80 percent in 2007. While the latter is probably not representing the "equilibrium" level, the changes in the ratio have over time become much smaller,[11] indicating a "convergence." In 2003–08 exports were on average 73 percent of GDP. Most of the exports (33 percent or 24 percent of GDP) are to

[10] Australia, Austria, Belgium, Canada, Cyprus, Denmark, Euro Area, Finland, France, Germany, Greece, Ireland, Israel, Italy, Korea, Netherlands, New Zealand, Norway, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland, UK, and the US

[11] Between 2000 and 2007, the export-to-GDP ratio increased by 16.7 percent, between 2004 and 2007 by 9.9 percent, and between 2006 and 2007 by 3.6.

Germany, which makes it the second largest consumer of Czech goods, although as the share of exports has increased in the last years, Germany, in fact, became the largest market.

15. **Incorporating information on the growth rate of trading partners allows establishing a benchmark value for long-run growth.** Assuming that the shares of income spent on Czech goods by foreigners and domestic residents remain constant, the growth rate of the Czech economy would equal the weighted-average growth rate of its trading partners with weights reflecting the export shares. According to the WEO projections the weighted-average growth in the trading partners will be 2.6 percent in 2012, rising to 2.7 percent in 2013–14. If the share of exports to Germany were to rise further, then the growth rate of the weighted trading partners would decrease given lower medium-term growth perspectives in this economy.

Value added by industries

16. **The final approach is to look at the supply-side structure of the economy in order to identify sectors of the economy that can be expected to contribute the most to long-run growth.** To utilize this approach a view needs to be formed of the structure of the Czech economy in the long run and of the productivity growth that each sector can generate. Multiplying growth rates by shares would yield contributions to growth that in sum would produce the growth rate of the overall economy.

The Industrial Structure of the Czech Economy

Industries	Shares				Changes		
	1995	2000	2004	2005	95–05	00–05	04–05
Agriculture, hunting and forestry	4.3	3.2	2.6	2.4	-1.9	-0.9	-0.2
Fishing	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mining and quarrying	1.7	1.1	1.0	1.0	-0.7	-0.1	0.0
Total manufacturing	35.7	39.4	39.7	39.9	**4.2**	0.5	0.2
Electricity, gas and water supply	6.2	4.8	4.7	4.9	**-1.4**	0.0	0.2
Construction	9.7	8.5	8.4	8.3	**-1.3**	-0.2	-0.1
Wholesale and retail trade	9.1	9.4	9.1	9.1	0.0	-0.2	0.1
Hotels and restaurants	2.1	1.9	1.7	1.6	-0.5	-0.3	0.0
Transport and storage and communication	8.1	8.2	8.6	8.4	0.3	0.2	-0.2
Financial intermediation	2.6	2.5	2.8	2.8	0.2	0.3	0.0
Real estate, renting and business activities	10.1	10.5	10.9	11.1	**1.0**	0.6	0.2
Community social and personal services	10.2	10.3	10.5	10.4	0.2	0.1	-0.1
Education	2.2	2.0	2.1	2.0	-0.2	0.0	-0.1
Health and social work	2.5	2.3	2.4	2.4	-0.2	0.1	-0.1
Other community, social and personal services	2.4	2.9	2.9	2.8	0.4	-0.1	-0.1
Private households with employed persons	0.0	0.0	0.0	0.0	0.0	0.0	0.0

17. **While there have been significant changes in the structure of the Czech economy, these have been rather small in the past years, indicating "convergence."** The biggest "winner" during the 1995–2005 period was the manufacturing industry, which increased its share in the economy by 4 percentage points. The second "winner" was real estate, while the biggest "losers" were utilities and the construction sector.[12] Using 2005 shares of different industries in the Czech economy and looking at average growth rates of value added in these sectors across European economies, one can produce an estimate of expected long-run potential output growth. This estimate varies depending on the time period used for taking an average. In particular, the highest estimate of 2.4 percent is produced when using the longest, 1970–2005, sample. Using the most recent period of 2000–2005 produces the lowest estimate of 1.7 percent.

[12] These changes are, of course, absolute, and thus do not represent quite an accurate picture. For example, agriculture has shrunk by 1.9 percentage points, but its share fell by half.

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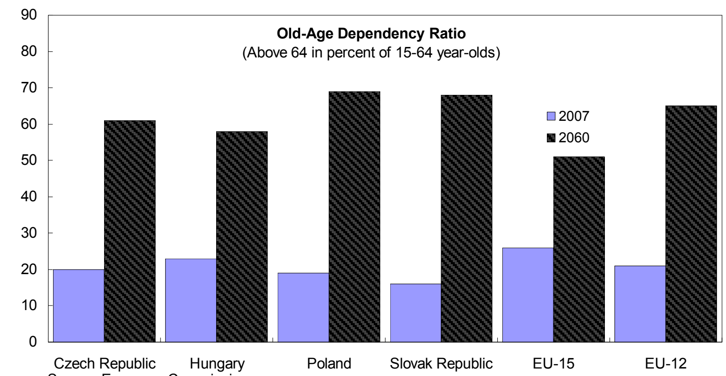
II. Structural Reform Agenda to Ensure Fiscal Sustainability and Promote Growth[13]

