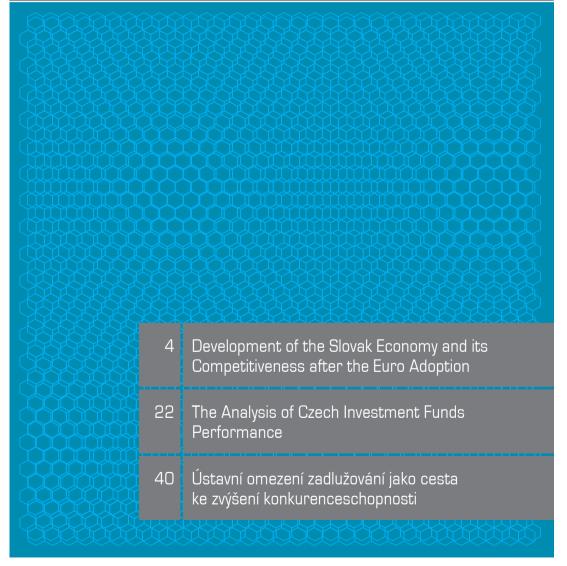


Ekonomické listy



Ekonomie a právo – výzva pro současnou i budoucí konkurenceschopnost

Rok 2011 ukázal, že dopad současné doznívající ekonomické krize je mnohem hlubší a cesta k opětovnému oživení ekonomiky bude mnohem delší a složitější než se původně očekávalo. V převážné většině zemí světa se jednalo o vůbec nejhlubší recesi v celém poválečném období. Krize totiž zasáhla a stále působí de facto na všech kontinentech a navíc je díky mezinárodnímu obchodu do značné míry synchronizovaná, proto můžeme hovořit o globální recesi světové ekonomiky, jejímž přirozeným důsledkem je, že období doznívání této krize s sebou přináší jak nové problémy, tak nové příležitosti.

Tradice v České republice oddělovala řadu let ekonomické otázky od otázek právních, přestože tyto problémy jsou úzce propojené. Toto tematické číslo je tedy věnováno příspěvkům, které se zabývají různými otázkami, které se vztahují k ekonomickému vývoji a k vývoji právních aspektů současné doby.

První článek slovenských autorů Dariny a Martina Vološinových se věnuje vývoji slovenské ekonomiky. Cílem příspěvku je zhodnotit aktuální vývoj slovenské ekonomiky a její konkurenceschopnosti po zavedení společné evropské měny. Hodnocení jednotlivých aspektů konkurenceschopnosti je provedeno na základě dostupných informací a analýz makroekonomických indikátorů, a to hrubého domácího produktu, míry zaměstnanosti, bilance zahraničního obchodu, běžného účtu platební bilance, celkové hrubé zahraniční zadluženosti, devizového kurzu, míry inflace, základní úrokové sazby centrální banky, bilance státního rozpočtu, míry deficitu a stupni zadlužení veřejné správy. Článek přináší poučení z nám blízké ekonomiky, která je kromě společné evropské měny v podobné situaci jako se v současnosti nachází česká ekonomika.

Druhý spíše empirický příspěvek Dariusze Filipa z Polska se zabývá českými kapitálovými trhy, a to analýzou efektivnosti českých akciových fondů v období od ledna 2004 do prosince 2010. Zahrnuje tedy období předkrizové i období, které je poznamenáno světovou finanční a ekonomickou krizí. Článek využívá standardní metodologii založenou na modelu oceňování kapitálových aktiv a na čtyřfaktorovém Carhartově modelu. Výkonnost fondů kapitálového trhu je svázána s faktorem trhu. Podle autora by bylo rovněž vhodné podobný výzkum v budoucnosti zreplikovat s novými daty, k postižení dalšího vývoje a dlouhodobějších trendů.

Poslední článek Petra Macha se zabývá státním zadlužováním jakožto brzdou konkurenceschopnosti států a zároveň navrhuje způsoby, jak ústavně omezit státní zadlužování a napomoci ke zvýšení inovačního potenciálu a výkonnosti ekonomiky. Základní tezí článku je, že vhodná změna právního rámce může účinně zabránit nadměrnému zadlužování a podpořit tak dlouhodobou konkurenceschopnost hospodářství ve

prospěch všech občanů. Autor své úvahy dokumentuje jednak českými historickými zkušenostmi a rovněž úspěšnými a neúspěšnými zkušenostmi dalších států v boji se státní zadlužeností.

Vybrané studie si kladou za cíl poskytnout celistvý obrázek o současném charakteru ekonomických a právních aspektů malé otevřené ekonomiky v období pomalu doznívající světové hospodářské krize.

Ing. Irena Jindřichovská, CSc. V Praze, 30. listopadu 2011

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Development of the Slovak Economy and its Competitiveness after the Euro Adoption

Doc. Ing. Martin Vološin, Ph.D., Ing. Darina Vološinová, Ph.D.¹

In the current phase of the Slovak economic development, the transition process is regarded as finished, last reforms are being implemented, and the economy moved to the phase of convergence to developed economies of the European Union. After the economic reforms in 2004 and the euro introduction in 2009. Slovakia became the leader in the Central European space from the point of view of economic growth. Together with the Czech Republic, the Baltic states and Slovenia, the country reaches the highest economic performance and credibility among all post-communist countries. This fact is certainly related to the euro introduction. Despite this, development of the Slovak economy and the impact of the single European currency's introduction on the country's competitiveness are not completely positive and its current macroeconomic development hides also certain risks, which we want to point out in this article.

Competitiveness in general is understood as an ability to achieve the planned position and to maintain the achieved position on the respective market. The highest degrees of competitiveness are displayed by the economic entities that are able to gain a dominant market position or to gain control of the market. This means that the notion of competitiveness is quite relative and

depends on the strengths ratio on the respective market or markets. The evaluation of competitiveness is even more complicated, if we want to assess the whole national economy or the country as a whole. The evaluation of macroeconomic competitiveness is therefore very often simplified by the focusing on selected aspects of competitiveness, for instance: the quality of business environment, export performance, the currency's stability, the country's credibility and rating of access to foreign investments or loans. These aspects are then evaluated using indicators such as: gross domestic product, rate of employment, foreign trade balance, current account of the balance of payments, total gross foreign debt, exchange rate, rate of inflation, basic interest rate of central bank, the balance of state budget, the amount of state deficit or the rate of public administration's indebtedness.

The purpose of our contribution is to evaluate, on the basis of available analyses and information, the current development of Slovak economy and its overall competitiveness with respect to the impact of common European currency introduction. This contribution was elaborated in the frame of solution of the Slovak government grant project VEGA No. 1/1007/09 "Innovation strategies of enterprises and forms of innovati-

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ons support with the focus on the growth of competitiveness".

Macroeconomic Environment as a Factor of Country Competitiveness

In this part, we will evaluate the macroeconomic results of the Slovak economy in the period of 2006–2010. The basic economic indicators are summarized in table 1

Development of Basic Macroeconomic Indicators

Slovak economy's performance during the monitored period, measured by the rate of GDP growth in constant prices of 2000, showed at first a strongly growing tendency: in 2006 Slovakia recorded GDP growth of 8.5% and the growth peaked in 2007, when the National Bank of Slovakia (NBS) reported 10.5% of real economic growth. The economic growth in this period was driven by domestic as well as by foreign demand. These data

together with economic outlook for 2011–2013 are shown graphically in figure 1.

The economic slowdown of the Slovak economy, together with other V4 countries, which till then resisted the negative effects of crisis due to the high domestic demand, occurred in the 4th quarter of 2008. In the crisis year of 2009, the Slovak economy as a whole declined by 4.8%. The economic recovery in Slovakia, manifested in 2010 by relatively strong restoring of the economic growth by 4% was caused in particular by the positive development of foreign demand.

According to the latest national and foreign estimations, the growth rate predicted for 2011 totals ca. 3%. As for the forthcoming years, in 2012 the persisted debt crisis in euro area will cause the slowdown of economy to 1.8%. The outlook for 2013 predicts that the Slovak economy may reach the rate of growth on the level of over 3.5%.

Table 1 ▶
Basic indicators of macroeconomic development of Slovakia in 2006–2010

Indicator		2006	2007	2008	2009	2010
Gross domestic product	mil. EUR	55 045.50	61 547.10	67 221.00	63 331.60	66 308.20
(in current prices)	index	8.5	10.5	5.8	-4.8	4.0
Unemployment rate	%	13.3	11.0	9.6	12.1	12.5
HICP (average)	%	3.7	2.5	3.5	0	1.3
Foreign trade balance	mil. EUR	-2 562.0	-725.0	-757.8	946.1	778.5
Current account balance	mil. EUR	-4 316.2	-3 292.0	-4 433.2	-2 264.2	-2 277.5
Foreign debt	bn. USD	32.2	44.3	52.5	65.3	65.8
Exchange rate	SKK/EUR	34.573	33.603	30.126	-	-
	USD/EUR				1.3948	1.3257
State budget balance	mil. EUR	-1 712.1	-1 139.0	-1 668.2	-4 291.7	-4 595.3
General government deficit	% of GDP	-3.2	-1.8	-2.1	-8.0	-7.9
General government debt	% of GDP	30.5	29.6	27.8	35.4	41.0
General government debt	S&P	А	А	Д+	Δ+	Α+
Rating	S&P	А	А	Д+	Д+	Д+

Source: http://www.nbs.sk/_img/Documents/_Publikacie/OstatnePublik/ukazovatele.pdf.

Figure 1 ▶

Development of Slovakia's main economic indicators in 2006–2010 and the forecast for 2011–2013

Source: National Bank of Slovakia, OECD Economic Outlook 90 database.

Labour Market and Inflation

According to the selective survey by the Slovak Statistical Office, the unemployment rate in 2006 reached 13.3% and slowly decreased to 11% in 2007. In 2008, the unemployment continued to decrease to 9.6%, as a result of previous economic growth, but from 1.Q 2009 the turnabout began and the rate of unemployment again gained a growing tendency – in 2.Q 2009 it returned to the level of 2006 (13.3%) and by the end of year 2009 the rate finally ended on the level of 12.1%.

Under the impact of higher economic activity in 2010, despite the ongoing structural imbalances and higher average rate of unemployment, the situation on the labour market began to stabilize progressively.

The average rate of inflation, measured by the HICP (Harmonized Index of Consumer Prices, serving as a criterion of inflation control for a country entering the euro area) reached the level of 4.3% in 2006, when the price growth was influenced mainly by the global prices of crude oil and energies, inflation was boosted also by the growth of regulated

prices and food prices. In average, the inflation in 2007 reached the value of 1,9%. In 2008 inflation increased again to 3,9%, mainly due to the influence of external factors. An especially significant increase was recorded by the prices of crude oil and agricultural products. Despite this, Slovakia fulfilled the Maastricht criteria and joined the euro area on 1st January 2009. The inflation in 1.Q 2009 decreased to 2.3%, and in the second quarter of 2009 to 1.1%, due to considerable drop in demand. In comparison with the year 2008, the domestic price level in 2009 remained unchanged. The price development in 2010 was influenced by the global revival of economic activity. Inflation was progressively accelerated by external and internal factors.

Balance of Payments and Export

The balance of payments represents a risk for the economy in the long run, because the periods of smaller external imbalance are alternated by periods of deep imbalance. The decline of economic activity was manifested by the decrease of the current account deficit. In the first quarter 2009,

the current account deficit ratio reached 4.52% and in the second quarter 1.12% of the GDP. At the same time, the country's foreign trade posted a positive balance after a longer period of time. The positive contribution of net exports to GDP growth was a positive effect, related to the recovery of foreign demand in 2010.

Other macroeconomic indicators of the development of Slovak economy are presented in the following short survey.

Foreign Debt and Public Finance

The total gross foreign debt of Slovak Republic showed a growing trend in the entire analyzed period. Slovak Republic's total gross indebtedness/GDP ratio reached 74.7% in 2010 (in current prices).

The public sector in Slovakia in the first part of the monitored period was characterized by the preparation for the euro adoption and by the aim to control the public debt. The public administration deficit was from the greater part caused by the central government's deficit financing. In the 2006–2008 period, state budget financing recorded positive development, in the form of a lower deficit. The government decreased the deficit, with the aim to fulfill the Maastricht criteria. At the same time, the higher than expected GDP growth also had a positive effect on the deficit ratio indicator. The crisis year of 2009 led to multiple changes of the planned budget deficit.

The procedure of deficit reduction in 2010 cut the deficit by 0.1% in comparison to previous year. As stated in the procedure, Slovakia is obliged to consolidate the public finance and to push the deficit under the limit of 3% of GDP by 2013 at the latest

Economic development in 2011

Following relatively favorable development in the first half of 2011, the third quarter of 2011

was characterized by decline in consumer and business confidence and the economic slowdown. Nevertheless, in the first three quarters of 2011 the Slovak economy grew by 3.3%. In the last quarter-year, households reduced their consumption and firms sought for alternative loan financing beyond the domestic financial sector. The country's external imbalances mitigated due to dynamic growth of exports. The unemployment rate stabilized at 13.4% for first three quarters. Expectations of accelerating inflation were confirmed, and the HICP for the first ten months of 2011 reached 3.9%. Some improvement occurred in the consolidation of public finances, but the fiscal development is currently subject to pressure from the external environment, due to the deepening of the euro area crisis, as well as instability in the domestic political environment. The state budget deficit to 30th November 2011 totalled EUR 2.665 bln, i.e. 5.1% of GDP. The general government debt to 30th September, 2011 was EUR 28.7 bln. The Country's foreign debt rose slightly to USD 52.7 bln. Rating agencies expect deterioration of the government's ability to meet its financial obligations and assigned slightly negative outlook to the country. The risk of further economic development is associated to the negative evolution of public finances, economic slowdown and the associated fall in the income of individual economic sectors.

Effects of the Euro Introduction

Given the fact that Slovakia is a member of the euro area from 2009, in relation to the topic of our contribution, in the following text we will try to assess the euro adoption as a factor influencing the macroeconomic competitiveness of the Slovak economy.

One of the significant competitive advantages connected to the common European currency is the functioning of the economy in the space "One Market, One Money". This involves not only the

solution of the problem of credibility and currency anchor, but also the internalization of benefits resulting from low inflation, effects of single currency on labour markets and decrease or elimination of exchange rate risk. The credibility problem means the ability of a country to maintain low inflation, which is important for the evaluation of the cost of monetary integration. The costs resulting from the loss of the autonomy of domestic macroeconomic policy are therefore perceived less sharply.

On the contrary, Slovakia, having had higher inflation and price instability in the past, now gains important benefits from higher credibility and stability. The common currency adoption works especially as an instrument of labour and production markets integration, foreign direct investment and financial market integration. In the context of the fiscal deficit, the fiscal integration, fiscal convergence and political integration are also important aspects. Last but not least, the euro adoption brought the saving of transaction costs for the domestic currency conversion and price transparency.

The main benefits and costs associated with the adoption of a common currency can be classified as follows (see for instance Mongelli, 2002):

■ Benefits from improvements of microeconomic efficiency result principally from the increased usefulness of money – i.e. the liquidity services provided by a single currency circulating over a wider area – as a unit of account, medium of exchange, standard for deferred payments, and store of value. The latter benefit is subject to "network externality", i.e., the broader the circulation of a currency, the greater this benefits. Greater price transparency discourages

price discrimination, decreases market segmentation, and fosters competition. Intra-area nominal exchange rate uncertainty will disappear (and thus also the intra-area exchange rate risk), resulting into savings in transaction and hedging costs. The more concentrated trade is in a currency area, the greater the savings on transaction costs are likely to be. This will strengthen the internal market for goods and services, foster trade, lower investment risks, promote crossarea foreign direct investments (FDI) and enhance resource allocation.

- Benefits from increased macroeconomic stability and growth – improved overall price stability, access to broader and more transparent financial markets increasing the availability of external financing; reputational gains for those members with a history of higher inflation that benefit from an anti-inflationary anchor; reduction of some types of fluctuations of output and employment across the currency area due to different economic policies.
- Benefits from positive external effects savings on transaction costs resulting from wider international circulation of the single currency, revenues from international seignorage, reduced need for foreign exchange reserves; and simplified international coordination.

