I. SOCIO-ECONOMIC CONTEXT

Progress in the environmental sustainability of economic growth (i.e. green growth) should be assessed in the context of important social goals, such as poverty reduction or equity. This reminds us that sustainable development is about people: employment, health or social inclusion. The economic context (e.g. industrial structure) affects the design and timing of green growth policies, while the social context (e.g. relationships within society and the distribution of specific groups across the economic and environmental systems) captures the social challenges and opportunities, and the potential trade-offs or synergies related to particular developments or policy interventions.

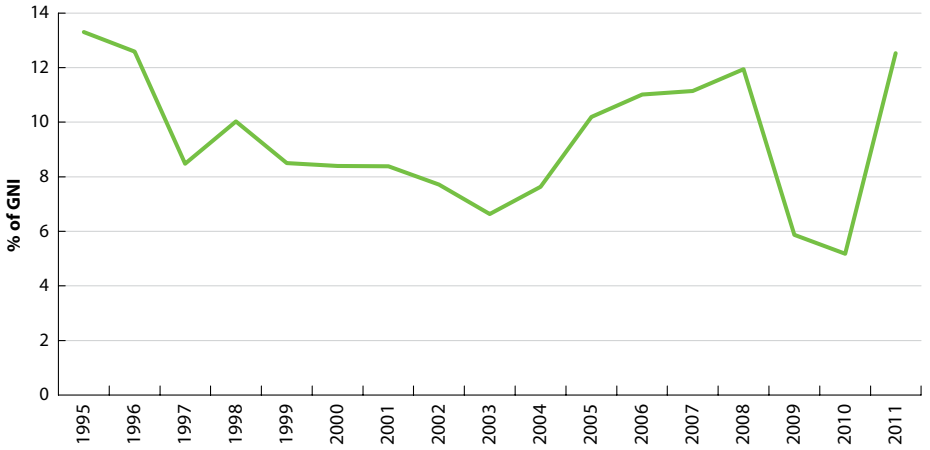
Many social aspects and their relationship to economic and environmental aspects are difficult to capture in an integrated way; moreover there is poor data availability. However, many important indicators already exist and these should inform green growth strategies on the social issues and equity concerns that can arise as a direct result of greening the economy – both at the national and international level. Health, poverty, equity and dependency of the elderly are among the most important issues for which strategies should be implemented in parallel with initiatives focusing on the broader social pillar of sustainable development.

1.1. Adjusted net savings

This indicator is calculated as a share of the adjusted national savings in the gross national income (GNI). Adjusted net savings are based on the adjustment of gross national savings for depreciation of produced capital *(–)*, current expenditure on education *(+)*, depletion of natural capital *(–)* and damages from environmental burden, including carbon dioxide and particulate emissions *(–)*.

Adjusted net savings seeks to provide a message to decision makers and policymakers as to how sustainable their investment activities are. While the standard measurement of "savings" and "investment" reflect a relative change in the value of a certain limited set of assets, adjusted net savings broadens the picture by adding environmental damage and creation of human capital. This indicator is based on a "weak sustainability principle", which assumes that natural capital can be perfectly substituted by any type of capital as an input to production.

Figure 3: Adjusted net savings (% of GNI)



Source: World Bank

Adjusted net savings captures the real rate of savings in the economy after taking into account investments in education, natural sources depletion and air pollution damage. The higher adjusted net savings, the better. The trend in the Czech Republic in adjusted net savings is influenced in a positive direction mainly by investments in education and by a decreasing rate of air pollution. On the other hand, there is a negative influence from the depletion of non-renewable energy sources. There was an overall growth trend in the country during the second half of the monitored period with a slump in 2009–2010 caused by the global economic crisis.