A. Introduction[14]

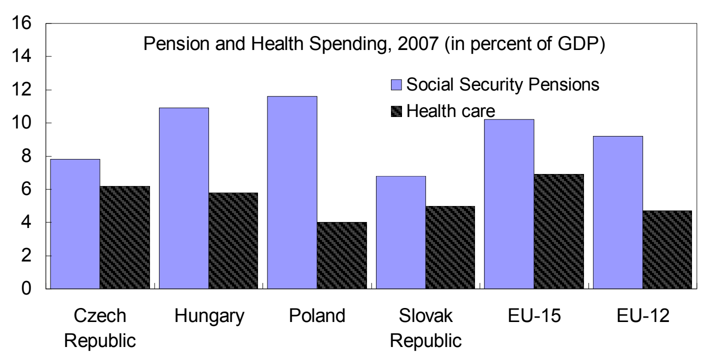
While the global economic and financial crisis is creating its own fiscal pressures, the Czech Republic will need to brace itself for an even greater challenge for fiscal sustainability over the medium term. Rapidly rising age-related pension and health spending underscores the need for fundamental pension and health care reform. The global crisis and associated decline in potential output are also accentuating the need for complementary growth-promoting structural reforms to enhance productivity growth and competitiveness.

1. **Going forward, the Czech population is projected to age at one of the fastest rates among OECD countries, in line with other countries in Central Europe.** By 2060, the old-age dependency ratio[15] will have tripled to 61 percent, with the elderly accounting for 33 percent of the population compared with 14 percent in 2007. Meanwhile, the share of the working age population will have shrunk to 54 percent compared with 71 percent in 2007.



Source: European Commission.

2. **At the same time, the pension and health care systems, which account for the bulk of age-related expenditures, remain largely unreformed, with only limited private participation.**[16] In particular, while public spending on pensions still remains comfortably below the averages of both the old (EU-15) and the new (EU-12)



Source: European Commission.

[13] By Ann-Margret Westin (EUR).

[14] This section draws in part on Czech Republic (2009a) and European Commission (2009a, c&d).

[15] Defined as the population aged 65 and above as a share of the population aged 15–64.

[16] Age-related spending also includes spending on long-term care, unemployment, and education.

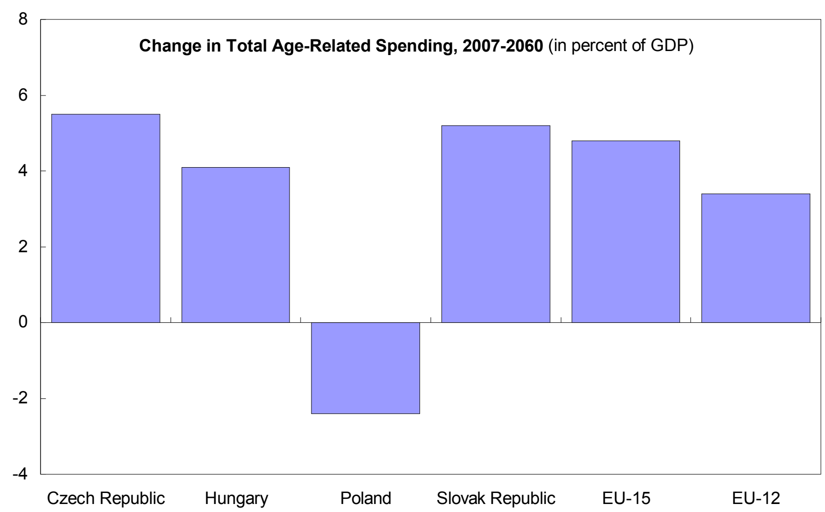
member states of the European Union, public health care spending is already high compared with the rest of the region.[17]

3. **As a result, total age-related public spending is projected to increase faster in the Czech Republic than in the rest of the EU based on current policies.** Spending will grow by 5.5 percentage points of GDP over the next 50 years compared with average increases of 4.8 and 3.4 percentage points in the EU-15 and EU-12, respectively.[18] According to the 2009 EU Sustainability Report, the Czech Republic is ranked as a country with high long-term fiscal risks, with a sustainability gap of 7.4 percent of GDP (compared with an average EU gap of 6.5 percent), implying that in order to put public finances on a sustainable path, the structural primary balance would need to improve by this amount.[19] Half of this gap is attributed to the current budgetary position, while the other half is attributed to the long-term cost of ageing.

Czech Republic: Pension and Health Care Spending Projections 2007 and 2060
(in percent of GDP)

	Czech Republic			EU-12			EU-15		
	2007	2060	Change	2007	2060	Change	2007	2060	Change
Social Security Pensions (Gross)	7.8	11.0	**3.3**	9.2	11.5	**2.3**	10.2	12.6	**2.4**
Health Care Spending	6.2	8.4	**2.2**	4.7	6.0	**1.4**	6.9	8.5	**1.6**
Total Age-Related Spending	17.9	23.4	**5.5**	18.2	21.6	**3.4**	23.5	28.3	**4.8**

Source: European Commission



Source: European Commission.

[17] In addition, experience from other countries suggests that as countries grow richer over time, age-related spending in proportion to GDP tends to increase.

[18] European Commission (2009a).

[19] European Commission (2009d).