However, despite all these benefits, the single currency does not safeguard the members of the single currency area from the effects of real economic shocks. The risks and costs connected with the common currency adoption can be classified as follows:

Costs from the deterioration of microeconomic efficiency. There are changeover costs from switching to a new currency. These costs include administrative, legal and hardware costs, such as re-denominating contracts and adapting vending machines. There is also the psychological cost resulting from a new numéraire. These costs in Slovakia fade out slowly. Successful joining of the single currency area depends also on the right choice of the exchange rate. If a country chooses the wrong nominal exchange rate parity at the onset of a currency area, this country may be too competitive or not competitive at all with respect to other members. This question is still a subject of analyses in Slovakia. The imbalance in external accounts will likely persist until the structure of prices and wages, as well as the level of Slovakia's economic activity, adjusts to those prevailing in the other members. With the introduction of a single currency a supranational institution is needed. This will result in increased administrative costs for each member country that could be offset by a reduction of the size of some national institutions due to redistribution and sharing of functions. A neo-classical optimal public finance argument against renouncement of monetary sovereignty is that joining a monetary union prevents a national government from equalizing the marginal cost from taxation and inflation (i.e., losing control over the "inflation tax"). But such a scheme may conflict with the price stability objective.

Costs from decreased macroeconomic stability. Membership in a currency area narrows the menu of policy instruments directly available to the Slovak government. As the responsibility for setting monetary policy and exchange rates is transferred to the European central bank, Slovakia cannot pursue real adjustment in the wake of asymmetric disturbances (and if its prices and wages are downward sticky). Furthermore, when a member country exhibits higher nominal price and wage rigidities than other partner countries in the currency union, the lower inflation rate in the area can increase its frictional unemployment (until its nominal rigidities are reduced by means of structural reforms). This may eventually lead to more pronounced short-term output and employment fluctuations. Direct control over part of the foreign exchange reserves and other assets is also transferred to the ECB. Slovakia has also lost the option of "inflating away" its national debt in the future. In addition, common fiscal restraints (as is the case with the Stability and Growth Pact and its Excessive Deficit Procedure) may be superimposed to reduce the ability of the national government to conduct possibly unsustainable national fiscal policies. In addition, the EMU has no supranational risk sharing arrangement that may assist its members in coping with asymmetric economic shocks.

Costs from negative external effects.

This question is currently being discussed in connection with the problem of Greece. From the theoretical point of view if one, or more member countries were to run sizeable and protracted budget deficits, accumulating an unsustainable public debt, eventually some pecuniary externalities might ripple through the currency area. For example, the fear could rise that such debt might have to be monetized. This might pose a strain on the interest rate of the currency union and the international confidence in the single currency may decrease. Every member country suffers in this situation, particularly those that previously had stable currencies. The current financial situation of Greece and other members of the euro area recall a fear from filling of this scenario.

Slovakia, as a small open economy using the single European currency, is very sensitive to changes in external environment. In connection with the Greek crisis, Slovakia now felt the negative impact of external shocks in the form of increased costs of government debt financing and lack of interest in buying government bonds. Additionally, the country has lost the possibility to balance macroeconomic cycles with its independent monetary policy. In this phase, the primordial question is the financial cost of protection mechanisms against this scenario and Slovakia's ability to really participate at these mechanisms.

Development of the Competitiveness of Slovak Economy

In this part we will focus primarily on global or absolute indicators of Slovakia's macroeconomic

competitiveness. These indicators include the GCI (Global Competitiveness Index) published yearly by the World Economic Forum, the index of business environment of the World Bank, as well as the country rankings from global rating agencies. This category of indicators may include the evaluation of labour productivity, cost of labour, flexibility of labour market, macroeconomic stability and performance, and evaluation of the export performance too. Similarly, the development of the real exchange rate may also be seen as an absolute indicator of macroeconomic competitiveness, but in the case of Slovakia this indicator after the euro adoption in 2009 is no longer valid.

Secondly, we want to focus in this part on the development of Slovak enterprises microeconomic competitiveness, regardless of the form and country of their ownership. Basic indicators of microeconomic competitiveness include the unit production cost, realized market prices, technological advance, export performance and competitive position on relevant markets, expressed by the absolute or the relative market share.

The assessment of specific impact of the euro introduction on Slovak economy's macroeconomic and microeconomic competitiveness is a separate issue. We will discuss this problem at the end of this part of our article.

Absolute Indicators of Slovakia's Competitiveness

The complex Global Competitiveness Index (GCI) of the World Economic Forum (WEF) includes twelve areas: institutions, infrastructure, macroeconomic environment, healthcare and primary education, higher education and training, goods market efficiency, labour market efficiency, financial market development, technological readiness, market size, business sophisti-

cation, and innovation. According to the Global Competitiveness Report 2010–2011, Slovakia, together with Poland and Hungary, is classified in the intermediary group of countries on the way from stage 2 (Efficiency driven economies) to stage 3 of development (Innovation driven economies). From the group of "post-communist" states, only Slovenia and Czech Republic are classified as countries in stage 3. The total number of classified countries was 139.

Slovakia's position in the Global Competitiveness Index overall ranking is considerably lower in comparison with the preceding 2009-2010 report (the drop from 47th to 60th position). Slovakia received the worst assessment in the following: Institutions and Innovation. The country's deteriorated position may be attributed to factors including: high tax burden of labour, high nominal compensations per employee, low flexibility of labour legislation, widespread clientelism and low trust of the public concerning the financial fairness of politicians. The most problematic factors of doing business in Slovakia according to the WEF Report are: inefficient state bureaucracy, corruption, overly restrictive rules of labour market functioning and insufficient infrastructure.

The ranking of former socialist countries according to the last Global Competitiveness Report of the World Economic Forum is shown in the table 2.

Among the post-communist countries, the Czech Republic, Slovenia and Azerbaijan also saw their CGI level go down. Estonia, Poland, Lithuania, Hungary and Montenegro also dropped in the chart, while Russia's position remained unchanged.

The country's competitiveness from the point of view of foreign investment can be characterized by the quality of business environment, too.

Table 2 ▶
Ranking of selected countries – Global Competitiveness Report 2010–2011

World Compet Report 2009		World Competitiveness Report 2010-2011			
Country	Ranking	Country	Ranking		
Czech Republic	31	Czech Republic	33		
Estonia	35	Estonia	36		
Slovenia	37	Slovenia	39		
Poland	46	Poland	45		
Slovakia	47	Slovakia	47		
Lithuania	53	Lithuania	49		
Azerbaijan	55	Azerbaijan	52		
Hungary	58	Hungary	57		
Montenegro	62	Montenegro	60		
Russia	63	Russia	63		

Source: Global Competitivenesss Report 2010–2011, WEF, Geneva 2010.

The business environment in individual countries of the world is evaluated by the World Bank in its annual Doing Business Report. This evaluation is based on a series of more than 40 indicators. monitoring the financial cost, time requirement and bureaucratic obstructions connected to the starting, running and ending of the business in respective country. The indicators are classified to 10 areas. In the 2011 Doing Business Report, the highest position among the post-communist countries was achieved by: Georgia (12th position), Baltic republics (from 17th to 24th position) and Macedonia (38th position). Slovakia ranked 40th, Slovenia 43rd, Hungary 45th, Czech Republic 62nd, and Poland placed 63rd among 183 countries.

From the point of view of global rating agencies, Slovakia together with the Czech Republic have the highest rating among the Visegrad four (V4) countries (table 3). Standard & Poor's even puts Slovakia on a higher level than the Czech Re-

public. Poland has the rating of A- and Hungary BBB+. Moody's in 2011 increased its outlook for Slovakia from stable to positive, the same level as the Czech Republic. Both countries have now the rating of A1 for bonds in foreign currency, as well as in domestic currency. Moody's simultaneously increased the ceiling for indebtedness of the country in foreign currency and deposits to "Aaa", which put Slovakia on the level of the entire euro area ¹

Table 3 ▶

Long-time rating of the V4 countries in 2011

	Moody's	S&P	Fitch
Slovakia	A1 p	Ар	A+s
Czech Republic	A1 p	As	A+s
Poland	A2 s	А- р	A-s
Hungary	A2 s	BBB+ n	BBB+ s

Source: own adaptation of the data of rating agencies.

A note regarding the quality of rating agencies' evaluations and conclusions: their credibility can be challenged by the mortgage crisis or unexpected fall of large U. S. companies during the previous period, which was not forecasted by rating agencies. Nevertheless, we do not have better tool of objective evaluation and financial markets reflect these ratings and abide by them. Basically, it is a general problem of increasing forecasting difficulty in the current stage of economic development.

Additional macroeconomic parameters of Slovakia, characterizing its absolute position from the point of view of global macroeconomic competitiveness, were already analyzed in the first part of this article. In macroeconomic comparison with the other V4 countries or Slovenia, which has the highest level of GDP per capita among all post-communist countries now, Slovakia reaches now 79% of the economic level of Slovenia and 88% of the economic level of Czech Republic. Hungary reaches currently 86% and Poland 82% of the Slovakia's economic level.

Competitiveness of Slovak Enterprises

If we would take export and production volume as the main indicator of competitiveness, we would have to state that Slovakia saw a dramatic decline in its export and industrial production in the period of transition to euro. The statistical index of industrial production dropped by more than 16 basic points within the period of one month (December 2008); the index of total export was lowered by 36 basic points in the same month.² On the average for 2009, export decreased by 30 points and production by approximately 20 points on year-on-year basis. At the first glance, we could blame too strong exchange rate and the appreciation of the effective exchange rate subsequent to and caused by the devaluation of neighboring currencies. Considering the hypothesis that the fixing of the Czech koruna's exchange rate and the euro transition had a negative impact on the competitiveness of Slovak enterprises, the industrial production in Slovakia would have been growing more slowly in comparison with the Czech Republic or other V4 countries. However, according to the analysis of the NBS, Slovak industrial production in 2009 grew faster

¹ On December 5th, 2011 Standard and Poor's put Slovakia's long-term and short-term rating to A+/A-1, with the credit watch negative, together with other 14 members of the euro area. After S&P, Slovakia has still strong ability to meet financial obligations, but it can be affected by business cycles and the environment.

² Index of industrial production is measured in relation to average month in 2005.

than in neighboring countries and in the course of the year, Slovakia saw the highest production growth among all EU countries.³

Similar situation could be seen also in other economic sectors. In the period under review, retail turnover dropped more significantly in Slovakia than in neighboring countries, and quick return to previous levels seen in the industrial sector did not come. In 2009, retail turnover's development in Slovakia corresponded more or less to the V4 average. In both construction and retail trade, the development in 2008 was very expansive and reflected the impact of the quick economic growth from previous years. In 2009 it came back close to the V4 average.

After fixing of the Slovak koruna's conversion rate to euro, discussions about the advantages of having an independent currency and benefits of potential currency depreciation for local enterprises were revived. As it is clear from the statistical data, neighboring countries did not see a substantially different development in industrial and construction output after depreciation of their currencies. The sharper drop of retail turnover in Slovakia in comparison with neighboring countries and its remaining on lower levels could theoretically be the proof of a certain delayed impact of an effective exchange rate appreciation.

A closer look at the wholesale, retail trade and motor vehicles repair industry shows that individual sub-industries responded in different ways. According to the data from the Slovak Statistical Office, the situation in wholesale deteriorated more than in retail. Wholesale turnover decreased by 27% and retail turnover by 12%. In a year-on-year comparison, the biggest drop was seen in machinery wholesale (-45%) and in non-specia-

lized wholesale. The only increase was seen in IT and communication devices (+5.6%). In the retail sector, the biggest drop was seen in other household goods (-30%). In a year-on-year comparison there was an increase of demand for culture and recreation goods (+5.9%), as well as the IT and communication devices retail (+2.6%). In spite of the decline in the global demand, retail turnover in non-specified shops, including the majority of retail chains increased by 1.2%.

The argument of currency depreciation is used mainly in the Czech Republic as an important argument for retaining the Czech koruna. However, the evolution of production and turnover does not indicate that a weakening of the Czech koruna in 2008 would be of a measurable benefit. Significantly different evolution can be seen only in the case of construction and retail trade turnover in Poland, where both indicators grew almost continually in the previous period in spite of the global economic crisis and higher exchange rate volatility. Here the key role, however, may have been played by the size of the local economy, higher significance of local demand and the economy's lower openness. Tax cuts, expansive fiscal policy and structural policy measures of Polish government also had an additional positive impact on the development in Poland.

Shortly after the introduction of the euro in Slovakia, discussions about the negative impact of exchange-rate fixing on the domestic tourist industry arose. Available data indicates that a decline in revenue from tourism was recorded in almost all EU countries (with mainly foreign trips being cut). Slovak citizens traveled less, too; they mainly cut back on their number of foreign business trips. On the other hand, the number of home and foreign visits of relatives rose significantly. Slovakia is also

³ Annual Reports of the National Bank of Slovakia 2006–2010.

one of the countries whose citizens only slightly reduced their number of foreign overnights in 2009. However, their interest in local tourism dropped substantially. In 2009, the drop in the number of overnights in collective accommodation facilities was gradually reduced in most of the monitored countries. Moderate recovery is apparent in Slovakia, too; however, the year-on-year drop of foreign tourists' interest during the first three quarters 2009 was still the largest among the neighboring countries. On the contrary, until 2008 the turnover in Slovak tourism industry grew faster the in other countries. This indicates that the major factor influencing development in the tourist sector in Slovakia during 2009 was probably the decrease of global demand.4

Export Performance of Slovak Enterprises

Export performance is the key indicator of a business sector's competitiveness. The volume of export from EU countries in 2009 was 19% lower by than in the previous year. Table 4 shows the year-on-year change of export from selected EU countries and from the European Union as a whole. In the table we can also see that the drop of export from all V4 countries was almost the same. The total import decreased even more significantly.

More detailed data indicate that export from Slovakia to non-EU countries fell slightly more than export from the Czech Republic. In comparison with other EU countries, Slovak companies saw a relatively lower decline in the export of intermediate products and capital goods. The year-on-year share of Slovakia in export to non-EU countries did not change considerably. The share of individual V4 countries in the common export changed only slightly. The share of Hun-

Table 4 ▶
Development of the EU foreign trade in 2009 (year-on-year change in %)

Country	Total fore	ign trade	Export outside
Country	Export	Import	the EU
European Union	-19	-24	-16
Czech Republic	-19	-22	-17
Hungary	-19	-24	-21
Poland	-17	-26	-22
Slovakia	-17	-21	-20

Source: Eurostat statistics.

gary remained at the level of 25.2%; Polish share dropped approximately by 1 percentage point (to 39.2%), to the benefit of the Czech Republic (0.8 p. p. growth) and Slovakia (small increase from 1.1% in 2008 to 11.3% in 2009).

According to the Slovak foreign trade statistics for the first three guarters of 2009, the export to Asia and to Europe decreased the least (-17% and -25%). Export to America dropped by 48,8%. The development of import was very similar, though differences among countries and continents were less striking. All countries (with the exception of the UK) exported less to Slovakia. As for the product structure, the only increases were seen in oil and gas export and export of electronic and optical devices. The largest fall was seen in export of basic metals (-42%) and other mining products. A year-on-year rise was recorded in the import of clothes (26%), tobacco products and pharmaceuticals. The largest drop was seen in the import of metals (-48%) and some services.

The Cost Competitiveness of Slovak Enterprises Coincidentally, during the period of the euro introduction in Slovakia, exchange rates of neigh-

Please see LALINSKÝ, T.: Konkurencieschopnosť podnikov po zavedení eura na Slovensku. Bratislava: NBS 2010.

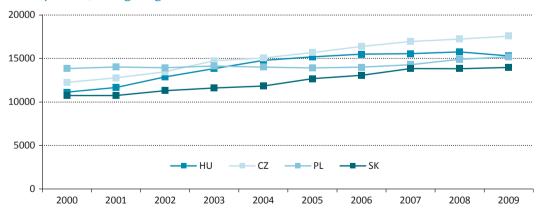
boring countries against the euro weakened as a result of deteriorating economic development and growing risk aversion. This resulted in a temporary drop in the price and cost competitiveness of Slovak enterprises. Average hourly labour costs in the V4 expressed in euro fell below the Slovak labour cost level. When the situation on financial markets calmed down, neighboring countries' exchange rates started to appreciate again. At the end of 2009 the cost competitiveness situation was practically the same as before the euro adoption. The observed decline in the cost competitiveness of Slovak companies can be therefore regarded as a temporary phenomenon.

