ECONOMIC DEVELOPMENT OF VISEGRAD FOUR

IN THE PERIOD 2000-2012

Lubomíra Breňová

Abstract

This paper deals with the brief description and analyzes of macroeconomic position and development in group Visegrad states (Czech Republic, Hungary, Poland and Slovakia) during the years 2000 – 2012.   The analyses uses selected statistical data - time series – real GDP, ratios actual GDP to potential GDP, rates of unemployment, deflators of GDP, consumer price indices and current accounts of balance of payments. Economic development of this group and the Euro Area has been cyclical (fluctuations and synchronized phases of economic cycle). However are important and interesting differences among in the individual states – Poland is in special position – there was no absolute decrease of GDP but fluctuation of positive rates of growth. Recessions lasted approximately three quarters of year 2009. Modest recovery (positive rates of growth) followed during 2010 – 2011, but with diminishing rates and negative rates (recessions) in Hungary. Lasting recession in Czech Republic during 2012. Outlook OECD and outlook IMF are optimistic, but slowing rates of growth of world GDP and especially for middle and east Europe (including Czech Republic - stagnation 2013).

Key words: Macroeconomic position, Main economic indicators, Visegrad Four

JEL Code: E 20, E 30, O 10

Introduction

The paper continues to the article published at last years MSED (Breňová, 2012). Economic development of the Visegrad Four countries during the years 2000 - 2012 is analyzed using selected economic indicators. The most important indicators (Dobrylovský, Loster, 2009) include the gross domestic product, respectively. gross national income, rate of unemployment, price level and current accounts of balance of payments. These indicators are complemented by indicators of competitiveness.

1   Selected Economic Indicators

Main economic indicators are presented graphically and numerically. The data are published in the OECD Economic Outlook No. 92: Annex-Tables.

1.1   Real gross domestic product

The greatest fluctuations of real gross domestic product were in Slovak Republic during this period. Rate of real gross domestic product was in the year 2007 10,5 %.. In the contrary in the year 2009 rate of growth of GDP was minus 4.9 %. This was the second deepest decline in growth rates among the Visegrad Four countries.

Worst development of real gross domestic product recorded in Hungary. The highest rate of increase was in 2004 (4.8 %), the deepest recession was in 2009 (- 4.9 %).

The year 2009 was a year of crisis in all countries EA as a whole. Poland was in exceptional position - there was only decrease of positive rate of growth. Real GDP growth was 5% in 2008 and 1,7 % in 2009.

In 2010 all countries had positive rates of growth of real GDP. This trend continued in Poland during the year 2011, however in other countries there was again a decrease of the growth rates.

According to preliminary data, there was an absolute decrease of real GDP in 2012 in Hungary, the Czech Republic and the EA as a whole. Outlook for these countries is positive increase for real GDP in 2013. Preliminary outlook for Slovak Republic and Poland is decrease of the rate of growth. The position will be similar for monitored areas.

Fig. 1: Real GDP (percentage change from previous year)

Source: Author's figure according OECD Economic Outlook No 92: Annex-Tables, tab. 1, www.oecd.org

1.2   Output gaps

The output gap is measured as a percentage of actual product to potential product. Potential output is Gobb-Douglas production function with average use of production factors. It is level of output that a economy can produce at a constant inflation. Output gaps are developing through economic cycles.

The figures prove cyclical fluctuations of the actual product to the potential product. The largest positive deviations were in Slovakia in 2008 (8,4 %) and in Czech Republic (6,1 %). Negative output gaps appeared In all areas in 2009. The greatest decline was in Hungary in 2009 (- 3,9 %) and EA as a whole (- 3.6 %). Positive output gap (1 %) was in Poland and Slovakia during the year 2011.

Czech Republic had minimal negative output gap (- 0.2 %) and EA as a whole and Hungary negative had gap (more than – 2 %). Negative output gaps are expected in the whole area.