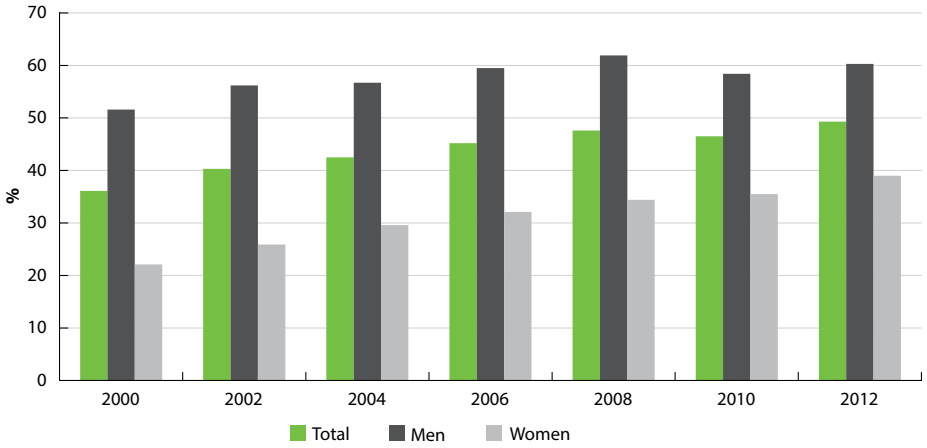
In an international comparison, the Czech Republic (12.5% of GNI) was above the EU average (9.6%) in 2011. In the same year it was placed 38th among 118 evaluated countries and territories by the World Bank (1st was China with 35%). The OECD – averaging around 7% – was led by Switzerland and Korea (22%) and Norway (19%). The United States came last (0.8%).

1.2. Employment of older workers

The employment rate of older workers is calculated by dividing the number of persons aged 55 to 64 in employment by the total population of the same age group. The indicator is presented for both men and women.

Employment of older workers monitors generational justice and equity in the society of a particular country. Older workers are often less flexible but they have more experience in a given field and provide a steady work output. The green growth concept should be implemented in a way that does not disrupt the social, religious and generational principles of sustainable development (the principle of "lifelong access" to work). The Czech Republic has set a goal of 55% for this indicator in the National Reform Programme.

Figure 4: Employment of older workers (% of total same age population)



Source: Czech Statistical Office, Eurostat

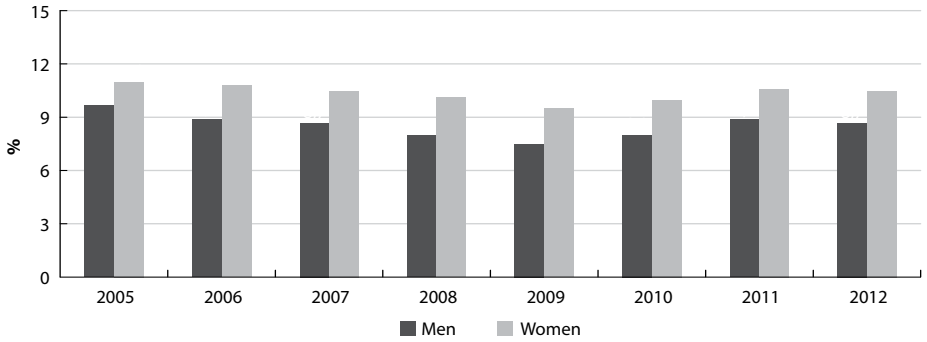
Employment of older male workers in the Czech Republic was steadily increasing up to 2008, then started to decrease mainly due to the economic crisis (during crisises companies tend to dismiss employees close to retirement age or employees leave for early retirement). Employment of older female workers in the Czech Republic has steadily increased. The average employment rate for both men and women of this age group in 2012 was 49.3%, which was slightly above the EU27 average (48.9%).

1.3. At-risk-of-poverty rate by gender

The at-risk-of-poverty rate is defined as the proportion of people with an equivalised disposable income below the risk-of-poverty threshold, which is set at 60% of the national median equivalised disposable income (after social welfare transfers).

Gender differences and inequalities are a fundamental feature of social exclusion and poverty. Women are less likely to secure a decent individual income through employment. This is demonstrated by women's lower employment rate, greater exposure to low pay, and, more broadly, by their lower average earnings. These average gender gaps in employment are more pronounced for particular subgroups, such as employment rates for older workers. In the period 2005 to 2009, the total at-risk-of-poverty rate declined (from 10.4% in 2005 to 8.5% in 2009). In the subsequent years of 2010, 2011 and 2012, the at-risk-of-poverty rate increased and fluctuated around 10%. The proportion of women considered to be at-risk-of-poverty was higher during the whole monitored period than men considered to be at-risk-of-poverty. This gap increased from 1.3% in 2005 to 2% in 2012. Social welfare transfers significantly affect the overall risk-of-poverty rate in the Czech Republic. In 2011, without social welfare transfers (pensions are excluded from welfare transfers), 18% of Czechs lived below the income poverty threshold, compared to 26.3% in the EU-28. In 2010, total government expenditure on social security in the Czech Republic accounted for 20.1% of GDP, which is relatively low compared to other EU countries (the EU-27 average expenditure on social security accounted for 29.4% of GDP). These figures demonstrate the efficiency of the social security system in the Czech Republic.