The depreciation of neighboring countries' exchange rates temporarily improved their cost competitiveness. However, higher import prices intensified the inflation pressures. Slovak enterprises were able to modify production prices more in the period of weak global demand. They could do so thanks to a faster decline in import prices of inputs and intermediate products, which fell approximately by 15% in Slovakia during 2009.

In the context of the discussion about the cost competitiveness, it is important to say that the unit labour cost (ULC) in the Slovak industrial sector decreased continually in the long run. The temporary increase of ULC in late 2008 and early 2009 was caused by the GDP decrease. In this period, the ULC increased also in other EU and euro area countries. In contrast to Slovakia, euro area registers long term stagnation or moderate growth of ULC in the industrial sector. For specific comparisons, we present the table of average wages' development in national economies of V4 countries from 2000 (see table 5).

The data from table 5 are graphically represented in figure 2. It is evident that the average wage in Slovak national economy is under the level of the other Visegrad countries in the long run. Obviously, the nominal values of wages calculated on the basis of the current exchange rates can be different and they depend also on the development of respective national currency exchange rate in relation to euro. However, as we have already noticed, the national currencies of

Figure 2 ▶
Development of average wages in V4 countries (in PPP USD)



Source: OECD Statistics, 2011, own adaptation.

Table 5 ▶
Average annual wages development in V4 countries (in PPP USD)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Hungary	11124	11659	12878	13832	14780	15195	15496	15546	15766	15300
Czech Rep.	12249	12765	13474	14739	15049	15682	16389	16959	17227	17564
Poland	13842	14022	13939	14136	14007	13910	14002	14289	14906	15184
Slovakia	10742	10751	11307	11610	11832	12678	13075	13836	13825	13977

Source: OECD Statistics, 2011, own adaptation.

neighboring V4 countries (Czech koruna, Hungarian forint and Polish zloty) after the economic revival started to appreciate again. As a result, the unit production cost is still the lowest in Slovakia in comparison with its neighbors.

The Innovation Competitiveness of Slovakia

Slovakia is, according to the last WEF Global Competitiveness Report, classified among the countries on the way from efficiency driven to innovation driven economies. In comparison with other countries in the same group, however, Slovakia lags behind in the innovation and professional aspects. The lag in innovation even increased in comparison with the previous year. Slovakia also has gaps in the area of basic infrastructure, institutions and the higher education.

In the field of innovations and business environment, Slovakia falls behind not only in comparison with the average of all innovation-driven economies, but also in relation to the Czech Republic. The World Bank Survey (2009) indicated that the proportion of innovating firms in Slovakia is smaller than in other Central and Eastern European countries. Innovation gap is growing with the size of enterprise. The proportion of innovating small enterprises in Slovakia is approximately equal to other analyzed European countries. But the proportion of innovating big enterprises in other Central and Eastern European countries

is on the average by 13% higher. In Slovakia, this indicator represents only 6%.

From the long term view, it is obvious that we must achieve a higher quality of educational system and focus more attention on research, development and innovations. Slovakia has, in comparison with other developed countries, still a relatively low share of citizens with universitylevel education. The quality of Slovak universities (with several exceptions) does not reach the required international level. The proportion of public and private expenditures on research and development in Slovakia, in relation to the GDP, is in the long term among the lowest in the frame of the EU. Weak interest of the young people in studying a number of important subject fields and the lack of innovation inhibits the increase of the country's competitiveness level. The World Bank survey also indicated that the major part of firms doing business in Slovakia already has a problem with insufficient professionalism and low experience of the labour force and perceive it as an important limiting factor.

Discussion about the Impact of the Euro on the Firms' Competitiveness

Analytical studies elaborated before the creation of single European currency considered mainly the benefits related to the drop in transaction costs and exchange rate risk elimination. These

direct advantages were expected to show later in indirect advantages of the euro introduction. New direct investment and an increase in foreign trade was supposed to, in the long run, lead to faster economic growth and higher performance and competitiveness of the whole euro area. Studies analyzing the possible impact of the euro introduction in Slovakia were of the similar nature.5 Ulterior analyses evaluating the impact of the euro introduction on the growth of foreign trade, the inflow of direct foreign investment and the related potential rise of competitiveness indicate that the expected benefits have not yet been shown to the extent predicted. The share of foreign trade among the euro area countries has grown to approximately one third of the GDP in comparison to 26% of the GDP in 1998. The increase in importance of direct foreign investment within the euro area was slightly higher than that (a rise from 20% to 33% of the GDP).

Since the establishment of the EMU, the euro is believed to have had a positive impact on foreign trade from 10 to 15% on average (Baldwin, 2008). However, several quantitative models confirm that the impact of the euro on foreign trade show great industry-related differences. Flam and Nordstrom calculated the 15% increase in trade among the euro area countries, while the impact on individual industries ranged between 7 and 50% and found a higher positive impact on industries producing semi-finished goods and finished products. De Nardis et al. (2008) stated that, on an industrial level, the euro's impact on foreign trade could even be negative for some countries. Industries with increasing economies of scale got the greatest advantage from the euro introduction. Industry-related division and industry location, together with other factors (such as different access to production resources and market liberalization rate), might have played a decisive role for the final effect of the euro introduction.

Works analyzing the real impact of foreign direct investment identified a positive effect on the level of 14 to 36%. Not only has the FDI inflow gone up among countries that have adopted the euro, but FDI inflow from or to countries where the euro has not been introduced has increased as well. According to Taylor (2007), however, there was a shift in investment from non-euro area countries to euro area countries. In general, the number of ex-post analyses dealing with the impact of euro introduction is low and there are even fewer in-depth studies about the impact on business competitiveness. Foreign studies focusing on competitiveness concentrate mainly on price and cost competitiveness. They are examining mainly the development of real exchange rates and unit labour costs in the euro area countries. In its Quarterly Report on the Euro Area (4/2009), the European Commission observes a divergence in the price competitiveness of countries after the euro introduction. Some countries have strengthened their competitive positions and other countries' competitiveness has deteriorated significantly. The reasons possibly include insufficient wage flexibility and strong national demand pressures, connected with high debts. Lower price competitiveness was later reflected in the decrease in non-price competitiveness in some countries. Cost competitiveness showed a similarly uneven development. In some countries, labour costs increased much faster than productivity. Several studies also indicate that the relation between export performance and price cost competitiveness changes depend

⁵ Please see e.g. ŠUSTER, M. a kol.: Vplyv zavedenia eura na slovenské hospodárstvo. Bratislava: NBS 2006.

on the country. In several cases, the factors of non-price competitiveness and relative national demand are more important.

Studies based on the new foreign trade theory indicate the advantages of euro related to lower prices and higher productivity coming from greater international competition. The direct effect resulting from economic integration related to economies of scale and higher competition pressures lead to a productivity increase of 3%. Indirect impact related to the fall in GDP volatility and risk premium was calculated at 2% (Barrell et al., 2008). Small, open countries (Finland, Belgium and Austria) benefited the most from the introduction of the euro. Competitiveness grew the most in industrial sectors with strong competition and low barriers (in particular the production of electrical devices, basic metals, metallic products and motor vehicles). This might be good news for Slovakia, as it is a small and open economy where the above mentioned industries play a key role.

Conclusion

In Slovak conditions, the business sector is constituted mainly by industrial firms. Despite the fact that the drop of industrial production under the crisis was greater than the EU average, the yearon-year decline in gross value added was very close to the EU average. Slovak firms acceded to the massive price and employment reduction. They succeeded in maintaining relatively high level of investment rate. When analyzing factors impacting the competitiveness of Slovak enterprises, we discover that the business sector perceived low demand as the key factor limiting the production. The more significant drop in production and GDP in Slovakia than in neighboring countries was probably caused by the greater openness and small size of the Slovak economy as well as a higher share of cyclically sensitive industries.

Two years after the euro adoption, no notable changes in Slovakia's total competitiveness can be seen. The worsening of price and cost competitiveness related to the fixing of the euro exchange rate is probably of a temporary nature. But so far, there is no direct evidence that the euro could have had a negative impact on some industries. Even after a longer time-period since the introduction of the euro in Slovakia it will be difficult to draw clear conclusions, because we will never know how the domestic economy and enterprises would have developed under an independent monetary policy. Comparing the current development in Slovakia with other EU countries allows us to admit a possible, though hard to quantify, negative impact which the strengthening of the effective exchange rate could have had on selected services.

Slovakia has relatively good preconditions for quick adaptation and growth of competitiveness. Enterprises seem to be flexible and prefer productivity increase: they do not focus only on cost reduction. The current improvement in the global economic situation has created conditions for the recovery of Slovak export, and also for a more dynamic GDP growth than in other EU countries. Business surveys have confirmed that companies are increasingly more aware of the importance of factors for long-term competitiveness. They feel the need to invest into research and development, boost innovation activity and support the education of their employees. Long-term trends in the development of export product structure representing export competitiveness are regarded as prevailingly positive.

Nevertheless, Slovakia is still failing to be successful in chemical industry and is lagging behind in high-tech products export. Almost the full export volume goes to the European countries. Following the trend in developed countries, Slovak enterprises should focus more on export

to rapidly developing Asian economies. Also, the business environment in Slovakia has not changed positively in recent years. Due to several reform steps taken in other countries, Slovakia has begun to lag behind in the support of its business environment. Perception of the quality of basic infrastructure, institutions, research and higher education has worsened. This is the space for improvement necessary for the growth of country competitiveness.

Economic development in Slovakia during the first half of 2011 has been positive, but favorable economic situation was marked by increased tension in the external environment. With growing risks in external environment, the economic outlook for 2012 was revised downward. In connection with the collapse of Slovak government

in October 2011, damping tax revenues and increasing spending on social benefits, the consolidation of public finances will also be hindered. Expected higher inflation, combined with the strengthening of the euro, would weaken the price competitiveness of Slovak exports. The negative trend of gross foreign debt growth is persistent.

In conclusion, after a rebound in 2010, Slovak economy is expected to slow in line with weak growth in export markets and problems in euro area. Also due to persistent high unemployment and fiscal consolidation measures, public and private consumption is projected to remain subdued.⁶ With the improvement of global environment and a pick-up in both exports and investment, GDP growth is expected to strengthen from mid-2012 onwards.

⁶ Slovak Republic – OECD Economic forecast summary (November 2011)

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DEVELOPMENT OF THE SLOVAK ECONOMY AND ITS COMPETITIVENESS AFTER THE EURO ADOPTION

Doc. Ing. Martin Vološin, Ph.D., Ing. Darina Vološinová, Ph.D.

ABSTRACT

The paper focuses on the competitiveness of the Slovak economy after the euro adoption in 2009, which is complicated due to the global crisis. Following the introduction of the euro, Slovak enterprises recorded decline of their economic and financial indicators. The main factor of negative development was the drop in the global demand. Analyses indicate that the euro adoption might have a negative impact on selected sectors of the economy, but the decline of the price competitiveness of these sectors after the euro adoption was rather temporary. Global economy's recovery enhances the importance of intensive competitiveness factors, such as the support for research and development, education and innovations. Unambiguous positive effects of the euro introduction can be awaited in the longer time horizon. Further development of the Slovak economy will depend mainly on external factors, especially the economic situation in Germany and the euro area stabilization.

KEYWORDS

Slovak Republic, euro area, financial crisis, country competitiveness.

JEL CLASSIFICATION

E60, D24, F15, O11

The Analysis of Czech Investment Funds Performance

Dariusz Filip, Ph.D.1

Last 10 years have been a period of considerable development of investment funds operating in Central and Eastern European (CEE) countries. The last economic crisis has led to a substantial decrease in the value of assets on funds' accounts. Still, the asset management companies are slowly recovering and once again become an important part of the capital market that offers alternative forms of investment. The activity of collective investment companies in developed and emerging markets is an interesting research topic particularly with regard to the last changes in financial markets.

The contemporary studies on the functioning of mutual funds focus mainly on the issues concerning their performance. For instance, there are studies that try to determine if mutual funds are able to achieve abnormal returns in a long term period. The term "abnormal returns" in this particular context refers to achieving abnormal results, which are better than the return on the defined benchmark, e.g. stock exchange index. According to financial literature, the phenomenon of beating the market, or achieving negative abnormal return, can influence performance persistence; performance dependence in consecutive periods, in turn, can encourage predictability.

The analyses of investment fund performance have practical applications, and thus are important especially to individual investors. The examination of performance efficiency helps investors to conduct a general evaluation of returns obtained by fund managers and may provide crucial information that may influence the choice of an investment fund. Moreover, by proving the two phenomena, which are namely the existence of performance dependence in consecutive periods and the predictability of results, it may be possible to determine the convenient moment to open or close investment in a chosen fund. Finally, in order to interpret fund ranks published by investment advisory companies in a proper way, it is vital to determine the impact of non-survived investment funds on the performance of the survived ones.

The paper aims at determining whether investment funds operating in the Czech Republic are able to constantly outperform a benchmark, or in other words, to keep competitive advantage. Thus, in this particular case, the analysis of mutual fund performance is based on the evaluation of fund managers' ability to beat the market. Accordingly, the analysis of performance efficiency will be based on specific regression models. Additionally, in order to determine performance persistence, the author will conduct an initial examination of general performance dependence in consecutive periods. The comprehensive persistence investigation most often takes place in the developed markets, but is still rare as far as

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the emerging Central Eastern European markets are concerned. Therefore, the aim of the article is to determine whether past performance can be used to predict future performance of the Czech funds. Moreover, the applied research procedures shall allow to estimate the survivorship bias and enable to determine its impact on the performance of surviving funds.

The article consists of several sections – a section overviewing briefly the financial literature related to the main issues discussed in this paper, a section describing the dynamics of the development of the Czech investment fund industry. Next the database and the applied methodology are described to be followed by a section dealing with the results of the fund performance analysis and a concluding part.

Review of the Literature

The issue of mutual funds performance has been present in the finance literature since the late 1960s. The majority of previous studies discuss the U.S. market, where the financial market has achieved the highest level of development. A great number of contemporary studies exploit the findings of Jensen (1968) or Kim (1978), who invented the ways of constructing the measures for the evaluation of mutual funds performance. Both the authors mentioned above ascertained that investment funds are unable to achieve abnormal returns. However, there were also studies that assumed efficient market hypothesis, which has confirmed the phenomenon of abnormal results (see Kon and Jen, 1979). The conclusions Grinblatt and Titman came to in 1989 were interesting: the researchers have shown that aggressive-growth funds and the funds with the smallest assets value are particularly able to achieve the risk-adjusted returns outperforming a benchmark. However, it was possible before expenses in general. Similar thoughts have been pointed out by Ippolito (1989). In his study, mutual funds perform better after load charges than the benchmarks in a long term period. Still, the distribution fees sometimes remained without a refund.

The heated discussion continued, and the successive studies (Fama and French, 1993; Carhart, 1997) set new methodological standards for the evaluation of performance efficiency. Elton, Gruber and Blake (1996a) generally rejected the possibility of achieving abnormal returns by the asset management companies. However, while analyzing equity funds, they have discovered that the achieved performance was characterized by some persistence. They have also confirmed that the past performance may provide information about the future one. Malkiel (1995), who included all the U.S. surviving and not-surviving funds in a database, came to similar conclusions. He paid particular attention to funds invested in stocks and found an evidence of performance persistence of the mutual funds. However, they were weaker with a passage of time. Furthermore, Malkiel rejected the hypothesis about the existence of managers able to continuously achieve better results at an acceptable risk level.

Other studies indicate survivorship bias in databases as a reason of that kind of empirical results. Thorough analyses concerning selection bias were made by Elton, Gruber and Blake (1996b). They found out that due to the exclusion of non-survived funds from the sample the results of survived funds seem to be better than in reality. At the same time, the sample truncated by survivorship bias enhances predictability of results (cf. Brown, Goetzmann, Ibbotson and Ross, 1992).