Fig. 2: Output gaps (Deviations of actual GDP from potential GDP as a per cent of potential GDP)
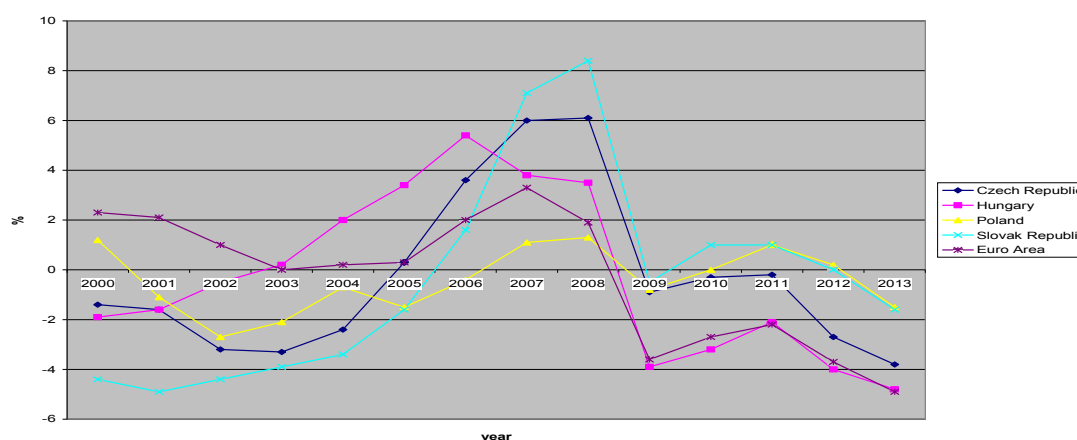
Source: Author's figure according OECD Economic Outlook No 92: Annex-Tables, tab. 10, www.oecd.org

1.3   Unemployment and rates of unemployment

The problem of unemployment is analyzed by many economists. For example Čadil, Pavelka, Kaňková, Vorlíček (2011) defined unemployment as"…undoubtedly phenomenon with serious social – economic impact on individuals and society as a whole."

Unemployment and the unemployment rates are calculated in several ways. In this paper is the unemployment rate expressed as a percentage of the labor force.[1]

Differences in unemployment rates are great among given countries   and during economic cycles. Rate of unemployment had highest level in Poland until 2006 (19,9 % in 2002) Slovak Republic had high rate of unemployment.   To the contrary, rate of unemployment in Czech Republic was the lowest in comparison with other countries (decreasing rates during 2000-2008 (up to 4,4 %), but certain increase during recessions). The increase of long-term unemployment is connected with the drop of gross domestic product and increase the overall unemployment rate. The long term-unemployment rates various considerably in EU Member states (see Pavelka, 2011).

Fig. 3: Unemployment rates: commonly used definitions (Per cent of labour force)
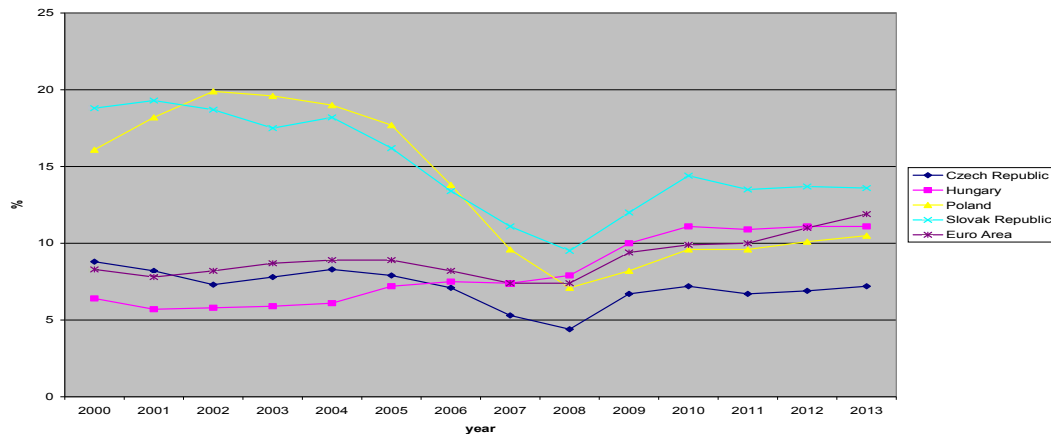
Source: Author's figure according OECD Economic Outlook No 92: Annex-Tables, tab. 13, www.oecd.org

1.4   Price level

Development of the price level is measured as percentage change of GDP deflator and CPI.

GDP deflator is index of market prices for the total of goods and services entering GDP.

Consumer price index (CPI) measures changes over time in the level of prices of goods and services that a reference population acquires, uses or pays for consumption in most instances.