4. **Furthermore, the reduction in the working-age population will require complementary structural reforms to boost productivity growth and competitiveness.** This will be key given the fiscal consolidation required to address the age-related spending pressures and the associated output costs. In line with the recommendations of the European Commission's 2009 assessment of the implementation of the Lisbon Strategy in the Czech Republic, reform policies should focus on: increasing labor productivity and participation, and labor market flexibility; promoting the efficiency of higher education and research and development; and enhancing the business climate and the flexibility of the economy more generally.

5. **While the 2007 welfare reform package was a step in the right direction, further steps will be needed.** As part of the 2007 package, steps were taken to shift some of the tax burden from labor to consumption, better target certain social benefits, and introduce the first steps in pension and health care reforms, including the increase in the statutory retirement age and co-payments for doctor's visits and pharmaceuticals. Still, this reform package was only the beginning of the reform process and further reforms will be needed in the years to come. While undertaking thorough structural reforms is a political challenge, the current crisis might now prove a "golden opportunity" to muster the needed political consensus.

B. Pension Reform[20]

The status quo

6. **The current pension system consists of a public mandatory PAYG defined-benefit social insurance scheme (first pillar), which has been successful in achieving high coverage and low poverty among the elderly at relatively low cost**. Pension benefits are highly redistributive, with net replacement rates declining with income.[21] At the same time, benefits are quite moderate by international comparison, resulting in relatively low pension wealth in terms of the present value of pension entitlements. While the system was running surpluses through 2008, the Social Insurance Fund is estimated to have recorded a deficit of close to CZK 30 billion in 2009 reflecting the economic downturn and hence decline in contributions, as well as the temporary reduction in social insurance contribution rates as part of the anti-crisis fiscal package.

7. **Meanwhile, the voluntary private supplementary pensions have only had limited success.** Despite both tax allowances and direct subsidies, they remain at an early stage of asset accumulation (with current assets of only about 5 percent of GDP) and function largely as a state subsidized savings scheme rather than as retirement savings.

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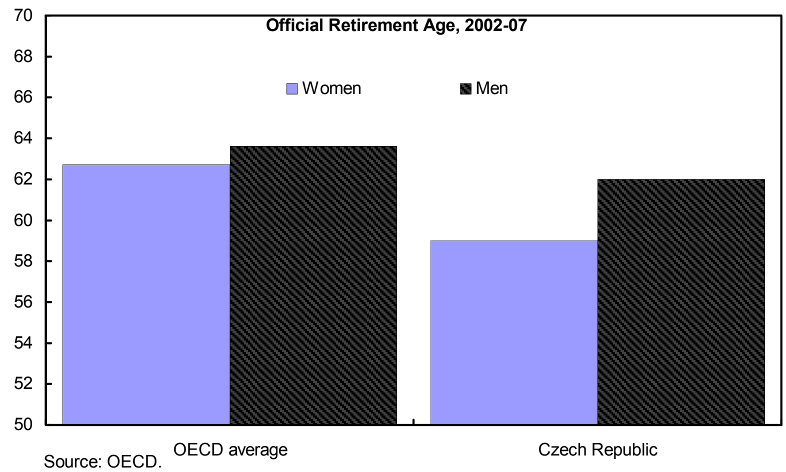
[20] This section draws on Botman and Tuladhar (2008); Czech Republic (2008 & 2009b); Dalsgaard (2008); OECD (2005 and 2009c); and Tuladhar (2005).

[21] Net replacement rates are defined as individual net pensions relative to individual net earnings, taking into account personal income taxes and social security contributions paid by workers and pensioners.



8. **While the current *statutory* (official) retirement age is already low compared with most European and OECD countries, the *effective* retirement age is even lower.** Since 1996, the statutory retirement age has been gradually increased from 60 to reach 63 by 2013 for men, and from 53–57 to 59–63 for women, depending on the number of children raised. However, many leave the work force even earlier through *generous early retirement schemes and disability pensions,* implying that the effective retirement age is even lower, in particular for women and low-wage earners. The effective accrual rate for pension benefits, which depends upon wage levels, is also relatively low by regional standards, providing strong incentives for early retirement. As a result, pension benefits combined with other social benefits have resulted in a net replacement rate of around 100 percent among low-wage earners.

Parametric changes to the public pension scheme

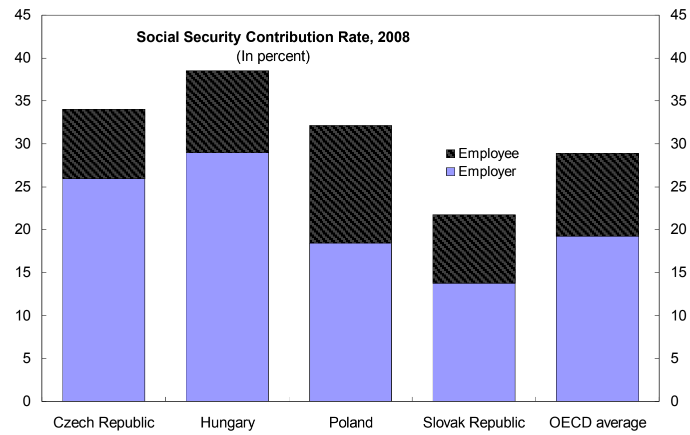
9. **Several measures in the 2007 welfare reform package, effective January 2010, aim to increase the effective retirement age.** In particular:

- The statutory retirement age will continue to be gradually increased to 65 for men (62-65 for women) by 2030;
- The required insurance period will be gradually lengthened from 25 years of gainful occupation to 35 years by 2019;
- Study periods will no longer be automatically insured but students will have the opportunity to voluntarily participate and pay contributions;
- Disability pensions will be reclassified from a 2-tier to a 3-tier system, in effect implying a tightening of the conditions;
- The old-age pension will be further reduced in case of early retirement.