Judging by the number of publications, the issue of evaluation of mutual fund performance is not as popular in Central and Eastern Europe

as it is in the countries, the financial markets of which are definitely much more developed. The performance analyses of investment funds operating within the mentioned region include, for example, the one made by Białkowski and Otten (2010) for investment fund industry in Poland. The efficiency of fund managers was examined in the analyses concerning Croatian and Slovenian mutual funds and Bosnian investment funds (Podobnik, Balen, Jagric and Kolanovic, 2007), and also Polish mutual funds (Swinkels and Rzeźniczak, 2009; Olbryś, 2009). One of the most well known studies on investment fund performance in the Czech Republic was carried out by Fajtova (2004), who examined performance of closed-end funds from the perspective of market fluctuation and information on legislative changes. Jindrichovska (2009), whose findings are also frequently mentioned, analyzed price reactions of investment trusts related to the legal conditions existing in the Czech Republic. As her findings show, the occurrence of abnormal returns was related to legislative and institutional changes and not to the announcement about the open-endedness of Czech funds in the late 1990s. The issue of efficiency of the Czech capital market was analyzed, among others, by Hajek (2007). Accordingly, the present examination of investment fund performance in the Czech Republic is a continuation of previous studies and will discuss the investment effects of funds with regard to the changes caused by the last financial crisis.

Characteristics of the Czech investment fund industry

Other CEE countries alike, the activity of investment funds in the Czech Republic dates back to the 1990s. The investment trusts functioned at the time when voucher privatization came to an end and the new legal and institutional fra-

meworks of investment funds were established. Within this period, the whole sector underwent the sweeping consolidation, which was due to the mandatory opening of closed-end funds and the liquidation of illiquid funds (IMF, 2001). This was possible because of the amendment to the collective investment act, 1998, when the total number of all funds was 56 and the value of the market was calculated at the level of 16.794 million CZK.

As a result, there was an initial decrease in net assets value of investment funds. However, due to the new conditions and environment, collective investment industry became more efficient and trustworthy (Armstrong, 2002). Moreover, a higher conviction of investors to this form of investment in the Czech Republic has been observed from the early 2000s. After its accession to the European Union in 2004, the Czech Republic opened to international financial markets. Since then, there has been a noticeable growth of competition in the sector and a wider fund offer appeared. Consequently, the new possibilities concerning investment funds have emerged (PriceWaterhouseCoopers, 2006). According to the Czech Capital Market Association (AKAT), the number of all funds in 2004 was 55, including 10 equity funds. The total net asset value of all funds amounted to 109,159 million CZK. In spite of the noticeable financial crisis in 2008, the number of all investment funds in the Czech Republic rose to 109 and in case of equity funds to 17. However, net assets value dropped to the level of 120.883 million CZK, that is more than by 25% in comparison to the year preceding the crisis. Towards the end of the survey period, the number of investment funds registered by AKAT was 113, including 17 equity funds.

One of the greatest weaknesses and barriers for investment fund industry in the Czech Republic is a relatively slow development of the local capital market caused by the size of stock market and by the level of concentration ratio of equities, which is quite high. Hence, the limited liquidity and specific shallowness of the Czech stock market have a direct impact on the effects of fund managers' actions. Other CEE countries alike, the investment fund industry in the Czech Republic is still minor in comparison to the U.S. or Western European fund markets. However, the growth of the Czech fund market is noticeable, which may be supported by AKAT's annual reports. According to the reports there was a 60% increase in net assets value on funds' holdings within the last 10 years. In corroboration of the stock market conditions, it would be useful to refer to the reports of the Prague Stock Exchange (2011), where a downward trend of total share trading value in the last three consecutive years is to be observed in spite of an inconsiderable increase of market capitalization and a slight change in the number of the stocks listed at that time. The total share trading value decreased from 1 013.02 billion CZK in 2007 to 389.87 billion CZK in 2010, that is more than by 61%.

Data and Methodology

The data for the study was obtained thanks to the courtesy of the Czech Capital Market Association (AKAT). The database consists of weekly net assets value of investment funds per unit share operating in the Czech Republic. The records made it possible to calculate the monthly results and consequently served as a starting point for measuring fund returns.

The study looks at open-ended funds classified by AKAT as equity funds. Since the number of investigated entities is limited, the funds of funds, which invest mainly in units shares of equity funds in accordance with their statute, were also taken into account. The decision to expand the research area in this way was motivated by the intention to prepare a sample, the size of which would make it possible to carry out statistical inference. The database of Czech investment funds includes survived, merged and disappeared funds. Hence, the sample is survivorship bias free.

The survey took place between January 2004 and December 2010. The time frames are not coincidental – they correspond with two significant events, which are namely the fact of issuing the act on collective investment in the Czech Republic, which defines a collective investment fund in accordance with the EU requirements (189/2004 Coll. ACT of 1 April 2004 on collective investment) and the end of works on the database.

In order to evaluate the performance of investment fund, the most popular measures of returns have been used. The following ratios have been applied: the rate of return, Jensen's alpha and Carhart measure.

A logarithmic rate of return is a version of return most frequently discussed in financial literature. The measure indirectly based on the values of funds' units share is defined as:

$$Y_{i,t} = \ln(\frac{NAV_{i,t}}{NAV_{i,t}}) \tag{1}$$

where: $Y_{i,i}$ is the logarithmic rate of return on fund i in the period t; $NAV_{i,i}$ is the unit share value on fund i in the period t; $NAV_{i,i-1}$ is the unit share value on fund i in the preceding period (t-1). The logarithmic return is also known as a force to interest

Another measure used in the study is connected with the standard Capital Asset Pricing Model. The slope coefficients (the so-called Jensen's alphas) of this regression model, estimated by the ordinary least squares (OLS) method, allow to calculate the abnormal returns of the analyzed

funds. The standard single-index model is calculated as follows (Jensen, 1968):

$$Y_{i,t} - r_{f,t} = \alpha_i + \beta_i (Y_{R,t} - r_{f,t}) + \varepsilon_{i,t} \tag{2}$$

where: $Y_{i,t}$ is the rate of fund return in the period t; the Jensen's α_i is the measure of out- or underperformance relating to the applied benchmark; $Y_{R,t}$ is the return on the local equity benchmark in the period t; $r_{f,t}$ is the mean risk-free return over the same period; β_i is a measure of the systematic risk of fund i; $\varepsilon_{t,t}$ means the random error in period t.

The CAPM's assumptions, particularly its four-factor version, developed by Carhart (1997) made it possible to estimate performance. The model is given as follows:

$$Y_{i,t} - r_{f,t} = \alpha_i + \beta_{0,i} (Y_{R,t} - r_{f,t}) + \beta_{1,i} SMB_t + \beta_{2,i} HML_t + \beta_{3,i} MOM_t + \varepsilon_{i,t}$$
 (3)

where: the Carhart α_i is the measure for fund i; SMB, as the risk factor in returns related to size, means the difference in return between the smallstock portfolio (the bottom 20% of market capitalization) and the big-stock portfolio (the top 80% of market capitalization) in the period t; HML_t , as the risk factor in returns related to book-to-market ratio, means the difference in return between the high book-to-market portfolio (the top 30% of market capitalization) and the low book-tomarket portfolio (the low 30% of market capitalization) in the period t; MOM_{o} , as the risk factor in returns related to the momentum effect,2 means the difference in return between a portfolio of past one-year winners and a portfolio of past oneyear losers in the period t.

The local equity benchmark covered in this study was the Prague Stock Exchange Index

(PX). The information on this index came from the official website of the Prague Stock Exchange (PSE). In order to compare fund returns with Czech risk-free returns, the treasury bill rate, defined as an average rate weighted by volume, on the three-month treasury bills sold at auctions has been used. The risk-free values were taken from the monthly reports of the International Financial Statistics IMF.

Collecting information on fundamental factors of Carhart model was quite a challenge: such indexes have never been recorded in the Czech Republic before. The monthly *SMB* and *MOM* factors were calculated on the basis of monthly reports relating to market capitalizations and prices of stocks came from PSE. The *HML* factors, in turn, additionally required the analysis of annual reports of companies from PSE.

It is difficult to analyze the Czech stock market because of its small size and heavy regulated industries, where the stock companies are operating. Thus, there is a possibility to compute unreliable returns using multifactor models. Accordingly, the size of the sample will be taken into account while interpreting results and making conclusions.

The monthly observations of slope coefficients' estimations for single-index and four-factor models and the calculation of logarithmic rates of return in one year periods allowed to evaluate investment fund performance. The abnormal returns verified by the Jensen's alpha and the Carhart measure, are connected with stock selection abilities or with the fact of obtaining inside information by some of the fund managers. If managers can forecast market conditions, they may

² The momentum effect is related to the investor's reaction to the information about past returns. On the basis of trading strategies, Jegadeesh and Titman (1993) found out that the strategy consisting in buying stocks with good performance and selling the ones which performed poorly in the past had significantly abnormal returns in subsequent periods.

take actions to include risk-appropriate stocks in investment portfolio. Jensen (1968) proved that if the stock selection ability really exists among fund managers, the estimated alphas will be positive. In other words, it is possible to achieve a return that exceeds a return from a market portfolio. The negative values of the applied regression models' slope coefficients, in turn, mean the costs exceeding the benefits in the event of an unsuccessful forecast.

The non-parametric and parametric methods based on ranks of funds will be applied as supporting research procedures. They will help to determine if investment fund performance is able to persist within a time period. The first, non-parametric method will be the analysis of the Spearman rank correlation, which shows the degree of dependence between performance ranks in the previous and following period.

The procedure consists in ranking the investigated funds by achieved returns. A few measures of returns may be employed. In order to find the difference between the performance ranks in the two consecutive periods, the rank correlation coefficient shall be calculated as follows (Huij and Derwall, 2008):

$$r_S = 1 - \frac{6\sum_{i=1}^{n} (x_i - y_i)^2}{n^3 - n}$$
 (4)

where: r_s is the Spearman rank correlation coefficient between the rankings in the previous period and those in the subsequent period; $\sum_{i=1}^{n} (x_i - y_i)^2$ is the sum of the squared differences between the funds' ranks over the previous (x_i) and the subsequent (y_i) period; n is the number of ranks.

A positive and statistically significant Spearman rank correlation coefficient indicates the existence of performance dependence in consecutive periods. In other words, if one variable is known, the similar value of the other can be

forecasted. The negative value of the correlation coefficient, however, suggests the specific dependence when the value of one variable increases and the values of the other decreases. A low value of the rank correlation coefficient indicates that the compared rankings are dissimilar.

The U-statistic determines the significance level of Spearman rank correlation coefficient and is calculated as follows:

$$U = \frac{r_s}{\sqrt{\frac{1}{n-1}}}\tag{5}$$

where: U is asymptotically normally distributed. If the estimated values of the U-statistic are larger than the critical value u_{α} for the significance level α , it can be assumed that the critical values for the significance levels of 10%, 5% and 1% are 1.65; 1.96 and 2.58 respectively.

The second research procedure is a regression analysis. The method makes it possible to carry out statistical inference about the performance dependence of funds in consecutive periods on the basis of Student's *t*-test (cf. Grinblatt and Titman, 1992; Goetzmann and Ibbotson, 1994). Because of the specific character of the dataset, the regression of percentile ranks was applied. The method, suggested by Collinet and Firer (2003), was adjusted to the Czech reality. The reason for using the funds' percentile ranks instead of the absolute rank was the low number of funds over the total horizon. A percentile rank is calculated as follows:

$$PR_{t,i} = \frac{MP_{t,i} - MP_{\min,t}}{MP_{\max,t} - MP_{\min,t}}$$
(6)

where: $PR_{i,i}$ means the result of percentile rank of the fund i in the period t, $MP_{i,i}$ means the value of the relative performance of fund i in the period t, $MP_{\max,i}$ and $MP_{\min,i}$ means the maximum and minimum value of the relative performance in the period t.

A slope coefficient was estimated by an ordinary least-squares (OSL) method for each pair of adjacent periods. Its statistical significance gives evidence to reject the null hypothesis about the performance in the previous period having no impact on the performance in the subsequent ones. The positive slope coefficient together with the significant t-statistic shall confirm the occurrence of fund performance persistence in successive periods, while the negative coefficient shall indicate the reversals in performance.

As for the presentation of the results concerning abnormal returns within the total study period (see table 2), only these funds which have survived the total period shall be taken into consideration. This in turn will make it possible to compare investment companies performance within the same analyzed time horizon. Hence, it will be justified to examine if the exclusion of non-survived entities would cause the distortion of the achieved results. For this purpose the analysis of survivorship bias will be applied.

The method used in this study is similar to the one proposed by Malkiel (1995) and consists of several stages. First, the investment portfolio of equity funds which existed throughout the whole study period has to be created. This portfolio will present the sample of survivors. Second, an opposite investment portfolio will be created. It will comprise the funds that existed at a certain point within the study period. In other words, the portfolio will present the sample of dead funds - not only the ones that disappeared or merged, but also funds that started functioning after the beginning of 2004. By including the last subgroup in the dead funds sample, it is possible to obtain a greater degree of precision while analyzing the survivorship effects. In financial literature the entities that survived till the end of the study period but started their activity after the had begun, were classified as survivors. However, because of a need for standardizing the time horizon of fund performance evaluation (see table 2) in the present study, the assumptions proposed by Malkiel (1995) have been modified.

At the next stage, the risk-adjusted returns will be used to estimate the survivorship bias. The rate of returns, Jensen's alphas and Carhart measures will be applied independently for all funds separately. The last stage of survivorship bias' analysis will be a comparison of the mean returns of the two mentioned investment portfolios within the total study period. The difference between them will indicate the value of an estimated survivorship bias. The significance of the obtained result will be tested by means of the well-known student's t-test for independent samples.

Empirical Results

Performance evaluation

The presentation of results will begin by the analysis of investment fund performance means within the time horizon. The three measures of returns, which show the possibility of achieving the abnormal returns in the study period, will be used. The knowledge of the Czech capital market situation within the period from 2004 to 2010 will be helpful during the interpretation of table 1.

The returns estimated on the basis of capital asset pricing models were used in the analysis of collective investment companies performance. Thus, the standard Jensen's alphas and Carhart measures, which to the author's knowledge have not been used in performance examinations of the Czech funds so far, were applied in this study. Unfortunately, more than 84% of returns from the single-index model and 89% from the four-factor model were statistically insignificant. Hence, the conclusions obtained by the applica-

Table 1 ▶

Mean abnormal returns of investment funds in the Czech Republic

Year	No. of funds	Mean rates of return	Return on PX	Rates of return - PX	Jensen's alphas	Carhart measures
2004	15	0.0578	0.4617	-0.4039	-0.0061	-0.0015
2005	14	0.1326	0.3465	-0.2138	0.0064	0.0202
2006	14	0.0367	0.0856	-0.0488	0.0001	0.0074
2007	16	0.0129	0.1112	-0.0983	-0.0033	0.0078
2008	21	-0.6173	-0.7317	0.1144	-0.0086	0.0086
2009	25	0.3109	0.2636	0.0473	0.0168	0.0219
2010	25	0.0861	0.0934	-0.0073	0.0029	-0.0007
Total horizon	130	0.0028	0.0900	-0.0872	0.0012	0.0091

Note: *, **, *** indicate statistical significance of annual measures at the level of 10%, 5% and 1%, respectively.

Source: Own estimates.

tion of these measures are preliminary and shall not play a decisive role while making a general evaluation about the performance of the Czech equity funds. The lack of significance of the slope coefficients in the mentioned models could be related to the market maturity – the capital market in the Czech Republic is classified as an emerging one; still, it is rarely analyzed by researchers.

The highest mean values of Carhart measures of above 1% per year were observed in 2005 and 2009. The mean values of Jensen's alphas were positive and exceeded the mentioned level in 2009. Such results can be partly shaped by the market tendencies in each particular period. Thus, a certain simplification of obtaining abnormal returns by investment funds can be used in this connection. It can be applied to the period when the Czech economy started suffering from the consequences of the financial crisis in 2007-2008. In the following year, the market situation improved, which was reflected in the superior returns of investment funds. Thus, it is the market situation which seems to be the reason for the existence of abnormal returns rather than the hypothesis of fund managers with

diverse skills or the fact of receiving an inside information.