Rate of inflation (expressed by GDP deflator) was lowest in Czech Republic (1,4 %) in the year 2000. Best position of the Czech Republic was during the whole analyzed period.

---

[1] Figure 3 represents rate of unemployment from commonly used definition.

The peak of rate of inflation was in Hungry (9.7%) in 2000. Differences in inflation rates were diminishing throw the period. A lessening of the rate of inflation in all countries is expected in all countries with the exception of Hungry. OECD Economic Outlook for year 2013 is following: Czech Republic decrease to 0,3 %, in Slovak Republic 1,4 %, in Poland 1,5 %, but in Hungary increase rate of inflation up to 4,3 %.

Fig. 4: GDP deflators (Percentage change from previous year)
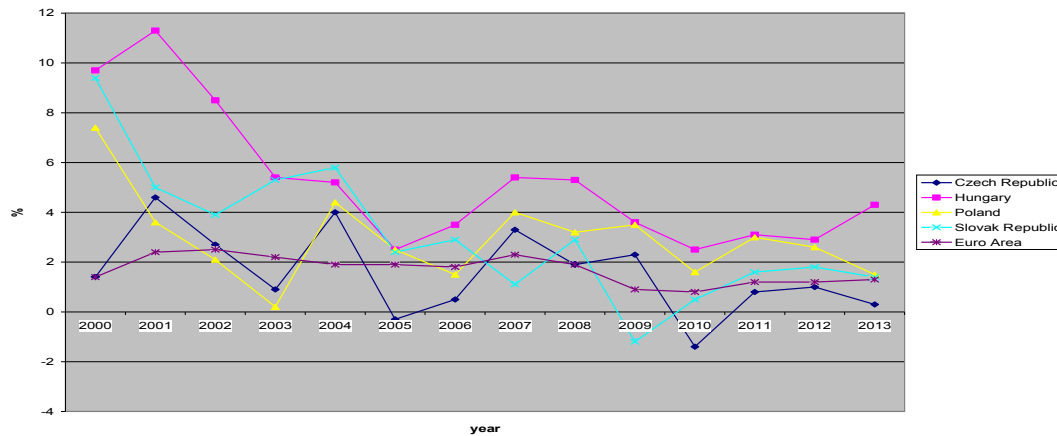
Source: Author's figure according OECD Economic Outlook No 92: Annex-Tables, tab. 16, www.oecd.org

Rates of inflation were very volatility. The largest differences in the rate of inflation as measured by the percentage change of CPI were in the beginning of the period. For example rate of inflation in Slovak Republic was in the year 2000 12,2 %, in Poland 9,9 %, in Hungary 9,8 %, in the Czech Republic only 3,9 % and in EA as a whole 2,2 %.

Fig. 5: Consumer price indices (Percentage change from previous year)
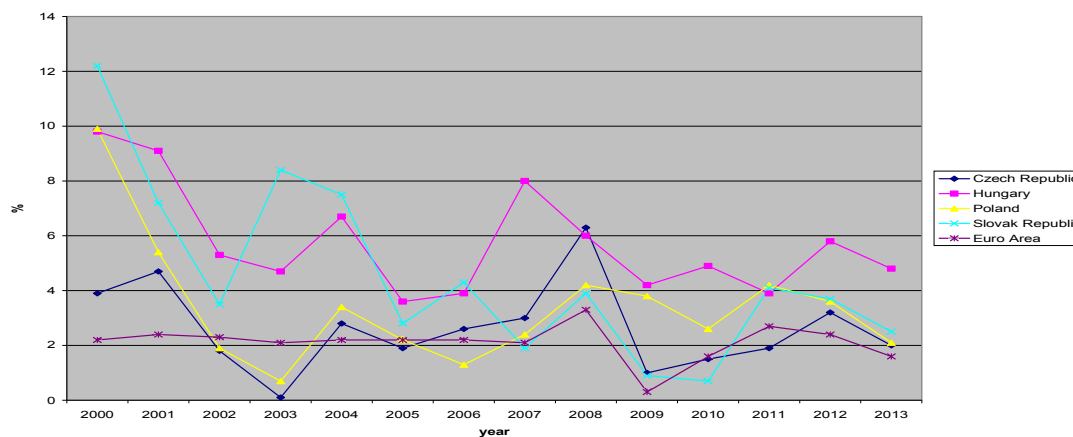
Source: Author's figure according OECD Economic Outlook No 92: Annex-Tables, tab. 18, www.oecd.org

Rate of inflation measured by CPI began to converge during the past decade. Preliminary data for the year 2012 is for Czech Republic 3,2 %. Although increasing trend is still the lowest among Visegrad Four. The peak of inflation are in the year 2012 in Hungary (5,8 %), in Slovakia (3,7 %) and in Poland (3,6 %).