Figure 5: At-risk-of-poverty rate by gender (% of persons with an equivalised disposable income below the at-risk-of-poverty threshold)



Source: Eurostat

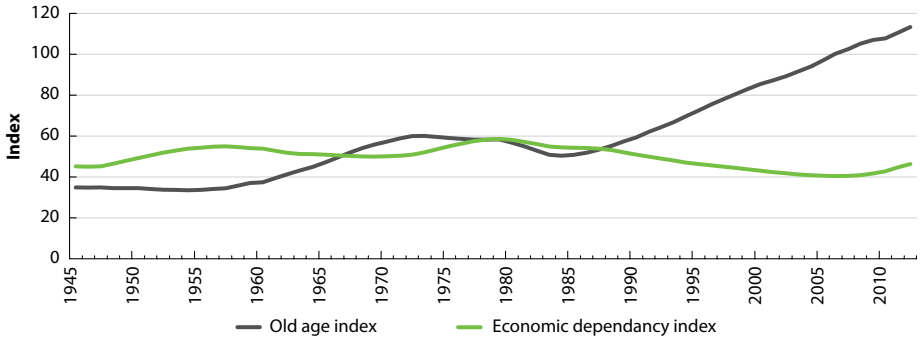
In 2012, the risk of poverty in the Czech Republic was lowest among all EU countries. This means that 9.6% of Czechs had incomes below the poverty threshold after social welfare transfers compared with 16.9% of the EU28 (in 2011). The highest at-risk-of-poverty rates in 2011 were found in Bulgaria (22.3%), Romania (22.2%), Spain (21.8%) and Greece (21.4%). Conversely, the lowest at-risk-of-poverty rates – besides the Czech Republic (9.6%) – were found in the Netherlands (11%), Austria (12.6%), Slovakia and Denmark (13%). However, it should be noted that the at-risk-of-poverty rate is a relative measure of poverty, and that the poverty threshold varies greatly between the Member States.

1.4. Old age index and economic dependency index

The old age index and economic dependency index are indicators of the actual age composition of a given country's population. The old age index refers to the number of people at the age of 65 and over per 100 people aged 0–14. The economic dependency index compares the number of people aged 0–14 and 65 and over with the number of people aged 15–64 (again generally expressed per 100 people of the latter age group). It serves as an indicator of the burden on the economically active part of the population.

Since the end of the Second World War until the mid-1950s, the old age index in the Czech Republic stagnated at a value of 35 (persons aged over 65 per 100 children aged up to 15), and then until the 1970s it increased to 60. Over the following 15 years the old age index gradually decreased slightly to a value of 50. From the mid-1980s up until today the relative ratio of elderly people and children has continuously increased in favour of the elderly. At the end of 2006, a situation where the 65+ age group outnumbered the 0-14-year age group was recorded for the first time, i.e. the old age index exceeded 100. According to the latest data on the age structure of the Czech population (as of 31 Dec. 2012), there were 113 seniors (65+ age group) per 100 children aged up to 15. Further growth of the old age index is also expected in future years. The economic dependency index has not – in comparison with the old age index – changed as significantly over the last 67 years. In the first half of the 1980s, the economic dependency index began to decrease and the downward trend was maintained until 2006 when the lowest value of 40.4 was recorded (persons of an economically inactive age per 100 people of an economic active age 15–64). The latest data from 2007–2012 indicate a return to a negative trend again, i.e. to an increase in the economic dependency index (46 in 2012).