These measures should help boost labor supply and reduce incentives for early retirement, hence further support the financial sustainability of the PAYG system. Meanwhile, the decision to gradually extend the period for early retirement from three to five years will negatively affect the effective retirement age.

10. **In the near term, further parametric changes to the current PAYG system would help strengthen the fiscal position.** While insufficient to ensure the long-term sustainability of the pension system, the following measures could be considered:

- Better linking contributions to benefits, thereby also making the former seem more like savings and less like a tax and in turn reducing the tax wedge on labor income;
- Moving forward to 2020 the increase in the statutory retirement age to 65;
- Introduce same retirement age for women as for men (women already enjoy significant maternity/parental leave for raising children, which counts against the required insurance period);
- Further review overall work-retirement incentives, including reducing the period for early retirement back to 3 years.



Source: OECD.

Yet increasing the social security contribution rates further should be avoided. These rates are already relatively high in comparison with other EU countries and a further increase would adversely impact labor supply.

Expanding private pension schemes

11. **In the short-term, a rationalization of the current tax allowances and direct subsidies for savings in the third-pillar voluntary supplementary private pension plan could also yield fiscal savings.** While there is wide-spread participation in these pension funds, they have had only limited success in generating further savings, with most contributions set at a level that maximizes the public subsidy. In fact, based on international experience, there is scant evidence as to the effectiveness of such incentives; meanwhile, they carry a fiscal cost.

12. **Looking ahead, pension reform should aim to reduce the reliance on the public pension system and increase the role of private pension schemes.** Several proposals have been discussed over the past few years to address the long-term fiscal pressures from aging, although there is so far no consensus on a new pension model. A number of these reform proposals envisage a transition to *fully funded second-pillar private pension schemes* where workers could divert part of their social security contributions away from the existing PAYG public pension scheme. In most countries in Central and Eastern Europe that have introduced

a multi-pillar pension system, the decision to switch to private pension funds has been voluntary. In cases where it has been mandatory it has only applied to new entrants or younger workers. Given the strong redistributive character of the Czech first-pillar system, there is a concern that mostly wealthy individuals might choose to opt out. As this would further undermine the financial sustainability of the first pillar, there is a case to be made for considering some degree of mandatory participation in a funded second-pillar pension system. More diversified sources of retirement income would help promote income security, in particular as the different systems face different shocks. While the PAYG system is more exposed to political bargaining, shocks to labor income and population aging, a funded pension system is more susceptible to inflation risk and financial market volatility.

Prefunding of future pension deficits

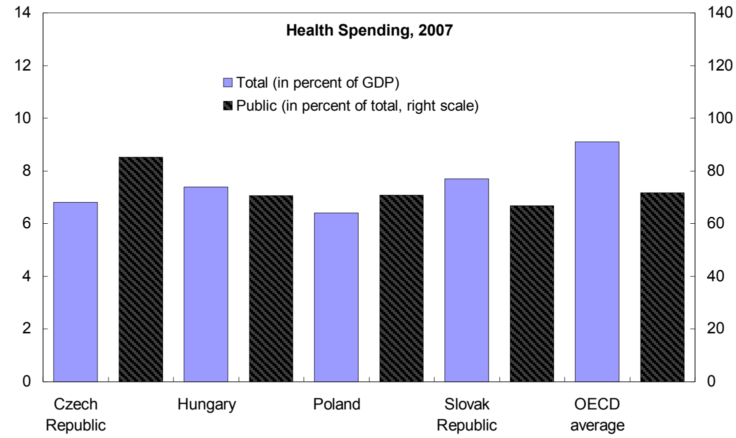
13. **As the cyclical fiscal position improves, the authorities may also need to consider prefunding of reserves that would be used to finance future pension deficits (or transition deficits if moving toward private pension funds).** This could be done through upfront fiscal consolidation measures, or possibly funding from any future pension surpluses or privatization revenues. While the authorities have already set aside some funds for this purpose, further significant financing will be needed. As the population ages, the reserve fund can be drawn down, avoiding an increase in contribution rates. Prefunding would improve inter-generational equity by ensuring that the output costs from the upfront fiscal consolidation are borne primarily by the beneficiaries of the government transfers. At the same time, it will be important to ensure a governance structure for the reserve fund that maintains independence for investment decisions and does not allow governments easy access to its resources.

14. **Lastly, it is important that the current economic and financial crisis does not lead to a reversal of past reforms.** In a number of OECD countries with mixed pension systems, there have recently been calls to move back to a pure reliance on public PAYG schemes. Still, fiscal constraints imply that private pensions must continue to play an important role in providing for old age. Rather, the current crisis underscores the need for changes in the way private-pension schemes operate, including better regulation, more efficient administration, clearer information about the risks and rewards of different options, and an automatic switch to less risky investments as people near retirement.