Certain rate of disinflation is expected by OECD Economic Outlook No.92.

GDP deflator and CPI are very fluctuating during the analyzed period. But the trends of both indexes are not similar in all cases. In the Czech Republic in the year 2007 was the change in the deflator 3,3 % and change of CPI 3 %, but during 2008 the deflator rose by 6,3 %, but the CPI fall by 1,9 %.

1.5   External economic position

External economic position is described by current account balance (deficits or surpluses) as a percentage of GDP. It is current account balance in local currency divided by nominal GDP.

Large fluctuations of the current account balance were during the whole period. Current account was negative in all the countries until 2010. In the year 2010 year Hungary had positive current account balance of 1,1 % and during following years was the trend of positive current account balance unchanged. In the year 2012 had a positive current account balance Slovakia (1,7 %), but Czech Republic had a negative current account balance (- 0,1 %) and Poland also negative current account balance (- 3,5 %).

Forecast of current account balance is surplus in Hungry (3,4 %), in Slovakia minimal increase to 1,8 %, in Poland reduction of deficit to – 3 %. Increasing deficit -0,5 % is expected in Czech Republic.

Fig.6: Current account balances as a percentage of GDP
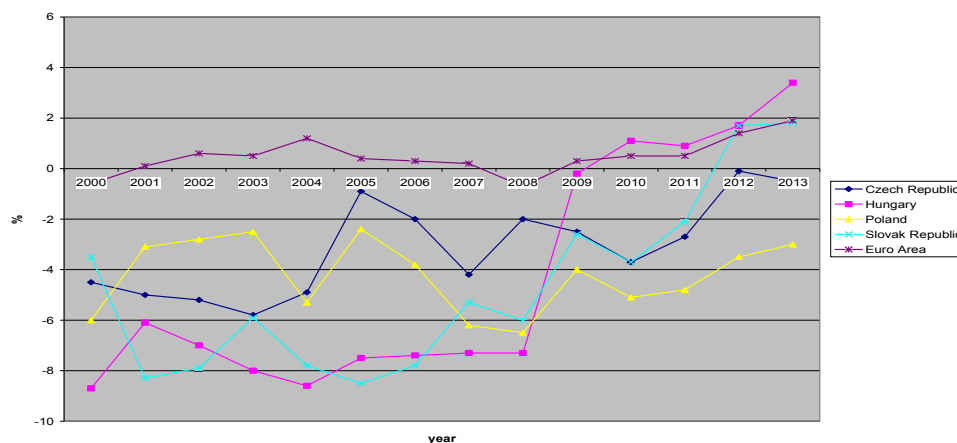
Source: Author's figure according OECD Economic Outlook No 92: Annex-Tables, tab. 51, www.oecd.org

2   Competitiveness

Competitiveness is described various ways. The authors Nečadová and Scholleová devoted their attention to the competitiveness in several papers (for example Nečadová, Scholleová 2011a, 2011b). They define competitiveness as follows: "The Competitiveness of firms is characterized as the ability to continually reach growth in productivity, which means to achieve higher output with limited inputs of labour and capital. The competitiveness of firms is reflected in acquiring, maintaining and increasing national and international market share. According to the OECD definition competitiveness of national economies is defined by the ability to produce goods and services that will stand the test of international competition and at the same time by the ability to maintain or increase GDP. In the broader concept competitiveness can be characterized as a set of preconditions for achieving sustainable growth performance of the economy, thereby even increasing the economic level in terms of internal and external balance." (Nečadová, Scholleová, 2011a, pp. 2).

The significant factor of the competitiveness for the long term is the behaviour of companies in accordance with principles of social responsibility in these days. (Džbánková, 2011).

OECD economic experts are computing competitive position in two ways – indexes of relative consumer prices and relative labour unit costs.

The first index of competitiveness (fig. 7) weighted relative consumer prices in dollar terms. Competitiveness weights take into account the structure of competition in both export and import market of the manufacturing sector of 49 countries.