Figure 6: Old age index and economic dependency index



Source: Czech Statistical Office

In 2012, old age index figures in individual EU countries broadly ranged from 55 (Ireland) up to 156 (Germany). In 10 – out of 27 – EU countries, children up to 15 years old outnumbered seniors older than 65 years. In other 9 EU countries, including the Czech Republic, the old age index was between 100 and 120. In half of the EU countries, the economic dependency index ranged from 45 to 50, with the highest value reported by France where there are almost 56 persons of an economically inactive age per 100 people of an economically active age. The Czech Republic had the 5th lowest value (45) among EU countries (ahead of Slovakia, Poland, Cyprus and Romania).

1.5. Life expectancy and healthy life years at birth

Life expectancy at birth indicates the number of years a newborn infant would live if prevailing patterns of mortality at the time of its birth were to stay the same throughout its life. Healthy life years at birth indicate the number of years a person at birth is expected to live in good health.

Life expectancy at birth is the most commonly used indicator for analysing mortality. This indicator is closely related to health conditions, which are in turn an integral part of a country's development. Since life expectancy is not able to fully answer issues related to the quality of life spent in good health in a country, the "healthy life years" indicator has been introduced (life expectancy years without long term restrictions on activity). It also monitors health as an economic factor – an increase is one of the main goals of health policies in the expectation that this would not only improve the situation of individuals but would also lead to economic growth as a result of lower public healthcare expenditure and higher work performance.

Figure 7: Life expectancy and healthy life years at birth (years)

Source: Czech statistical office, Eurostat

Life expectancy for Czechs has risen by 5.1 years for men and by 4.5 years for women, to 74.8 years and 81.1 years, respectively, over the past 17 years. Also, healthy life years increased considerably (from 59.9 to 63.6 for women and from 57.9 to 62.2 for men) during 2005–2011.

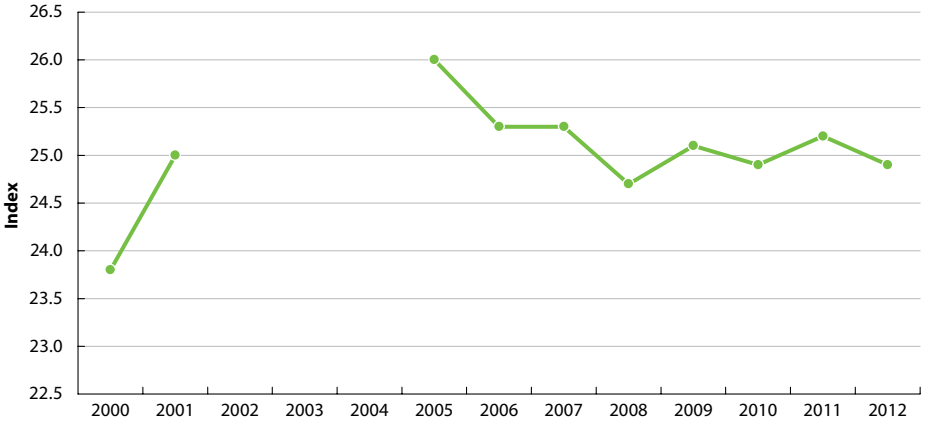
Despite the considerable improvement in the mortality ratio and health of the Czech population, life expectancy at birth has still not reached the EU27 average (women – 83.2, men – 77.4). However, the EU27 average for life expectancy in good health has been reached (women – 62.2, men – 61.8).

1.6. Gini index

The Gini coefficient of equivalised disposable income is defined as the relationship of cumulative shares of the population arranged according to the level of equivalised disposable income, to the cumulative share of the equivalised total disposable income earned by them[1]. The Gini index (named by the World Bank)[2] thus measures the extent to which the distribution of income or consumption expenditure among individuals or households within an economy deviates from a perfectly equal distribution. The Lorenz curve plots the cumulative percentages of total income earned against the cumulative number of recipients, starting with the poorest individual or household. The Gini index measures the area between the Lorenz curve and a hypothetical line of absolute equality, expressed as a percentage of the maximum area under the line.

A Gini index of 0 represents perfect equality (when everybody has identical incomes), while an index of 100 implies perfect inequality (when all income goes to only one person). Income inequalities are one of the most visible manifestations of differences in living standards within each country. High income inequalities typically imply a waste of human resources in the form of a large proportion of the population out of work or trapped in low-paid and low-skilled jobs. However, the Gini index is not an easy metric to interpret, especially in terms of its relation to green growth (e.g. non-subsidised environment-friendly goods and services may strengthen inequalities between people or social groups etc.).