C. Health Care Reform[22]

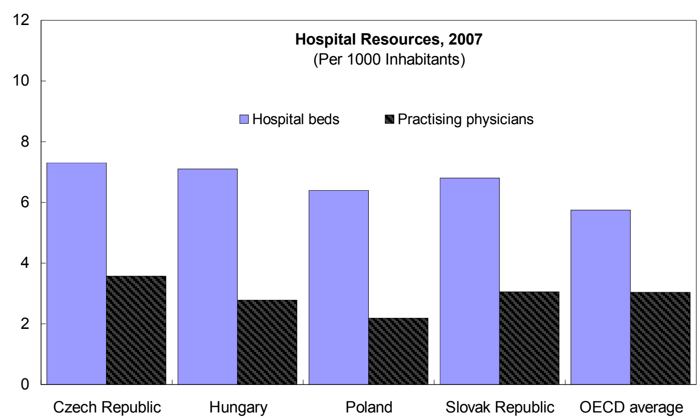
The status quo

15. **The current health care insurance system provides universal and near comprehensive coverage with a public price-setting mechanism.** The public has the choice of health insurance fund and provider, which involves a public/private mix of hospitals and physicians. The government supervises and has the final authority over the negotiation of contracts between insurance funds and providers, specifying benefits coverage, fee structure, and reimbursements. Individuals and employers contribute through payroll taxes (13.5 percent: ⅓ employee, ⅔ employer) while the state provides for those outside the workforce, comprising more than 50 percent of the population.[23] The share of public sources in total health spending amounted to 85.2 percent in 2007, well above the OECD average of 73 percent; private insurance is virtually nonexistent.



Source: OECD.

16. **The health care system has experienced repeated financial strains over the years, reflecting inefficiencies, excessive demand and high utilization rates, and overcapacity**. While the statutory health insurance is separated from the state budget, there have been reoccurring subsidies to indebted hospitals from the state budget. Reimbursements have been provided for specialist care on a fee-for-service basis, resulting in



Source: OECD.

[22] This section draws on Czech Republic (2009a); European Commission (2009a); Hroboň et al. (2005); Mattina (2007); OECD (2009b); Tuladhar (2005); and World Bank (2002, 2009a&b).

[23] The state covers the unemployed, pensioners, dependents up to the age of 26, students, women on maternity leave, military, prisoners, and individuals on social welfare.

excessive demand and high utilization rates with few incentives for rationalization of service delivery or cost containment. There is overcapacity, with more physicians and hospital beds per capita than in most other OECD countries. Under current policies, health care expenditures are projected to rise to 8.5 percent of GDP in 2060 compared with a projected EU average of 7.2 percent.[24] Pharmaceutical spending has risen in particular, accounting for 21.5 percent of total health spending in 2007, well above the OECD average of 17.1 percent.[25]

Recent reforms have been limited

17. **Following a considerable amount of reform in the Czech health care system in the early 1990s, there has since been limited progress until more recently.** Other than legislative changes in connection with EU accession, little was done in health care reform until the introduction in 2008 of nominal user fees for doctor's visits, short-term hospital stays, emergency services, and prescriptions. The user fees had a noticeable immediate impact in containing excess demand, especially for drugs: looking ahead, these user fees could usefully be made means tested. The user fees have turned out to be politically contentious and amendments were introduced last year eliminating payments for doctor's visits for children under 18, and halving the fee for people above 65. There also attempts by local hospitals to reimburse the fees from their own budgets and there are proposals pending in parliament for their complete abolition.

Further reforms are needed

18. **Looking ahead, there is a need for more fundamental institutional and funding reforms to enhance efficiency and ensure long-term financial sustainability of the health care system.** Such reforms could build on the 2006–08 government health care proposals and could focus on:

- *Institutional reform*: Allowing greater scope for private sector provision of health services by pairing down the current wide coverage of publicly provided and insured services. Greater private sector participation in health services would in turn introduce more competition among insurers and providers, and create better incentives for health insurance funds to be cost effective. More competition among insurers would probably also require governance reforms regarding their Board representation—currently, the Board of the largest insurance fund consists entirely of political representatives, in contrast to more diversified representation structures at the Boards of the other smaller insurance funds.

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[24] European Commission (2009a).

[25] OECD (2009b).

- *Funding reform*: Introducing a voluntary supplementary health insurance system, personal health accounts, and differing health benefit plans.

A thorough proposal for health care reform in the Czech Republic was prepared for the previous government by an independent think tank in 2005 (Box 1).

Box: Independent Health Care Reform Proposal[1]

In 2005, Health Reform.cz, a nonprofit professional Czech think tank prepared a reform concept as a basis for the government's health care reforms. The proposal focused on institutional reform, i.e. changing the roles and relationships between insurers, providers, the state, and the citizens; and funding reform, to ensure long-term financial sustainability.

Institutional Reform:

- ✓ *Use health insurers as purchasers of health care*, in addition to their main function of providing insurance. All developed health care systems have the specific function of a purchaser of health care, resulting in an "internal" market between payers and providers and eliminating the role of the state as a direct organizer of health services. Quality of health care should be measured in terms of inputs, processes, and outputs. Price negotiations between insurers and providers should be liberalized and there should be competition among health insurers;
- ✓ *Strengthen competition among health insurers and health facilities*, leading to the creation of a regulated market in the area of health insurance and health care provision:
- ✓ *Change the incentives and hence behavior of individuals* by introducing limited user charges and changes in drug reimbursement, while introducing caps on total individual spending (such measures were introduced in 2008);
- ✓ *Improve the role of the state as a regulator and consumer advocate* in the health care system.