The second index of competitiveness (fig. 8) weighted relative consumer prices in dollar terms.

An increase in the indexes indicates a real effective appreciation and a correspondent deterioration of the competitive position (Notes to tables 42, 43, OECD Economic Outlook No.92).

Index of competitive position by relative consumer prices was increasing in Czech Republic, (deterioration) up to year 2011 and certain decrease is estimated for the year 2012.

In Hungary this index decreased in 2009 and similar improving of that index is expected in the year 2012.

Poland – mailed decrease in 2003 and 2004 and 2009 and for the year 2012 expected decrease-

In Slovak Republic increasing trend (deterioration) Thru the whole period stagnation for the year 2012.

The competitiveness measured by relative consumer prices is during analyzed period strongly deteriorated in Slovakia. The best competitive positions have Hungary and Poland.

The indexes of competitive position by relative unit labor cost in Czech Republic were destroyed up to year 2011 and calculated index for 2012 decreased.

In Hungary improving of that index in 2006 and improving during 2009 to 2012.

Fig.7: Competitive positions: relative consumer prices (Indices, 2005 = 100)
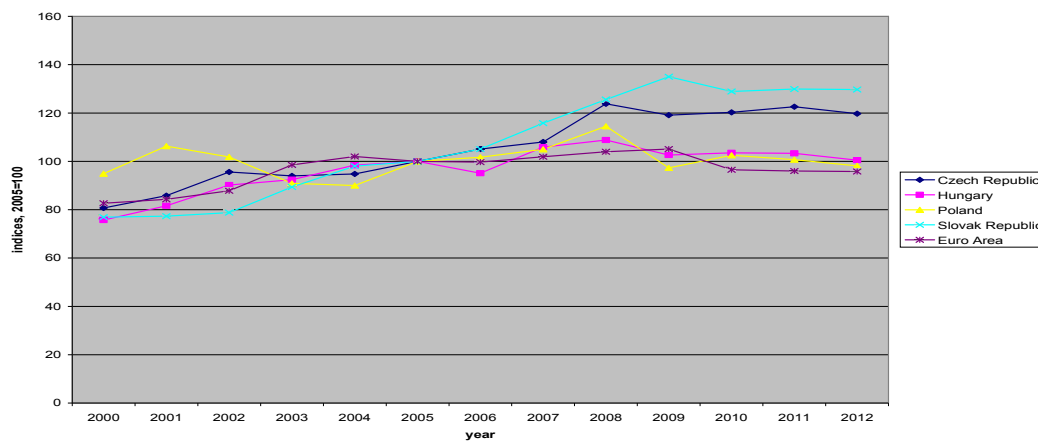
Source: Author's figure according OECD Economic Outlook No 92: Annex-Tables, tab. 42, www.oecd.org

In Poland improvement of this position during the years 2009, 2011 expected improvement for 2012.In Slovakia this index felt in 2006 and expected fall in 2012.

Fig.8: Competitive positions: relative unit labour costs (Indices, 2005 = 100)
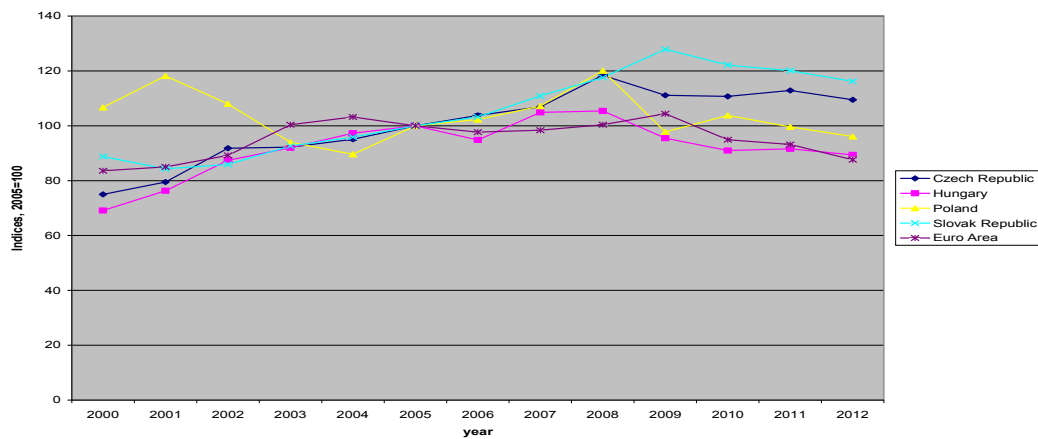
Source: Author's figure according OECD Economic Outlook No 92: Annex-Tables, tab. 43, www.oecd.org