Figure 8: Gini index



Source: Eurostat, SILC

Czech society experienced forty years of totalitarian government characterized by high income equality. Six years after the establishment of free market mechanisms and democratic rights in

[1] Eurostat (http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&language=en&pcode=tessi190)

[2] World Bank (http://data.worldbank.org/indicator/SI.POV.GINI)

1995, the Gini index was still as low as of 22 and slowly rose to 23.8 in 2000. Since then, its value has oscillated around 25 with a peak of 26 in 2005 (data are lacking for some years). Analyses show that the level of income distribution was higher for men (a higher Gini index) than for women over the whole period. They also show that the index for Prague was higher (31.3 in 2008) than the national average and averages in other regions and is thus fully comparable with the advanced OECD countries.

There is considerable variation in income inequality across OECD countries. Inequality is above-average (31.3), for example, in Israel, Portugal and the United States, and below-average in many European countries. The Gini coefficient in individual EU countries broadly ranged from 22.5 (Norway) up to 35.9 (Latvia), with an average of 30.5 in 2012. Other than the Czech Republic, the other very egalitarian countries are – Iceland (24) and Slovenia (23.7), while Spain (35), Portugal (34.5) and Greece (34.3) are the most unequal EU countries.

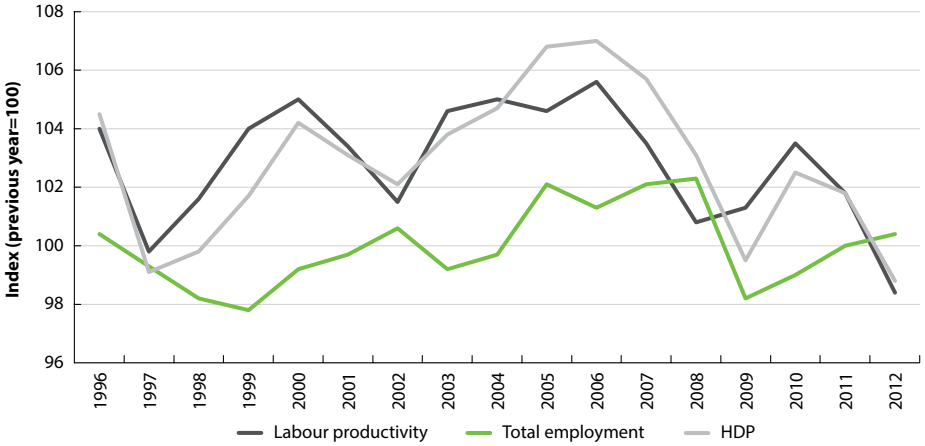
1.7. Labour productivity

At the macroeconomic level, labour productivity means the ratio of a product to the labour expended on it. Aggregated productivity is a share of GDP per employed person. The number of workers is obtained according to national accounting methodology; it includes employees and businesspeople, i.e. paid employees or employees in their own business without differentiating the type of labour activity (permanent, temporary, casual). It is measured in constant prices over a longer time period.

The labour productivity indicator measures the performance of some production factors. The growth of labour productivity is a necessary condition for sustainable development as it is directly reflected in increased economic competitiveness and indirectly in living standard growth.

As can be seen on the chart showing yearly change figures, over the period 1995–2012 labour productivity measured by GDP per employee grew by a yearly average of 2.6%. However, there were numerous variances recorded in the pace of growth: The highest average growth was in 2001–2005 (3.5%) while the lowest in 2006–2010 (1.9%). In 2012, negative growth was recorded. In comparison with average GDP growth, the productivity growth in both five-year periods referred to here was lower.

Figure 9: Aggregated labour productivity, employment and GDP (index, previous year=100)



Source: Czech Statistical Office

The level of labour productivity in the Czech Republic has gradually moved closer to the average level of the EU27, in particular due to accelerating growth in 2003–2006, and partly because of the limited investment activity in the developed EU countries and the shift in investment to countries with lower price and wage levels. Nevertheless, labour productivity in the Czech Republic remains low (about 75% of the EU27 level). Most former socialist countries (Lithuania, Latvia, Bulgaria, Estonia, Hungary, Poland and Romania) have even lower productivity levels than the Czech Republic.