The mean rates of return achieved by investment funds were compared directly with the return on the PSE index. Such a measure has shown that at the time of the biggest market falls in 2008, the analyzed entities suffered smaller losses than the PX index. In 2009, they started to go up faster than the local equity benchmark. The last row of table 1 presents the values of abnormal returns within the total time horizon. In general, the mean excess fund returns between 2004 and 2010, measured by the application of the asset pricing models, were slightly greater than zero. There are three explanations of this result. Firstly, most of the Jensen's alphas and Carhart measures for Czech equity funds were statistically insignificant. Secondly, the Czech investment funds are functioning in the capital market that is characterized by low liquidity and a high concentration ratio of equities. Thus, the fund managers and their counterparts from other CEE countries' may considerably differ as far as the effects of their actions taken at the same time are concerned. Finally, it is difficult to

treat the seven-year perspective that coincided with one of the biggest economy crises in history as a representative long-term period for performance evaluation.

Despite the statistical insignificance of estimated asset pricing models' parameters, which makes it difficult to achieve analytical conclusions, the author decided to present the frequency of occurrence of the value of return obtained by the application of the two measures (see table 1) in order to supplement the findings mentioned above. Figure 1 presents the distribution of annual Jensen's alphas and Carhart measures for all analyzed equity funds.

The mean value of the estimated Jensen's alphas rounded to two decimal places equaled 0.00. The equity funds achieved the similar mean returns in 58 cases. The positive alphas occurred insignificantly more often than the negative values, but only 4 annual outperforming returns could be referred to as statistically significant. In comparison to traditional alphas, the presented distribution of Carhart measures is more oblate. The values most frequent for this measure gave a similar mean value when rounded to two decimal places. The means occurred in 27 cases.

As far as the positive values of Carhart measures are concerned, the abnormal returns were statistically significant only in 10 cases.

The factors that indirectly influence the final fund returns and, at the same time, the fund attractiveness for clients, are worth attention and thus will be a subject of the section summarizing some of the observations concerning the evaluation of the Czech investment funds' performance. The values of particular factors' parameters of the applied models will help to determine the relation existing between the benchmarks and returns of the investigated investment funds (see table 2) within the total study period.

The analyzed investment funds presented in table 2 were equity funds operating in the Czech Republic continuously from 2004 to 2010. The disappeared funds or the new ones activated during the study period were not included in the list. Moreover, in order to evaluate the performance of equity funds in an identical time horizon, the number of the analyzed entities had to be reduced. Thus, it was reasonable to perform the analysis of survivorship bias (see section 5.3). As mentioned before, the majority of the estimated slope coefficients of single-index and four-factor

Figure 1 ▶

The frequency of distribution of the estimated annual Jensen's alphas and Carhart measures for equity investment funds (to two decimal places)

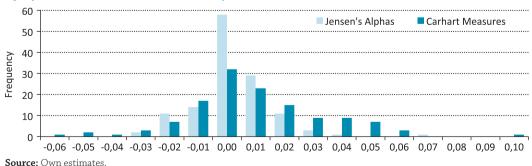


Table 2 ▶
Measure of performance using the single index model and the Carhart four-factor model in the total period from 2004 to 2010

Faulty fund	Sing	le index m	nodel		Car	hart four	-factor m	nodel	
Equity fund	Alpha	Mkt	R²	Alpha	Mkt	SMB	HML	MOM	R²
AKRO akciový fond nových ekonomik	-0.0018	* * * 0.5171	0.4707	-0.0030	* * * 0.4891	* -0.5965	0.2569	0.0229	0.5037
AKRO fond progresivních společností	-0.0060	* * * 0.3675	0.4068	-0.0090	* * * 0.3395	* * * -0.6851	* 0.4265	0.0804	0.45745
AKRO globální akciový fond, otevřený podílový fond	* * -0.0065	* * * 0.3449	0.0229	-0.0081	* * * 0.3293	-0.3656	0.2062	0.0421	0.5095
Fond farmacie a biotechnologie OPF ČP INVEST	-0.0022	* * * 0.2379	0.2646	-0.0027	* * * 0.2426	0.0996	-0.0438	0.0176	0.2680
Fond globálních značek OPF ČP INVEST	-0.0032	* * * 0.4808	0.6015	-0.0017	* * * 0.4689	-0.3660	0.3316	-0.0508	0.6139
Fond nových ekonomik OPF ČP INVEST	-0.0051	* * * 0.5952	0.4903	-0.0037	* * * 0.5927	-0.0478	0.0154	-0.0439	0.4912
Fond ropného a energetického průmyslu OPF ČP INVEST	-0.0006	* * * 0.4357	0.5193	0.0010	* * * 0.4250	-0.2806	0.2033	-0.0537	0.5284
ČSOB akciový mix	* * -0.0053		0.8210	-0.0015		-0.3147	0.2135	-0.1212	0.8336
IKS Akciový PLUS,	-0.0075	0.5365	0.6535	-0.0069	0.5310	-0.1474	0.1108	-0.0184	0.6553
Investiční společnost České spořitelny, a.s., SPOROTREND	0.0029	* * * 0.9039	0.6306	-0.0070	* * * 0.8608	* * -0.8853	0.3132	0.2824	0.6614
Pioneer – akciový fond	-0.0044	* * * 0.4480	0.6191	-0.0021	0.4425	-0.1679	0.1537	-0.0726	0.6237
Fénix dynamický PLUS	-0.0050	* * * 0.3762	0.4571	-0.0037	* * * 0.3591	* * -0.4621	0.3510	-0.0465	0.4817
Investiční společnost České spořitelny, a. s., AKCIOVÝ MIX FF	-0.0045	* * * 0.4882	0.6782	-0.0024	* * * 0.4789	-0.2330	0.1586	-0.0658	0.6866
Investiční společnost České spořitelny, a.s., GLOBAL STOCKS FF	-0.0042	* * * 0.3916	0.4739	-0.0014	* * * 0.3789	-0.3773	0.3308	-0.0895	0.4910

Notes: For both the single-index model and the Carhart four-factor model, Alpha means a measure of out- or underperformance; Mkt, in accordance with Jensen's (2) and Carhart's (3) formulas, stands for the return on the local equity benchmark; R2 refers to a determination coefficient; SMB, HML and MOM are the risk factors in returns from the Carhart's (3) formula. *, **, *** indicate statistical significance of annualized measures at the level of 10%, 5% and 1%, respectively.

Source: Own estimates.

model were statistically insignificant; therefore, it is difficult to make inferences about the competitiveness of the analyzed entities. As it was expected, the local equity benchmark had significant influence on the performance of the ana-

lyzed entities. Only in a few cases have the obtained results shown the relation existing between the fundamental factors such as size (*SMB*) or book-to-market ratio (*HML*) and the fund performance. The momentum effect (*MOM*) had an

insignificant influence on the performance of the analyzed entities.

The results correspond well with the ideas of Bialkowski and Otten (2010) about mutual funds in Poland, where the market is more representative than in the Czech Republic. They discovered that there are two important factors that influence the performance of Polish equity funds in a substantial way, these are namely the market factor and the size factor, where the former is the most vital one. In general, all the obtained values of alphas in single-index and four-factor models from their study were negative at various significance levels. The study by Podobnik, Balen, Jagric and Kolanovic (2007), in turn, shows that the mean values of CAPM alphas for Croatian and Slovenian mutual funds and Bosnian investments funds equaled slightly more than 0 and were in majority statistically insignificant. Thus, the performance evaluation of mentioned funds is similar to the findings of investment fund performance in the Czech Republic.

According to Novak and Petr (2010), the results presented in studies concerning the U.S. $\,$

market, which show the relation existing between fund performance in consecutive periods and the factors such as the variation in market return, size, book-to-market ratio and a short-term historical stock returns, depend upon the analyzed sample and the time horizon. Hence, the conclusions which may be drawn from the present study hold true only for the analyzed entities within the given study period, and as such shall not be treated as universal for all funds or all time horizons.

Predicting Performance

An additional aim of this study was to investigate if equity funds in the Czech Republic tend to repeat their performance in subsequent periods. Thus, it was necessary to analyze performance dependence of investment funds in consecutive periods. The results will be presented by means of the three following measures of returns: logarithmic rate of return, Jensen's alphas and Carhart measures. The results of the non-parametric method are presented in table 3.

The analysis carried out by the application of Spearman's rank correlation has shown weak evi-

Table 3 ▶
Results of Spearman rank correlation's analysis

Periods	Rate of	return	Jensen	's alpha	Carhart measure		
Periods	r _s	U	rS	U	r _s	U	
2005/2004	0.1824	0.6577	-0.1780	-0.6419	0.1385	0.4992	
2006/2005	0.5648	**2.0365	-0.3319	-1.1966	0.5121	*1.8464	
2007/2006	0.3846	1.3868	0.1121	0.4041	0.3890	1.4026	
2008/2007	-0.2294	-0.8885	0.1912	0.7404	-0.1441	-0.5582	
2009/2008	-0.8792	***-3.9320	-0.6000	* * * -2.6833	-0.4390	* *-1.9631	
2010/2009	0.3469	*1.6996	0.2662	1.3039	0.3131	1.5338	
total horizon: 2004-2010	-0.2046	**-2.0767	-0.1412	-1.4334	-0.1210	-1.2283	

Note: *, **, *** indicate the grounds to reject the null hypothesis about the independence of fund performance in consecutive periods at the respective levels of significance of 10%, 5% and 1%.

Source: Own estimates.

dence of the existence of performance dependence in consecutive short periods. In general, the obtained results are measure sensitive. The dependence of ranked returns in the following two years was most often noticeable in case of rates of return. All the measures used in 2009/2008 achieved negative and statistically significant performance correlation, which probably results from the change of tendencies in the stock market. Within the total time horizon, only the rates of return have supplied statistically significant grounds for rejecting the null hypothesis about performance independence. This relation took the form of negative correlation for the period between 2004 and 2010.

The second of the applied research procedures is related to the analysis of percentile rank regression. The results achieved by the application of this method indicate the lack of ranking dependence in consecutive periods within the total time horizon and particular annual periods (see table 4). In case of the rates of returns and Jensen's alphas, it was observed only in 2009/2008 that the rank position of a fund in the previous

period had strong influence on its position in the following period. The influence was negative, which may be explained by the trends' reversal in the capital markets at that time.

The supporting analysis, allowing to evaluate the degree of performance persistence, did not provide any strong evidence of repetitive fund performance in consecutive periods. Hence, the past performance of funds cannot be the only factor in forecasting the unit value of investment funds for clients in the Czech Republic. In general, the obtained results were conditioned by the applied measures of returns and research methods. As the statistical significance of the values obtained by means of Jensen's alphas and Carhart measures was relatively low, the conclusions drawn from these results should be treated with reserve

According to financial literature (see Lynch and Musto, 2003), poor past results provide information only about past performance, and it is difficult to predict future performance relying on them. Unfortunately, due to the limited scope of the persistence examination, it was impossible to analyze the obtained results by ca-

Table 4 ▶
The analysis of percentile ranks regression

D. i. I.		Rate of return	1	J	ensen's alpha	1	Carhart measure			
Periods	d	t-stat	R²	d	t-stat	R²	d	t-stat	\mathbb{R}^2	
2005/2004	0.6158	**2.6404	0.3675	-0.3151	-1.0179	0.0795	0.3211	0.8893	0.0618	
2006/2005	0.3865	1.5067	0.1591	-0.1728	-0.8294	0.0542	0.3381	*1.8771	0.2270	
2007/2006	0.1966	1.0500	0.0841	0.0790	0.4395	0.0158	0.1441	0.6016	0.0293	
2008/2007	-0.0488	-0.1875	0.0025	0.3811	1.1559	0.0871	-0.1488	-0.5747	0.0230	
2009/2008	-0.7710	* * * -7.0789	0.7251	-0.3232	* *-2.1735	0.1991	-0.4663	-1.4744	0.1027	
2010/2009	0.2697	1.4782	0.0868	0.1564	0.8154	0.0281	0.1543	1.0867	0.0488	
total horizon: 2004-2010	0.1123	1.2140	0.0142	-0.0152	-0.1621	0.0003	0.0463	0.4857	0.0023	

Note: *, **, *** indicate the grounds to reject the null hypothesis about the lack of influence of a percentile rank in a previous period on a rank in a following period at the respective significance level of 10%, 5% and 1%.

Source: Own estimates.

tegorizing funds with regard to returns. Hence, the supporting evaluation of the persistence of abnormal returns is and shall be treated as preliminary one.

An analysis of survivorship bias

The analyses concerning the abnormal returns and performance dependence in consecutive periods presented so far did not exclude the disappeared funds (with the exception of results presented in table 2). However, the influence of the probable survivorship effect on the results from the Czech database also seems to be an interesting research subject. The distortion of the results based on the sample containing survivorship bias may result from selection bias. It is particularly important while interpreting the rankings of asset management companies by investors. In most cases these rankings do not take the information about the non-survived entities into account. By the application of Malkiel's

(1995) research procedure adjusted to Czech reality, it was possible to compare the mean returns of Czech equity funds in the period from 2004 to 2010 (see table 5).

In financial literature a survivorship bias is referred to as a tendency of failed companies to be excluded from performance studies because they no longer exist. In this study, the funds which started functioning after the beginning of 2004 were excluded from the sample as well. Accordingly, the greater difference between the mean returns of survivors and mean returns of dead funds was observed, particularly if performance was measured by rate of returns. However, none of the estimated values of survivorship bias was statistically significant. In general, the mean returns of dead funds sample were considerably worse than the ones of survivors' sample, which is obvious as the funds with unsuccessful performance tend not to survive (cf. Malkiel 1995).

Table 5 ▶
The effect of survivorship bias observed in the Czech data base

	Number	Number	Rate of	return	Jensen	's alpha	Carhart	measure		
Year	of survivors	of dead funds	Mean return of survivors	Mean return of dead funds	Mean return of survivors	Mean return of dead funds	Mean return of survivors	Mean return of dead funds		
2004	14	1	0.0616	0.0055	-0.0056	-0.0135	-0.0012	-0.0048		
2005	14	0	0.1327	n.a.	0.0064	n.a.	0.0202	n.a.		
2006	14	0	0.0367	n.a.	0.0001	n.a.	0.0074	n.a.		
2007	14	2	0.0271	-0.0863	-0.0020	-0.0125	0.0089	-0.0001		
2008	14	7	-0.5951	-0.6616	-0.0086	-0.0085	0.0040	0.0177		
2009	14	11	0.3082	0.3143	0.0165	0.0172	0.0248	0.0183		
2010	14	11	0.0641	0.1142	0,0011	0.0051	0.0011	-0.0030		
total h	total horizon: 2004-2010		0.0050	0.0050 -0.0628		0.0011 -0.0025		0.0011 -0.0025 0.0093		0.0056
	orship bias t's t-test		0.06 t-test 0			0.0036 t-test 0.5258	0.003 t-test 0.226			

Note: *, **, *** indicate significance level for t-test of 10%, 5% and 1%, respectively; n.a. means not available data.

Source: Own estimates.

Summary and conclusions

The aim of the study was to analyze performance of the Czech investment funds. The database made it possible to make general observations concerning the issue of performance persistence in consecutive periods and the influence of dead funds on performance of the funds that survived in the form of survivorship bias. The evaluation of results made by fund managers provided general information about investment fund performance in the Czech Republic and may be helpful for clients as far as the choice of collective investment companies is concerned.

The part of investigated equity funds, measured by rate of returns, Jensen's alphas and Carhart measures, had slightly higher performance, better than the mean market return. However, the majority of results in annual periods and within the total time horizon was statistically insignificant, so it is difficult to make inferences about the actual competitive advantage of investment funds. Moreover, it was observed that fund performance depends upon the market factors. In general, the PX index, as a market factor of the single index as well as the four-factor asset pricing models, was responsible for investment fund performance. The fundamental factors (SMB and HML) were less important. The momentum effect (MOM), a popular term in financial literature, was insignificant with reference to fund performance. Such findings may be related to the small size of PSE as well as to heavy regulated industries where the biggest stock companies are operating.

In general, various returns of particular Czech investment funds prove the existence of competition in the sector. Additionally, the findings of investment fund performance in the Czech Republic turn out similar to the results of performance evaluation in other countries in the region

(e.g. Croatia, Slovenia or Bosnia and Herzegovina) but it is difficult to relate them to findings made in more representative markets.