Funding Reform:

- ✓ *Divide health insurance into Basic and Supplementary parts*, with the former covering some 70 percent of the current scope of public health insurance and defined using medical and financial criteria. The supplementary insurance should be voluntary but largely supported from public sources, as outlined below;
- ✓ *Introduce personal health accounts*, to allow more independence and responsibility for health care costs on the part of the citizens. The personal health accounts could be used to buy supplementary insurance or to pay for medical care directly. This would limit the scope of mandatory health insurance while maintaining general financial accessibility to health care.
- ✓ *Offer different health benefit plans*;
- ✓ *Combine public and private mandatory and voluntary funding*: (i) public contribution toward basic health insurance (including from levies on wages); (ii) public contribution toward personal health accounts; (iii) mandatory private contributions toward personal health accounts; and (iv) voluntary private contributions toward personal health accounts.

[1] Based on Hroboň, Macháček, and Julínek (2005).

19. **While fundamental health care reform would require a strong reform effort, it could yield significant savings over time**. While there are various options to consider, with different countries choosing different systems, international experience underscores the need to, as a first priority, establish a team to lead the reform effort given the sheer complexity of overall health care reform. A broad public discussion regarding an acceptable definition of entitlement—benefits publicly covered and insured—could be a good starting point for future reforms. The reform efforts could pay off: over time, enhanced competition among providers and insurers would help keep costs down, private co-payments would rationalize demand, and a reduction in the current very generous coverage would keep public spending in check.

D. Labor Market Reform[26]

Recent reforms

20. **A number of steps have been taken in recent years to reduce the existing administrative burden on businesses and ease labor and skill shortages.** These include the removal of certain restrictions in the labor code effective January 2007, the reduction of direct taxation of labor as part of the 2007 reform package and the temporary reduction in social security contributions rates for low-skilled workers in early 2009, as well as recent measures to support training of employees in existing firms.

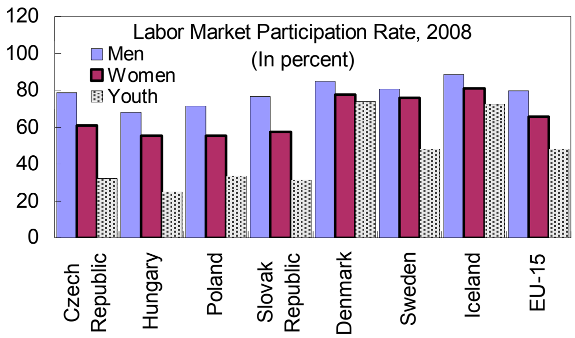
The status quo and outlook

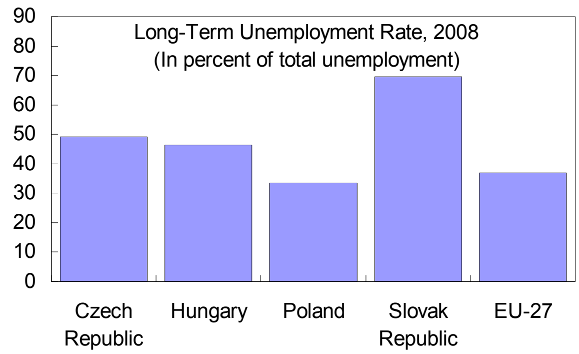
21. **Yet problems remain in the labor markets, including low geographic and sectoral mobility and skills mismatch.** Youth participation, although in line with the rest of the region, has declined over the last few years and is much lower than the EU-15 average.[27] Labor market participation among women is in line with EU-15 and even higher than elsewhere in the region, but it is still lagging behind the best performers in Europe. Part-time jobs are still uncommon, preventing flexibility and leaving a significant part of the labor pool untapped. Also, while the unemployment rate has declined substantially over the past few years before rising sharply during the crisis, long-term unemployment remains high, in line with the rest of the region. While there seems to be an excess supply of vocational schools oriented toward traditional industries, local governments might not be providing sufficient capacity for more general pre-university secondary education, which is increasing in demand. Lastly, following strong growth over the last number of years, labor productivity has fallen significantly during the current crisis, declining by an estimated 3 percent in 2009 compared with average annual gains of some 4 percent during the boom years, possibly reflecting labor hoarding as firms sought to retain employees during the downturn.

[26] This section draws on Dalsgaard (2008); European Commission (2009b&c); European Employment Observatory (2009); Mattina (2007); OECD (2008, 2009a); and World Bank (2009c).

[27] While this in large part this reflects higher inflow to secondary and tertiary education, there is also a relatively high incidence of unemployment among those aged 20–24.

22. **Structural labor market reforms will be all the more important in light of the current economic crisis.** Unemployment in many European countries is expected to rise well into next year, reaching levels not seen for a decade. As noted by the European Commission in its Annual Assessment of the implementation of the Lisbon Strategy, "[o]ne of the main challenges facing the Czech economy in the post-crisis environment will be to ensure a rapid adjustment of the labor market to the downturn."[28] There is a risk that the large drop in economic activity might translate into an extended period of high unemployment, in particular in export-oriented regions.