Conclusion

Economic development of Visegrad group countries and the Euro Area has been cyclical during the analyzed period. However there are important and interesting differences among the individual states. The year 2009 was a year of crisis in all countries EA as a whole, but Poland is exception position. There was only decrease of positive rate of growth. Real GDP growth was 5 % in 2008 and 1, 7 % in 2009.

New forecast for the year 2013 is not positive for all countries – decrease of the growth rates or declines are expected.

In the year 2010 all countries had positive rates of growth of real GDP. This trend continued in Poland during the year 2011, however in other countries there was again a decrease of the growth rates.

According to preliminary data, there was an absolute decrease of real GDP in the year 2012 in Hungary, the Czech Republic and the EA as a whole. Outlook for these countries is positive increase for real GDP in the year 2013. Preliminary outlook for Slovak Republic and Poland is decrease of the rate of growth. The position will be similar for monitored areas.

.

References

Kislingerová, E. a kol. (2008). *Inovace nástrojů ekonomiky a managementu organizací. Praha: C,H,Beck.*

Breňová, L., Nečadová, M., Soukup J. (2012). *Impact of the New Economy on the Competitiveness of the Visegrad Group Countries (with an emphasis on the Czech Republic). 1. vyd., Slaný: Melandrium. ISBN 978-80-86175-78-2*

Breňová, L. (2012). *The last development of the economy of the visegrad four. In: Loster, T., Pavelka, T. (ed.). International Days of Statistics and Economics. Slaný, Melandrium. pp. 220- 227. ISBN 978-80-86175-86-7.*

Čadil, J., Pavelka, T., Kaňková E., Vorlíček J. (2011). *Odhad nákladů nezaměstnanosti z pohledu veřejných rozpočtů. Politická ekonomie 5/2011, 20 s. ISSN 0032-3233*

Dobrylovský, J., Loster, T. (2009). *Makroekonomické účinky toku PZI do a z ČR. Ekonomika a management, 4/2009, s.5-14, ISSN 1807-8470*

Džbánková, Z. (2011). *Corporate social responsibility – global business strategy. Praha 22.09.2011-23.09.2011. In: Loster, T., Pavelka, T.(ed.). International Days of Statistic and Economics. Slaný, Melandrium, pp. 151-158. ISBN 978-80-86175-77-5.*

Nečadová, M.., Scholleová, H. (2011a*) Competitiveness and innovation performance of the Czech republic in international rankings, Research Journal of Economics, Business and ICT(online).Č.4,14s.ISSN2045-3345.*

Nečadová, M., Scholleová, H. (2011b*). Position of the Czech Republic in competitiveness ranking. Praha 23.9.2011. In Pavelka T (ed). International Days of Statistic and Economics. Slaný, Melandrium, pp. 440-450. ISBN 978-80-86175-77-5.*

Nečadová, M. (2011). *Změny v konkurenceschopnosti České republiky. Praha 21.10.2011. In: Kislingerová E., Krause J. (ed): Nová teorie ekonomiky a managementu organizaci. Nová ekonomika, nové přístupy? (CD-ROM). Praha. Oeconomica, 2011. 12 s. ISBN 978-80-245-1802-2.*

Pavelka, T. (2011). *Long-term unemployment in the Czech republic in comparison with the other countries of the european union* . In Loster Tomas, Pavelka Tomas (Eds.), *International Days of Statistics and Economics* (pp. 481-489). ISBN 978-80-86175-77-5

Spěváček, V*. (2013). Růst a stabilita české ekonomiky v letech 2001-2011. Politická ekonomie. 1/2013, s. 24-45, ISSN 0032-3233.*

Makroekonomická predikce České republiky duben 2013 (2013). Ministerstvo financí, www.czso.cz

OECD Economic Outlook No. 92 – Annex-Tables (2012), www.oecd.org

Contact
Lubomíra Breňová
University of Economics Prague
W. Churchilla 4, 130 67 Prague 3
brenova@vse.cz