The investigation did not confirm the existence of performance dependence in consecutive periods. Hence, the investors have a restricted possibility to predict market results. However, the obtained results shall encourage future investigations of investment fund performance in the Czech Republic with the application of more advanced methods, particularly because the number of observations is increasing, and the situation of the Czech investment fund industry is becoming more stable. The larger samples will help to determine the strength and character of the phenomenon of investment companies' performance persistence. The low values of survivorship bias of equity funds in the Czech Republic could allow to exclude non-survived entities from the study. The selection bias was statistically insignificant for performance analysis. However, it may change together with the increase in the number of investment funds.

In brief, the study does not provide any arguments against the theory of market efficiency. The obtained results suggest the existence of abnormal returns in short periods; however, they are statistically insignificant. The slight outperformance by some funds is related to performance dependence in consecutive periods and caused rather by market factors than managerial skills. Such findings may result from the typical limited liquidity and the specific shallowness of the Czech stock market, which influence the effect of fund managers' actions. However, the legal conditions for the functioning of funds in the Czech Republic may change in the near future with the implementation of regulations that are currently being prepared and, among others, cover organisational requirements, rules of conduct, risk management

and fund mergers (see CNB, 2011). The regulations are designed to attract more investors and to ensure higher safety standards for their assets.

Acknowledgements

I would like to thank the guest editor, Irena Jindřichovská, and the reviewer for their helpful comments and suggestions. Furthermore, I would like to express my gratitude to Krzysz-

tof Jackowicz from the Kozminski University, Warsaw, Katarzyna Perez from the Poznan University of Economics and Jiří Novák from the Charles University, Prague, for their guidance and support. My appreciation and thanks are also extended to Jakub Hrbek from the Czech Capital Market Association (AKAT) for supplying the data used in this study. Any possible errors are the sole responsibility of the author.

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THE ANALYSIS OF CZECH INVESTMENT FUNDS PERFORMANCE

Dariusz Filip, Ph.D.

ABSTRACT

The paper presents the analysis of efficiency of equity funds performance in the Czech Republic. The study took place between January 2004 and December 2010 and is based on the measures of returns frequently mentioned in financial literature. In general, the empirical results do not confirm the occurrence of abnormal returns that could be statistically significant. However, periodical returns of Czech investment funds indicate the existence of competition in the sector but without a competitive advantage of particular funds. The results obtained by the application of the single-index asset pricing model (CAPM) and four-factor Carhart model indicate an influence of the market factor on funds' returns. The performance dependence of investment funds in consecutive periods was hardly observed. The findings encourage further investigations of investment fund performance in the Czech Republic in future, when more data will be available.

KEYWORDS

Mutual funds, performance evaluation, emerging market, survivorship bias, Carhart model.

JEL CLASSIFICATION

G11, G14, G23

Ústavní omezení zadlužování jako cesta ke zvýšení konkurenceschopnosti

Ing. Petr Mach, Ph.D.

Jednou z významných brzd konkurenceschopnosti ekonomik je rostoucí míra státního zadlužení. Vhodná změna právního rámce může – z pohledu konstituční ekonomie – účinně zabránit nadměrnému zadlužování a podpořit tak dlouhodobou konkurenceschopnost hospodářství ve prospěch všech daňových poplatníků i osob placených státem. V následujícím textu v první části popíšeme problém státního zadlužování, které může skončit až státním bankrotem. Ve druhé části nastíníme teoretický základ ústavního omezení zadlužování. Ve třetí části zmíníme příklady existujících ústavních omezení proti zadlužování a jejich ekonomickou úspěšnost. V závěru se vyslovíme pro aplikaci závěrů institucionální ekonomie ve smyslu přijetí ústavního pravidla proti zadlužování.

Problém státního zadlužování

Rostoucí dluh států vede k rostoucímu břemenu pro státní rozpočty v podobě úroků placených věřitelům. Pokud roste v očích investorů pravděpodobnost, že závazky státu nebudou řádně spláceny, roste požadovaná úroková míra a úrokové břemeno pak roste rychleji než jistina dluhu. Když se již tak zadlužený stát dostane do recese, kdy mu autonomně klesají daňové příjmy, nebo když se dostane do jednorázových problémů spojených např. se sanací bankovního sektoru, přibližuje se rychle situaci, kdy není schopen řádně splácet závazky. Tato situace bývá dnes často označována jako credit default, neboli lidově řečeno – státní bankrot.

Reálnému státnímu bankrotu obvykle předcházejí politicky organizované mezistátní půjčky s cílem bankrot odvrátit. V situaci, kdy si od dané země není ochoten – ani za vysoký slibovaný výnos – koupit dluhopis žádný soukromý investor, může země vyjednat nouzovou politicky motivovanou půjčku od jiné vlády či nadnárodní vládní organizace (Mezinárodní měnový fond, Světová banka, Evropská unie apod.). Na rozdíl od soukromého kupování dluhopisů, bývají tyto půjčky striktně podmíněné – obvykle vynucenou privatizací, přizpůsobením daní a výdajů apod. Motivací pro poskytování záchranných státních půjček je obvykle úvěrová angažovanost mocných zájmových skupin (např. když mnoho německých voličů má vklady v penzijních fondech, jež investovaly část prostředků do řeckých dluhopisů), případně obava z nepokojů nebo státního převratu v zemi, kterou postihne státní bankrot (pro EU by převrat v členské zemi představoval politický problém).

Státní bankrot – neschopnost státu hradit své závazky – dopadá tíživě na všechny věřitele, ať zahraniční či domácí. Zahraničními věřiteli jsou obvykle investiční a penzijní fondy či centrální banky. Pro ně úvěrová angažovanost v jednom státě obvykle představuje jen zlomek jejich portfolia. Domácími věřiteli jsou zejména banky a potažmo jejich klienti – v jejich případě tvoří často dluhopisy jejich vlády podstatnou část portfolia, proto na ně státní bankrot dopadá mnohem tíživěji.

Státnímu bankrotu předchází run na banky, které nejsou schopny vyplatit v hotovosti všechny vklady, když většinu aktiv mají ve státních dluhopisech. Vlády v takové situaci obvykle volí "menší zlo" – dodají bankám "likviditu" prostřednictvím nouzového úvěru od centrální banky. Masivní zvýšení množství peněz pak zaplatí všichni obyvatelé v podobě inflace. Alternativním řešením je "měnová reforma" – kdy na základě zákona mohou klienti bank vybrat ze svých úspor nad daným limitem jen poměrnou část. Příkladem takového řešení byla československá měnová reforma roku 1953. Jak uvádí Miroslav Tuček, "Všechny mzdové a sociální příjmy byly sníženy v poměru 5:1... Hotovosti občanů byly vyměněny v poměru 5:1 jen do částky 300 Kčs na osobu, zbytek v poměru 50:1, vklady občanů... se přepočítávaly odstupňovaně, částky nad 50 tisíc v poměru 30:1, životní pojistky v poměru 50:1. Kromě toho byly anulovány vklady vázané po měnové reformě v r. 1945, veškeré státní dluhopisy (a to i emise z r. 1946) a všechny další tuzemské cenné papíry." (2003, s. 113)

V Evropě se v poslední době do potíží se splácením svých závazků dostalo několik států včetně tří členů eurozóny – Řecka, Irska a Portugalska. Jejich možnost řešit problém runu na banky prostřednictvím dodání likvidity ze strany centrální banky coby "věřitele poslední instance" je závislá na rozhodnutí Evropské centrální banky, která je smluvně vázána dodržovat cíl stabilní cenové hladiny a kde každá jednotlivá členská země má jen zlomek hlasovací váhy v rozhodujících orgánech.

Státní bankrot jako důsledek předlužení tedy dopadá tvrdě na všechny věřitele státu, od zahraničních investorů do státních dluhopisů přes domácí banky a jejich klienty po osoby závislé svými příjmy na státu (státní zaměstnanci, penzisté, příjemci státních zakázek). Státní bankrot také může mít jiný průběh v zemi, která má vlastní centrální banku s právem emise, a v zemi, která nemá vlastní svrchovanou měnu.

Ať již je státní bankrot "řešen" inflací či anulováním úspor, znamená ztrátu bohatství pro valnou

část populace s vážnými hospodářskými a politickými důsledky. V lepším případě vede státní zadlužování k dodatečnému břemenu v podobě úroků z dluhů, v horším případě vede ke státnímu bankrotu, který může vyústit v násilí či diktaturu. Jestliže státní dluh identifikujeme jako "problém", má smysl se zabývat jeho příčinami a možnou prevencí.

Státní dluh jako problém veřejné volby

Státní dluh není omyl, náhoda či nehoda. Státní dluh je dlouhodobě sledovaným ukazatelem a veřejnost i politici předlužených zemí nemohli nepozorovat, že se jejich fiskální situace zhoršuje. Přesto se zdá, jakoby voliči i politici vždy dávali přednost krátkodobému prospěchu (neochota k rozpočtovým škrtům) na úkor dlouhodobého fiskálního zdraví (preferují rostoucí dluh a rostoucí úrokové náklady).

Jestliže je státní bankrot nepříjemnou záležitostí, proč se k němu mnohé státy takřka vědomě a cíleně přibližují?

Existuje problém nepříznivé "veřejné volby": politici podléhají politickému horizontu volebního období. Jejich pokušení slibovat vyšší výdaje než daně je příliš vysoké. Jejich pokušení odkládat řešení přes další volby je příliš silné. Důsledkem je zadlužování států, které ohrožuje nejen konkurenceschopnost jednotlivých států, ale i jejich samotnou nezávislou existenci.

Jinými slovy, demokracie v podobě, jak ji známe ve většině západních států, se snadno zvrhává v nekontrolované zadlužování – lidé volí vyšší výdaje než daně, chtějí, aby cenu za deficitní financování platili – ať již jakoukoliv formou – daňoví poplatníci a občané v budoucnu.

Jestliže preference voličů upřednostňují státní zadlužování před nižšími vládními výdaji, jde o problém institucionální.

Polem ekonomické vědy, které se zabývá rolí institucí na rozhodování jednotlivců, je "in-

stitucionální ekonomie". Její podmnožinou je "konstituční ekonomie", která se zabývá vlivem ústavních pravidel na ekonomické rozhodování lidí. Ústavní pravidla jsou "pravidla vytváření pravidel", představují vymezení kompetencí. Podstatou ústavních pravidel je jejich větší stálost oproti běžným zákonům – na jejich změny je obvykle potřeba kvalifikovaná většina, tj. větší než prostá většina těch, kdo rozhodují.

Zakladatelé "konstituční ekonomie" – Geoffrey Brennan a nositel Nobelovy ceny za ekonomii James Buchanan ve svém díle "The Power to Tax: Analytical Foundations of a Fiscal Constitution" polemizují s hobbesovskou tezí, že "neomezená vláda je jedinou alternativou vůči chaosu anarchie: "Odmítáme hobbesovský předpoklad, že panovník nemůže být kontrolován konstitučními omezeními. Historie ukazuje, že vlády zjevně byly a jsou ve svém konání omezovány konstitučními pravidly. Přesný důvod, proč tomu tak je, není pro naši analýzu podstatný. Ovšem celá konstrukce naší analýzy je založena na víře, že ústavy fungovat mohou a že daňová pravidla zabudovaná do ústav mohou dlouhodobě přetrvávat." (2000, s. 13)

Ve své analýze autoři považují v souladu s Thomasem Hobbesem stát za "Leviatana" (který, když není krocen, zdaňuje lidi maximální mírou) – tedy nepočítají s existencí "osvícené vlády" a hledají vhodná ústavní omezení. Ve svém díle se především zabývají otázkou ústavních omezení, pokud jde o zdaňování. Zabývají se ale i dalšími dvěma zdroji, které má Leviatan k dispozici: 1) využíváním "inflační daně" – tedy situace, kdy si stát pomáhá k příjmům tištěním peněz tím, že využívá monopol na emisi měny, a 2) financování výdajů pomocí půjček – tedy zvyšováním státního dluhu.

Ústavní omezení centrální vlády, pokud jde o růst daní či veřejných výdajů, existují jen v několika málo státech (např. ve Švýcarsku). Zde omezení existuje historicky a nelze říct, že by bylo inspirováno konstituční ekonomií – švýcarská konfederace vznikla "zdola", dobrovolným sdružením jednotlivých kantonů, které svěřily centrální vládě jen omezené pravomoci. Dalším příkladem zabudování omezení pro růst výdajů na základě konstituční ekonomie je Colorado, jehož ústava limituje růst výdajů na úrovni státu. Konstituční ekonomie měla značný vliv také při zavádění omezení práva států financovat své výdaje tištěním peněz, tedy prvků tzv. nezávislosti centrální banky.

Řada zemí úspěšně zkrotila stát ve zneužívání měny zabudováním prvků nezávislosti centrálních bank a stanovením cílů, pokud jde o cenovou hladinu. Většina států dnes pomocí zákonů zakazuje přímé nakupování vládních dluhopisů centrální bankou a centrální bankéři nejsou přímo odvolatelní vládou.

V mnoha státech je přímo v ústavě zabudovaný úkol udržovat stabilní cenovou hladinu. Např. v Ústavě České republiky se říká: "Česká národní banka je ústřední bankou státu. Hlavním cílem její činnosti je péče o cenovou stabilitu (čl. 98, odst. 1)." Podobná ustanovení má v ústavách od 90. let minulého století řada států a výsledkem bylo prudké snížení míry inflace. Zatímco až do 80. let 20. století bylo běžné, že v zemích OECD existovala vysoká inflace či hyperinflace, posledních dvacet let je ve znamení stabilní cenové hladiny nebo jen mírné inflace.

Nicméně když se státy přestaly spoléhat na státní tiskárnu peněz jako na snadný zdroj příjmů, začalo se prohlubovat státní zadlužení. Leviatan, kterému bylo svázáno jedno mocné chapadlo ovládající tiskárnu na peníze, začal o to více využívat druhé nespoutané chapadlo vydávající jeden dluhopis za druhým.

Buchanan a Brennan argumentují, že by měla existovat i ústavní omezení pro vytváření státního dluhu. "Právo vlády brát si půjčky (tj. vydávat dluhopisy) je právo vydávat cenné papíry, které nesou povinnost vlád platit držitelům těchto cenných papí-

rů (vládních dluhopisů) v budoucích obdobích určené sumy, získané nejspíš z daní vybraných od obyvatel v těchto budoucích obdobích. Pro účely smysluplné analýzy předpokládáme, že dluhy musí být spláceny. Vláda, u které se má za to, že nebude schopna své závazky hradit, by nebyla schopná své dluhopisy vůbec udat." (2000, s. 123).

Autoři se zabývají i tím, zda existuje smysluplné oprávnění vydávat peníze na dluh v mimořádné situaci, přiklánějí se však k tomu, že takové oprávnění by mohlo být zneužíváno: "Opakované téma v klasické (tedy předkeynesovské) ekonomii veřejných financí je koncept ´mimořádných výdajů´ (např. válečných) ... S ohledem na to by případné ústavní vymezení práva vlády zadlužovat se mohlo být omezeno na období fiskálního ´ohrožení´. Přesná definice takových stavů nouze je samozřejmě vysoce problematická. Bylo by jistě nerozumné svěřit Leviatanovi právo libovolně se zadlužovat jen tím, že by vyhlásil "stav ohrožení"... Z těchto důvodů by možná bylo lepší zadlužování zakázat úplně" (tamtéž, s. 123–124)

Nakonec se autoři vyslovují pro určité omezení možnosti zadlužování i ve stavech ohrožení: "I v situacích ohrožení by měly zůstat v platnosti omezení pro vnější zadlužování na rozdíl od možnosti vnitřního zadlužení." (tamtéž, s. 128)

Existující konstituční omezení

Státní bankrot Řecka – oddálený prozatím nouzovou půjčkou od států eurozóny a Mezinárodního měnového fondu – možná odstartoval vlnu zavádění takových pojistek do ústav evropských států. Zatímco donedávna byly ústavní pojistky proti zadlužování tématem pro akademické diskuse liberálních ekonomů, dluhová krize eurozóny znamená změnu. Politici významných států začali skutečně ústavní omezení zadlužování prosazovat.

Institucionální omezení mohou mít formu ústavně zakotveného pravidla nebo pravidla přijatého prostou většinou. Výhodou ústavně zakotveného pravidla je jeho vymahatelnost (jeho nedodržování může být napadeno u ústavního soudu) a jeho stabilita (nelze jej zrušit jinak než ústavní kvalifikovanou většinou). Prostý zákon či deklaraci vlády je na druhé straně snazší prosadit, ovšem dodržování takového závazku nemusí být respektováno příští vládou.