Source: European Commission

Reform proposals

23. **Future reforms to enhance labor participation and labor productivity could focus on**:

- Improving work incentives for low-income households and reducing their still high effective marginal tax rates, once cash benefits are included, through further reforms of the tax-benefit system;

- Enhancing post-retirement work incentives, in addition to raising the retirement age, to boost labor market participation among the elderly—currently, working pensioners make contributions but there is no corresponding adjustment of the payout;

- Enhancing access to affordable daycare, possibly by giving municipalities greater incentives to provide such services, to further promote female labor participation;

- Removal of barriers to nonstandard work, including the minimum social contribution, to enhance part-time work;

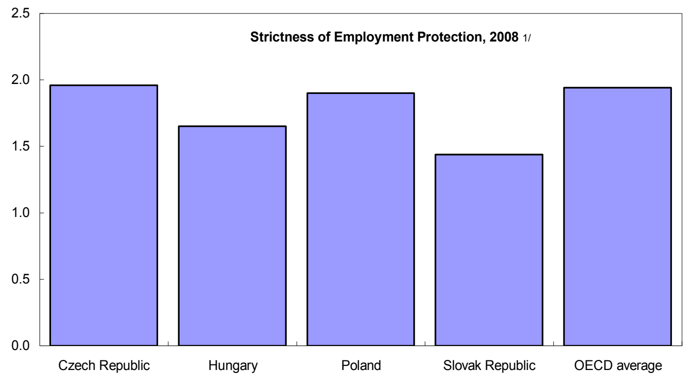
[28] European Commission (2009c), p. 77.

- Reducing the age limit until which individuals are eligible for tax credits and child benefits from the current 26 years of age to 18. This would boost youth labor supply, as well as tax revenue, while reducing transfer spending;

- Complete liberalization of the rental market to promote labor mobility within the country and hence productivity;

- Enhanced access to secondary training with greater emphasis on general competencies, to allow workers to move across sectors and occupations while avoiding having young people entering too narrow vocational training too early. For example, Poland has postponed by one year the move from lower secondary to vocational education to allow students to absorb more general knowledge and avoid too early specialization;

- Reducing the relatively costly dismissal protection for newly hired by linking it to length of employment to enhance labor market flexibility.



1/ The strictness of regulation on dismissals and the use of temporary contracts in a scale of 0-6.

Source: OECD

E. Education Reform[29]

The status quo

24. **As economies mature, there is an increasing demand for more general skills such as adaptability, analytical thinking and communication skills, acquired through additional academic schooling.** Recent survey data from the region suggest that merely completing tertiary education generates a strong wage premium, an indication that the associated certification is a signal in itself about competencies and attributes valued by employers.[30]

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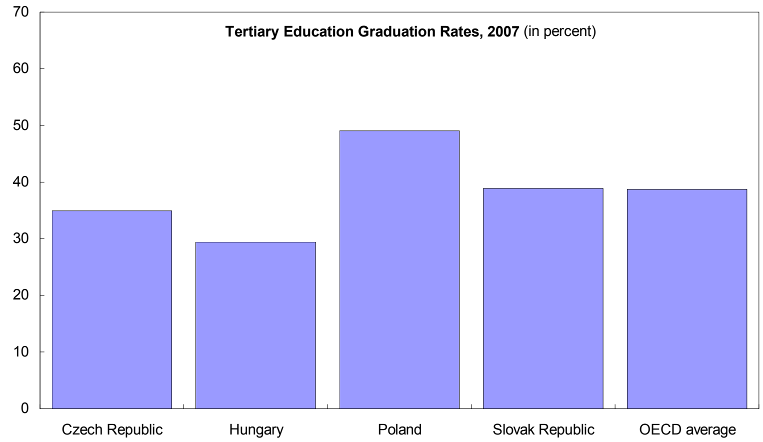
[29] This section draws on European Commission (2009c); OECD (2009a); and World Bank (2009c).

[30] World Bank (2009c).

25. **However, while tertiary education in the Czech Republic has expanded rapidly, graduation rates remain relatively low compared with the rest of the EU, including other new member states.** A recent study commissioned by the European Commission on the efficiency and effectiveness of public spending on tertiary education ranks the Czech Republic among the least efficient within the EU.[31] Tertiary education efficiency is related both to institutional factors and the quality of secondary education. As tertiary education is seen as one of the driving forces of growth, with strong linkages to labor and total factor productivity, it will be important to take measures to enhance its efficiency.



Source: OECD

Reform proposals

26. **Reforms to enhance the efficiency of tertiary education and promote innovation (R&D) and productivity growth could include**:

- Introduction of tuition fees, to raise revenues and enhance efficiency by creating cost incentives for students to complete their studies in a timely manner; such fees should be backed by student loans with income-contingent repayments. There are currently advanced proposals for the introduction of such a system of student loans, which in turn could pave the way for introducing the tuition fees looking ahead;

- Enhanced licensing and accreditation procedures for universities, with more emphasis on quality assessment;

- Increase the share of public funding that depends on the quality of output, including publication history—while Czech universities are highly dependent on public funding, they enjoy a significant degree of independence, with few checks and balances;

- Enhanced collaboration between employers and universities/research institutes to cope with changing skill requirements;

[31] St. Aubyn et al. (2009).

- Expanding the range of programs and improving access for adults, including through shorter-term studies and long-distance learning.

F. Business Environment[32]

Recent reforms and the status quo

27. **Steps to enhance the business climate will be key to attract FDI and enhance overall factor productivity.** Capital flows to transition and emerging economies are likely to be considerably lower looking ahead given the reduced appetite for risk, and will go to countries with the most attractive business environment.

28. **Despite some recent reforms, there is still room for improving the business climate in the Czech Republic.** A substantial amendment to the trade law became effective in July 2008, which significantly simplified licensing procedures, including through electronic registration, and thus made starting a business easier and faster. Also, a new insolvency law came into effect in 2008, which should shorten the duration of bankruptcy procedures and strengthen creditors' position. It also introduced the possibility of personal bankruptcy for private individuals. Still, license and permits systems and communication of rules and regulations remain relatively cumbersome, in particular for new firms, discouraging competition and productivity increases.

29. **The recent World Bank Group *Doing Business Report 2010* points to starting and closing a business as particularly onerous in the Czech Republic.[33]** In particular, while the number of procedures and time required to start a business are only slightly above the OECD average, there is a much larger financial burden in the Czech Republic both in terms of upfront costs and minimum capital as percent of per capita income. Also, despite the adoption of the new bankruptcy law, closing a business still takes much longer and is significantly more costly compared with the OECD average.

30. **Other concerns noted are paying taxes, protection of investors, enforcement of contracts, and dealing with construction permits**. While the issuance of construction permits has been streamlined by reducing the internal processing time for registering new plots, there are still many more procedures compared with the OECD average. Similarly, despite the recent introduction of electronic filing, paying taxes still takes much longer in the Czech Republic. Looking ahead, the government plans to further simplify paying taxes and levies by unifying the assessment tax bases, establishing one account for all payments, and creating one single institution for revenue administration.

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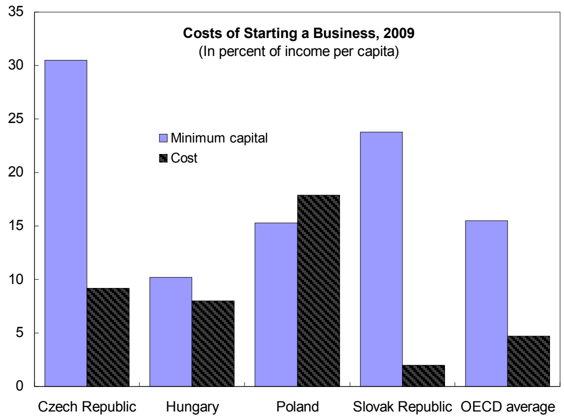
[32] This section draws on OECD (2009a); World Bank (2009c); and World Bank Group (2009).

[33] The World Bank Group (2009).



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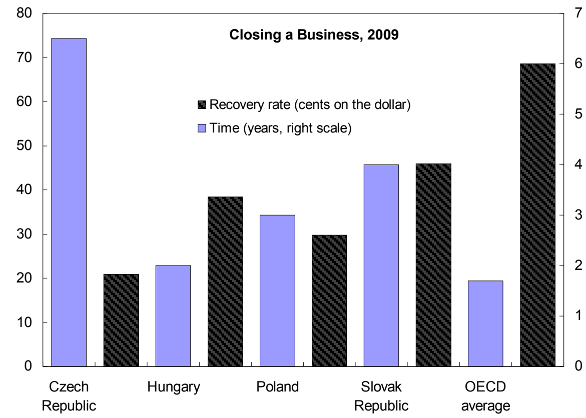

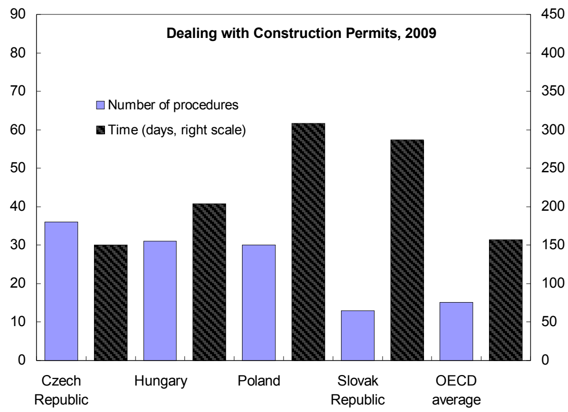

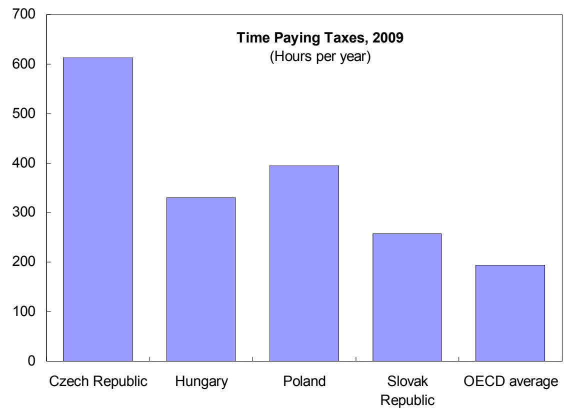

Source: World Bank.

Reform proposals

31. Looking ahead, reforms could address the following areas:

- Further streamlining the implementation of the new trade and insolvency laws to encourage entrepreneurship, including further efforts to train judges and administrators;

- Improve communication of rules and procedures;

- Facilitate new entry by reducing state ownership in network industries (airlines, post, and rail) and strengthen competition in the gas sector; and

- Further enhance the effectiveness of e-government, in particular at the regional and municipal levels, and ensure that it covers all basic business needs, including paying taxes, business registration, obtaining permits and licenses, and public procurement.

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