Příklady zemí s pravidlem, které není zakotveno v ústavě, jsou Estonsko, Chile a Švédsko. Estonsko hospodaří s vyrovnaným rozpočtem, aniž by mělo tuto povinnost zakotvenou v ústavě nebo v jiném dokumentu. Podle Andruse Säälika, vedoucího odboru hospodářské analýzy estonského ministerstva financí, existuje mýtus, že má Estonsko pravidlo vyrovnaného rozpočtu v ústavě. Podle něj je pravidlo vyrovnaného rozpočtu ale vryto hluboko v myslích obyvatel (2007). V případě Estonska je tedy pravidlo vyrovnaného rozpočtu pravidlem nepsaným, a přesto, nebo právě proto, vysoce účinným.

Jak ukazuje tabulka 1, státní dluh Estonska je dlouhodobě stálý na úrovni 6 % HDP, tedy na úrovni zděděné z dob Sovětského svazu.

Tabulka 1 ▶
Veřejný dluh Estonska (% HDP)

1997	1998	1999	2000	2001	2002	2003
7,0	6,0	6,5	5,1	4,8	5,7	5,6
2004	2005	2006	2007	2008	2009	2010
5.0	4.6	4.4	37	4.6	7.2	66

Pramen: EUROSTAT, 2011.

V Chile existuje rozpočtové pravidlo v podobě usnesení vlády. Ta se zavázala hospodařit tak, aby rozpočet dosahoval strukturálního přebytku ve výši 1 % hrubého domácího produktu (viz Garcia et al., 2005).

Ve Švédsku má rozpočtový závazek formu zákona přijatého v roce 2000. Zákon přikazuje pra-

vidlo vyrovnaného hospodaření obcím a krajům (které jsou ve Švédsku zodpovědné za zhruba 40 % veřejných výdajů). Zákon také zavazuje centrální vládu hospodařit s přebytkem 2 % hrubého domácího produktu, a to "v průběhu hospodářského cyklu" (viz Lindström, 2007). Švédsko tedy může mít nižší přebytek, příp. mít deficit v době recese, pokud je tento nižší přebytek (či deficit) kompenzován vyšším přebytkem v době konjunktury (viz tabulka 2). Švédsko své fiskální pravidlo dodržuje impozantním způsobem, hospodaří dlouhodobě s přebytkem, jak ukazuje tabulka 3 a švédský veřejný dluh tak poklesl z 73,3 % HDP v roce 1996 na 39.8 % HDP v roce 2010.

Tabulka 2 ▶
Saldo veřejných financí Švédska (% HDP)

1999	2000	2001	2002	2003	2004
0,9	3,6	1,5	-1,3	-1,0	0,6
2005	2006	2007	2008	2009	2010

Pramen: EUROSTAT, 2011.

Tabulka 3 ▶ Veřejný dluh Švédska (% HDP)

1996	1997	1998	1999	2000	2001	2002	2003
73,3	71,2	69,9	64,3	53,9	54,7	52,5	51,7
2004	2005	200) 6 20	007 2	800	2009	2010

Pramen: EUROSTAT, 2011.

Několik zemí má pojistky proti zadlužování a přílišnému přerozdělování vtěleno přímo do ústavy. Mezi nejzřetelnější příklady patří Hongkong a Švýcarsko.

Hongkong

Hongkong má pravidlo vyrovnaného rozpočtu zakotveno v článku 107 své ústavy: "Hongkong dodržuje princip předkládání výdajů v mezích příjmů a usiluje o vyrovnané hospodaření, vyvarovává se deficitů a rozpočet mění v tempu růstu hrubého domácího produktu."1 Hongkongská ústava tak vyžaduje nejen vyrovnané hospodaření, ale v druhé části věty obsahuje i pojistku proti zvyšování státního přerozdělování vzhledem k HDP (viz tabulka 4). Hongkongské ústavní omezení je tak nejen omezením proti zadlužování, ale nepřímo i proti zvyšování daní. Jak ukazuje tabulka 5, i díky ústavnímu omezení se celková míra státního přerozdělování v Hongkongu pohybuje dlouhodobě kolem 17 % HDP a nenarůstá.

Tabulka 4 ▶ Saldo veřejných financí Hongkongu (% HDP)

1999	2000	2001	2002	2003	2004
0,8	-0,6	-4,7	-4,7	-3,1	-0,3
2005	2006	2007	2008	2009	2010

Pramen: International Monetary Fund, World Economic Outlook Database, April 2011.

Tabulka 5

Celkový objem vládních výdajů Hongkongu (% HDP)

1997	1998	1999	2000	2001	2002	2003
15,1	17,2	17,2	17,8	17,8	18,3	19,1
2004	2005	2006	2007	2008	2009	2010

Pramen: International Monetary Fund, World Economic Outlook Database, April 2011.

¹ Článek 107 Základního zákona Hongkongu. Dostupné z URL: http://www.basiclaw.gov.hk/en/basiclawtext/ chapter_5.html.

Švýcarsko

V prosinci 2001 Švýcaři v referendu schválili změnu ústavy, podle které "Konfederace udržuje příjmy a výdaje vždy v rovnováze". V mimořádné situaci je možné schválit deficit, ale je k tomu potřebná kvalifikovaná většina všech zákonodárců v obou komorách, a deficit musí být vykompenzován v následujících letech. Jak ukazuje tabulka 6, Švýcarsko dokázalo toto pravidlo dlouhodobě dodržovat, a to i během globální recese roku 2009.

Tabulka 6 ▶
Saldo veřejných financí Švýcarska (% HDP)

2001	2002	2003	2004	2005
-0,3	-1,1	-1,2	-1,1	-0,2
2006	2007	2008	2009	2010

Pramen: International Monetary Fund, World Economic Outlook Database, April 2011.

Švýcarská ústava obsahuje i únikové ustanovení pro případ mimořádné situace. Parlament každoročně schvaluje na návrh vlády strop výdajů na základě očekávaných příjmů. Strop lze v mimořádné situaci navýšit za podmínky souhlasu ústavní většiny a přijetí plánu splátek takového navýšení v následujících letech.

Rakousko

Rakousko zabudovalo do své ústavy omezení proti zadlužování v roce 2008. Článek 13, odst. 2 Ústavy Rakouské republiky říká: "Spolková vláda, zemské vlády a vlády municipalit musí usilovat o celkovou makroekonomickou rovnováhu a dlouhodobě vyrovnané veřejné finance."

Jak ukazuje tabulka 7, zatím je Rakousko daleko od plnění cíle dlouhodobě vyrovnaného rozpočtu. Rakouská ústava přitom předpokládala, že článek 13, odst. 2 o vyrovnaném rozpočtu vstupuje v platnost počínaje rokem 2009 a finanční rámec na léta 2010–2012 už bude připraven v souladu s tímto ustanovením.⁴ Jak ale ukazuje tabulka, rozpočtový deficit rakouské vlády v roce 2010 dosahuje nejvyšších hodnot za poslední léta.

Tabulka 7 ▶
Saldo veřejných financí Rakouska (% HDP)

1999	2000	2001	2002	2003	2004
-2,3	-1,7	0,0	-0,7	-1,5	-4,5
2005	2006	2007	2008	2009	2010

Pramen: EUROSTAT, 2011.

Jak to, že rakouské ústavní omezení nefunguje? Pravidlo "dlouhodobě vyrovnaných veřejných financí" zní na první pohled velmi striktně, ale zjevně umožňuje různé výklady. Co znamená "celková makroekonomická rovnováha" (gesamtwirtschaftlichen Gleichgewichtes)? Co znamená "dlouhodobě vyrovnané veřejné finance" (nachhaltig geordnete Haushalte)? Oficiální anglický překlad ústavy poskytnutý rakouskou vládou vykládá "nachhaltig geordnete Haushalte" jako "sustainable balanced budgets". Další prostor obcházení pravidla skýtá výraz "usilovat o" (anzustreben), což není totéž jako "dodržovat". Rakouské ústavní pravidlo evidentně ponechává značnou vůli pro interpretace.

Pro budoucí výklad uvedeného ústavního omezení bude důležitý i výklad rakouského spolkového

² Čl. 126, odst. 1 Ústavy Švýcarské konfederace. Dostupné z URL: http://www.admin.ch/ch/e/rs/101/a126.html.

³ Článek 13, odst. 2 rakouské ústavy. Dostupné z URL: http://www.ris.bka.gv.at/Dokumente/Erv/ERV_1930_1/ERV_1930_1.pdf.

⁴ Článek 149, odst. 37 rakouské ústavy. Dostupné z URL: http://www.ris.bka.gv.at/Dokumente/Erv/ERV_1930_1/ERV_1930_1.pdf.

ministerstva financí vydaného k návrhu ústavní reformy: "Tento článek ústavy obsahuje dva cíle, jež musí spolková, zemské a místní vlády koordinovaně dosahovat. Jedním je makroekonomická rovnováha. Tím se míní úsilí o rozvoj založený na vyváženém hospodářském růstu a na cenové stabilitě, vysoce konkurenceschopném sociálně tržním hospodářství směřujícím k plné zaměstnanosti a společenskému pokroku, s vysokým stupněm ochrany a zlepšování kvality životního prostředí (Článek I-3 Návrhu smlouvy o Ústavě pro Evropu). 5 Druhý cíl dlouhodobě vyrovnaných veřejných financí se týká rozpočtové politiky. Vylučuje nepřiměřeně vysoký státní dluh a přetrvávající deficity. Za horní limit, pokud jde o veřejný dluh, by se mělo považovat maastrichtské kritérium. Za slučitelné s tímto druhým ústavním cílem lze považovat vyrovnanost veřejných rozpočtů v rámci hospodářského cyklu."

Budeme-li tedy vycházet z výkladu předkladatele, kterým bylo rakouské ministerstvo financí, pak uvedené ústavní rozpočtové pravidlo připouští deficit v době recese, přičemž tento deficit by měl být kompenzován přebytkem v době konjunktury, a celkový dluh by neměl nikdy překročit 60 % HDP.

Polsko a Maďarsko

Polsko přijalo změnu ústavy v roce 1997 a zahrnulo do ústavy i "dluhovou brzdu": "Není povoleno přijímat půjčky či poskytovat garance a finanční záruky, takové, které by vedly k růstu státního dluhu nad úroveň tří pětin HDP." Polská ústava tak neumožňuje zvyšovat státní dluh nad 60 % hrubého domácího produktu. V čísle 60 % je opět patrní inspirace maastrichtskou smlouvou o založení Evropské unie.

Jak je vidět z tabulky 8, polská ústavní dluhová brzda se ukázala jako málo účinná. Umožnila třináct let zadlužování až k limitní úrovni.

Tabulka 8 ▶ Veřejný dluh Polska (% HDP)

1997	1998	1999	2000	2001	2002	2003
42,9	38,9	39,6	36,8	37,6	42,2	47,1
2004	2005	2006	2007	2008	2009	2010

Pramen: EUROSTAT, 2011.

Maďarsko přijalo novou ústavu v roce 2011 a ta obsahuje také pravidlo vyrovnaných veřejných financí: "Při realizaci pravomocí odvozených od svrchovanosti lidu, stanovuje Parlament ústavní řád společnosti a určuje organizaci, směřování a pravidla vládnutí. V rámci této kompetence parlament...zajišťuje rovnováhu veřejných financí, schvaluje státní rozpočet a jeho naplňování."

Pro Maďarsko přišla dluhová brzda pozdě, deficitní financování vedlo k žádosti o nouzový úvěr od států EU a Mezinárodního měnového fondu (viz tabulka 9).

Tabulka 9 ▶ Veřejný dluh Maďarska (% HDP)

1997	1998	1999	2000	2001	2002	2003
62	59,9	59,8	54,9	52,0	55,6	58,3
0004	2005	2006	2007	2000	2009	2040
2004	2005	2000	2007	2000	2009	2010

Pramen: EUROSTAT, 2011.

⁵ Úřední věstník EU C 310/11. Dostupné z URL: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2004 :310:0011:0040:CS:PDF.

⁶ Budget Reform. Das neue Bundeshaushaltsrecht Rechtliche Grundlagen. Str. 20. Dostupné z URL: http://www.bmf.gv.at/Budget/Haushaltsrechtsreform/Literatur/Schilhan_Das_neue_Bundeshaushaltsrecht_Rechtliche_Grundlagen.pdf.

⁷ Článek 216, odst. 5 Ústavy Polské republiky. Dostupné z URL: http://www.sejm.gov.pl/prawo/konst/angielski/kon1.htm.

^{8 §19,} odst. 2 a 3d) Ústavy Maďarské republiky. Dostupné z URL: http://www.mkab.hu/index.php?id=constitution.

Německo

Vládě kancléřky Angely Merkelové se podařilo v polovině roku 2009 prosadit důležitou změnu ústavy, která omezí zadlužování země. Článek 115 německé ústavy nyní připouští maximální deficit ve výši 0,35 % HDP:

"Příjmy a výdaje jsou v zásadě v rovnováze, nepočítaje v to příjmy z půjček. Tento princip se má za splněný, pokud příjmy z půjček nepřesahují 0,35 % nominálního hrubého domácího produktu. Kromě toho je potřeba brát symetricky do úvahy vliv hospodářského cyklu na rozpočet. Odchýlení skutečných půjček od limitů specifikovaných ve větách 1–3 se zaznamenávají na kontrolním účtu. Záporné zůstatky nad 1,5 % nominálního HDP musí být sníženy s ohledem na hospodářský cyklus."9

Toto rozpočtové pravidlo má začít platit počínaje rokem 2016. Německo se tak stává největším státem na světě, který má takovéto ústavní omezení.

Přesto se může německé rozpočtové pravidlo jevit poněkud nesrozumitelné. Pomůže nám výklad Spolkového ministerstva financí: "Pokud je povolený limit na čisté výpůjčky během realizace rozpočtu překročen, vykáže kontrolní účet záporný zůstatek. Analogicky, pokud jsou maximální povolené čisté výpůjčky pod uvedeným limitem, vykáže kontrolní účet kladný zůstatek. Kladné a záporné zůstatky jsou v dlouhém období vyrovnávány. Pokud záporný zůstatek na kontrolním účtu přesáhne hranici 1,5 % HDP, ukládají ustanovení v ústavě snížit deficit přiměřeně hospodářskému cyklu. Aby se zajistilo, že redukce záporných zůstatků na kontrolním účtu bude mít co možná nejmenší dopad na hospodářský cyklus, pravidla správy kontrolního účtu stanoví,

že v době recese (když se snižuje output gap) není nutné splácení záporných zůstatků. 10 Německému pravidlu lze tedy rozumět tak, že připouští dlouhodobě strukturální deficit 0,35 % HDP a implicitně počítá s krátkodobými odchylkami směrem do deficitu v době recese a směrem do přebytku v době konjunktury.

Teoreticky tak deficit může dosáhnout v jednom roce 1,85 % HDP (povolený strukturální deficit 0,35 % plus mimořádný deficit 1,5 %), ale jen za podmínky, že další rok bude deficit menší než 0,35 %, aby se zůstatek na kontrolním účtu snížil pod 1,5 % HDP.

Podobně jako ve švýcarské ústavě, mají i Němci únikovou klauzuli pro stav ohrožení, umožňující kvalifikovanou většinou (tj. většinou všech, nikoliv jen většinou přítomných poslanců) zvýšit uvedené limity za podmínky jasně daného plánu splátek nouzové půjčky:

"V případě přírodní katastrofy nebo mimořádného ohrožení, které pocházejí z vyšší moci a mají značný dopad na veřejné finance, budou uvedené limity zvýšeny rozhodnutím většiny členů spolkového sněmu. Takové rozhodnutí musí být doprovázeno splátkovým plánem."¹¹

Jak ukazuje tabulka 10, Německo dlouhodobě neplnilo ani Pakt stability a růstu (podmínka EU mít deficit do 3 % HDP). Má čas do roku 2016 své veřejné finance vyrovnat. Jak tvrdí ve svém komentáři spolkové ministerstvo financí, s povoleným strukturálním deficitem 0,35 % HDP a za podmínky dlouhodobého reálného růstu ve výši 3 % ročně by Německo snížilo svůj veřejný dluh vůči HDP z 80 % v roce 2016 na 40 % v roce 2050.¹²

 $^{^9 \}quad \check{C}l\'{a}nek~115, odst.~2~N\check{e}meck\acute{e}~\'{u}stavy.~Dostupn\acute{e}~z~URL:~http://www.gesetze-im-internet.de/gg/BJNR000010949.html.$

Reforming the Constitutional Budget Rules in Germany. Spolkové ministerstvo financí, 2009, s. 7.

¹¹ Článek 115, odst. 2 Německé ústavy. Dostupné z URL: http://www.gesetze-im-internet.de/gg/BJNR000010949.html.

¹² Reforming the Constitutional Budget Rules in Germany. Spolkové ministerstvo financí, 2009, s. 9.

Tabulka 10 ▶
Saldo veřejných financí Německa (% HDP)

		•	•	•	•
1999	2000	2001	2002	2003	2004
-1,5	1,3	-2,8	-3,7	-4,0	-3,8
2005	2006	2007	2008	2009	2010
-3,3	-1,6	0,3	0,1	-3,0	-3,3

Pramen: EUROSTAT, 2011.

Otázkou zůstává, jak chtějí Němci toto pravidlo jednostranně dodržovat, když sdílí jednu měnu se státy, které se zadlužují na úkor ostatních členů eurozóny. Německé ústavní pravidlo v podstatě znamená, že kdyby chtěli od Německa nouzovou půjčku další státy eurozóny v roce 2016, nebude jim Německo moci vyhovět. Leda že by takovou půjčku nefinancovalo vydáním dalších dluhopisů, ale rozpočtovým přebytkem, tedy přímo z daní vybraných daný rok od občanů, což je krajně nepravděpodobné. Změna německé ústavy by tedy měla být jasným signálem "rozpočtovým hříšníkům" eurozóny, že další úvěrování už nebude možné.

Spojené státy americké

Ačkoliv Spojené státy nemají federální pojistku proti zadlužování, limity existují v řadě jednotlivých států. Podobně jako kantony ve Švýcarsku, mají i jednotlivé státy USA své vlastní ústavy. Kalifornská ústava v článku 16 zakazuje zákonodárnému sboru zadlužování "kromě případu války s cílem odrazit invazi nebo potlačení revolu-

ce. "13 Výjimečně je zadlužení možné jen se souhlasem minimálně dvoutřetinové většiny, a to jen tehdy, když existuje plán splacení půjčky na konkrétní projekt. V referendu v roce 1978 přijala Kalifornie ústavní dodatek číslo 13, který zakazuje zvyšovat daň z nemovitosti a na zvýšení jakýchkoliv daní vyžaduje dvoutřetinovou většinu všech zákonodárců. Navzdory uvedeným ustanovením kalifornský státní dluh roste a dosahuje přes 300 mld. USD. Bylo by již nad rámec tohoto textu zkoumat příčiny nefunkčnosti kalifornské ústavy.

Omezení růstu vládních výdajů má od roku 1992 stát Colorado v podobě "Listiny práv daňových poplatníků", která je součástí coloradské ústavy. Výdaje mohou růst jen o inflaci a procentní nárůst počtu obyvatel. Při kladném růstu ekonomiky tak dlouhodobě klesá podíl vládních výdajů k HDP. Kromě toho ústava obsahuje i limit na zadlužování:

"Stát se nesmí nijak zadlužovat žádnou formou, vyjma běžného kolísání příjmů, stavby vládních budov za účelem fungování státu, potlačování revolucí, obrany státu nebo – v době války – pomoci obraně Spojených států."¹⁶

Analogii coloradské ústavy pro celé Spojené státy prosazuje kongresman za Texas Lamar Smith, který je předkladatelem návrhu "Zákona na záchranu americké ekonomiky."¹⁷ Zákon by stanovil počínaje rokem 2012 limity pro růst federálních výdajů podle coloradského vzoru. Federální výdaje by mohly růst jen o inflaci a populační

¹³ Článek 16 Ústavy státu Kalifornie. Dostupné z URL: http://www.leginfo.ca.gov/.const/.article_16.

¹⁴ Dodatek 13 Kalifornské ústavy. Dostupné z URL: http://www.leginfo.ca.gov/.const/.article_13A.

¹⁵ Článek 7a) Listiny práv daňových poplatníků Ústavy státu Colorado. Dostupné z URL: http://www.michie.com/colorado/lpext.dll/coconst/57/2492/2774?fn=document-frame.htm&f=templates&2.0#.

¹⁶ Článek IX, Oddíl 3 Ústavy Colorada. Dostupné z URL: http://www.michie.com/colorado/lpext.dll/coconst/57/2832/287e?f=templates&fn=document-frame.htm&2.0#JD_cocartxi-3.

¹⁷ Dostupné z URL: http://www.opencongress.org/bill/111-h5323/text.

růst, takže by v podstatě dlouhodobě při reálném růstu ekonomiky vůči HDP klesaly.

Evropská unie

První kvaziústavní omezení zadlužování přijalo 12 států Evropské unie v Maastrichtské smlouvě. Článek 104c Smlouvy o založení EU stanovil: "Členské státy se vyvarují nadměrných schodků veřejných financí."Následuje soubor sankcí, které může Rada uložit členskému státu, včetně pokut.¹¹8 Smlouva stanoví limit pro schodek veřejných financí na 3 % HDP a pro veřejný dluh na 60 % HDP. ¹¹9

Z teoretického hlediska má mezinárodní smlouva přednost před běžným zákonem, a smlouva stanoví pravidla fungování EU a závaznosti jejích norem. Primární právo je jakousi "ústavou" EU (koneckonců se tak měla původně smlouva i nazývat) – proto v případě maastrichtských kritérií hovoříme o "kvaziústavním" omezení. Faktem ale je, že uvedená pravidla nebyla dodržována. V době zavádění eura v roce 2002 neplnil některé z kritérií takřka každý ze států – a Řecko neplnilo ani jedno z nich. I proto se řada států předlužil, protože pravidla nebyla vymáhána. Naopak, limit pro státní dluh ve výši 60 % HDP dal některým zemím (Polsko, Česká republika) ospravedlnění pro rychlé "dohánění" tohoto "cíle" a limit pro deficit veřejných financí ve výši 3 % HDP dal mnoha zemím zelenou pro rychlý růst dluhu. Mnohé země měly v podobě limitu pro deficit ve výši 3 % HDP výmluvu pro deficitní hospodaření v době konjunktury. Pak logicky sklouzly do hlubších deficitů v době recese.

Jako ponaučení z nevymahatelnosti smluvních zásad evropských smluv představili v únoru 2011 vrcholní představitelé Německa a Francie tzv. Pakt konkurenceschopnosti. Pomiňme nyní většinu bodů tohoto politického návrhu a zaměřme se na jediný. Pátý bod navržené dohody zní: "Povinnost všech států začlenit do svých ústav mechanismus dluhového varování."20 Německo a Francie přitom jdou příkladem. Německo zabudovalo do své ústavy zákaz zadlužování v roce 2009 (s účinností od roku 2016), francouzská vláda jej ve stejném roce předložila do parlamentu. Pakt byl nakonec 25. března 2011 přijat několika zeměmi EU (země eurozóny plus Bulharsko, Dánsko, Lotyšsko, Litva, Polsko, Rumunsko) v podobě "Paktu euro plus", který, pokud jde o fiskální závazek, obsahuje toto ustanovení:

"Zúčastněné členské státy se zavazují zabudovat fiskální pravidla EU stanovená v Paktu stability a růstu do svých národních právních řádů. Zůstává na členských státech, jaký konkrétní legislativní nástroj k tomu využijí, zajistí ale, aby to byl nástroj dostatečně závazný a trvanlivý (např. ústavní zákon nebo rámcový zákon). Konkrétní formulace pravidla se také ponechává na každé jednotlivé zemi (např. může mít formu "dluhové brzdy", pravidla týkajícího se primárního salda nebo pravidla limitujícího veřejné výdaje), ale je nezbytné, aby takové pravidlo zajistilo fiskální disciplínu jak na národní, tak na lokální úrovni."

¹⁸ Článek 104c, Smlouvy o založení EU. Dostupné z URL: http://eur-lex.europa.eu/cs/treaties/dat/11992M/word/11992M.doc.

¹⁹ Protokol o postupu při nadměrném schodku, Smlouva o založení EU. Dostupné z URL: http://eur-lex.europa.eu/cs/ treaties/dat/11992M/word/11992M.doc.

²⁰ Dostupné z URL: http://www.europeanvoice.com/article/2011/february/merkel-sarkozy-present-competitiveness-pact/70165.aspx.

²¹ Závěry Rady 25. března 2011, str. 10. Dostupné z URL: http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ec/120296.pdf).

Lze říci, že Německo a Rakousko mají tuto dohodu naplněnou. Německo a Rakousko zabudovaly (byť s časovým odkladem) pravidlo fiskální disciplíny do své ústavy. Dohodu by plnilo také Švédsko, které využívá rámcové zákony (víceletý fiskální rámec) – nicméně Švédské království se z jiných důvodů k "Paktu Euro Plus" nepřipojilo.

Členské státy Evropské unie jsou tedy sice smluvně vázány rozpočtovým omezením – schodek veřejných financí smí dosahovat maximálně 3 % HDP, jinak následuje série sankcí včetně finančních pokut ve prospěch EU. (Pravidla z Maastrichtské smlouvy byla převzata prostřednictvím tzv. Lisabonské smlouvy do nyní platné Smlouvy o fungování EU.)²² Protože mezinárodní smlouva má právně vzato přednost před běžným zákonem, má takové omezení teoreticky podobnou právní sílu jako ústavní omezení.

Ukázalo se však, že toto pravidlo v EU takřka nikdo nedodržuje a EU jej není ochotná či schopná vymáhat. Ani žádný členský stát dosud u Evropského soudního dvora nežaloval jiný stát za porušování smlouvy ani nežaloval Evropskou komisi či Radu za nečinnost. Žádný členský stát ani nenavrhl vypovězení smlouvy jako trest za neplnění smluvních podmínek. Pravidla tak existují jen na papíře.

Závěr

Omezení přijatá mnoha státy proti financování veřejných výdajů inflací nevedla ke zdravějším veřejným financím, spíš v mnoha zemích vedla k většímu státnímu zadlužování. Úspěšné řízení veřejných financí dokázaly zajistit jen ty země, které současně s omezením možnosti monetizace státního dluhu omezily i samotnou tvorbu státního dluhu.

Omezení formou mezinárodní dohody (Smlouva o fungování EU, Pakt stability a růstu) se ukazují jako neúčinná vzhledem k omezené vymahatelnosti. Nadto limit pro deficit ve výši 3 % HDP byl příliš mírný a na členské státy působil spíš jako benchmark než jako nepřekročitelná hranice. Závazek politiků uzákonit podobná omezení v národních ústavách formou rozhodnutí Rady EU je spíš deklaratorní a též nevymahatelný. Sotva si lze představit, že by francouzský prezident Sarkozy získal pro návrh změny ústavy levicovou opozici. Nakonec záleží vždy na konkrétní vůli v daném státě a ne na mezinárodních deklaracích.

Příklad Švýcarska, Německa a dalších zemí naznačuje příchod nové vlny korekce ústavního pořádku směrem k omezení státního zadlužování. Ukazuje se ale, že aby takové omezení bylo účinné, musí být stanoveno jasně a s blízkou dobou plnění. Příklad Polska ukazuje, že pravidlo se vzdáleným limitem umožňuje jeho dlouhodobé ignorování a vede spíš k přibližování se limitu. Příklad Rakouska ukazuje, že pravidlo s nejednoznačným výkladem umožňuje jeho snadné obcházení.

Z uvedeného lze jednoznačně doporučit přijetí ústavního omezení zadlužování i pro Českou republiku. Takové pravidlo by mělo spíš cílit na státní deficit než na státní dluh a mělo by být spíš jasné (jako ve Švýcarsku), než neurčité (jako v Rakousku).

Na základě zkušeností lze předpokládat, že hospodaření zemí, které podobná omezení nepřijmou, skončí spíš špatně.

Konstituční demokracie – státy založené na všeobecném hlasovacím právu existují v Evropě sotva sto let s četnými a mnohdy dlouhými přestávkami v podobě diktatur. Jinými slovy, historie demokracie je příliš krátká na to, abychom

Žĺánek 126 Smlouvy o fungování EU. Dostupné z URL: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ :C:2010:083:0047:0200:CS:PDF.

mohli vynášet soud o nadřazenosti takového systému nad jinými systémy. Žijeme pravděpodobně v době, kdy si konstituční systémy založené na všeobecném volebním právu hledají své korekce v podobě rozličných ústavních omezení. Současná vlna ústavních omezení je reakcí na hrozící státní bankroty evropských států. Lze předpokládat, že demokracie se udrží v těch zemích, které si stanoví dobrá konstituční pravidla. Leviatan,

o němž psal Thomas Hobbes v 17. století, nemá nezbytně podobu zlého diktátora. Leviatanem je neomezená státní moc, ať už ji drží absolutní monarcha nebo demokratická většina.

Zemím, které ústavní brzdy zadlužování nezavedou, hrozí státní bankroty, jež mohou být následovány státními převraty. Nadějí je, že tam, kde demokracie přežije, půjde o demokracii vylepšenou o účinná konstituční omezení.

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CONSTITUTIONAL LIMITATIONS TO MAKING PUBLIC DEBTS AS WAY TO INCREASED COMPETITIVENESS

Ing. Petr Mach, Ph.D.

ABSTRACT

Many European countries including euro area members face severe difficulties with their public finance. Credit default is impending in Greece, Portugal and others. Credit default will affect not only creditors but the economy as a whole. It has negative economic and political consequences. Constitutional economics – a branch of the science founded by James Buchanan – assumes that the government is "Leviathan" – non-benevolent revenue maximiser. If democracy is to survive in the long run Leviathan must be restricted by Constitution. Several countries in the World have adopted constitutional limitations to making public debt. The EU has incorporated rules requiring maximum budget deficits of 3 % of GDP into its founding treaties however these rules are not effectively enforced. Constitutional rules against budget deficits work well in Switzerland, framework obligations work well in Sweden. The biggest country that has incorporated a budget rule in the constitution is Germany allowing for structural deficit of 0.35 % GDP. Constitutional restrictions must be enforceable and clear otherwise they would be inefficient.

KEYWORDS

Constitution, budget, fiscal policy.

JEL CLASSIFICATION

E02, H61, H62

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Tematicky je výzkum zaměřen na čtyři oblasti: (1) Růstová výkonnost a stabilita, (2) Institucionální kvalita, (3) Strukturální konkurenceschopnost a (4) Inovační výkonnost. Specifická pozornost je věnována strukturálním aspektům konkurenceschopnosti na odvětvové a regionální úrovni. CES je odborným garantem magisterského studijního programu Vysoké školy ekonomie a managementu (www.vsem.cz). Spolupracuje rovněž na řadě mezinárodních výzkumných projektů v problematice znalostně založené konkurenceschopnosti a podílí se na expertizních aktivitách pro veřejnou správu v oblasti růstové výkonnosti a stability, výzkumu a vývoje a inovační výkonnosti.

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 PrintActive, s. r. o.

 Vyšlo dne:
 30. 11. 2011

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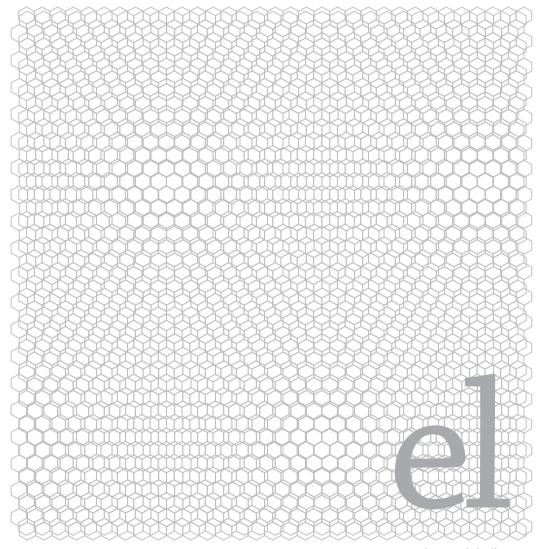
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ISSN:



EKONOMICKÉ LISTY 09|2011



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