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Ekonomické studie a analýzy
Economic Studies and Analyses

EDITORIAL

SCIENTIFIC ARTICLES / VĚDECKÉ STATĚ

SCIENTIFIC REPORTS / VĚDECKÁ SDĚLENÍ

Editorial

Editorial

MOJMÍR HELÍSEK

Dear Readers,

This year's second issue of ACTA VŠFS offers four papers, which largely focus on financial and monetary issues.

J. Tepperová and L. Rytířová analyze "Discrimination in Taxation of Non-residents". It is clear from the analysis that the national legislation of the Czech Republic in the area of personal income tax complies with the relevant judgments of the Court of Justice of the European Union. The Czech national legislation in the given area also complies with the principles for assessing tax discrimination.

The paper of L. Sedmihradská and J. Haas asks the following question: "Budget Transparency and Fiscal Performance: Do Open Budgets Matter?". The results of the statistical analysis did not confirm existence of a significant negative relationship between the budget transparency and the budget deficit and public debt. At the same time, a statistically significant negative relationship between the budget transparency and the level of corruption was confirmed.

I. Vrňáková and H. Bartušková authored the paper entitled "Is the Euro Area an Optimal Currency Area and What Barriers Could Obstruct Its Future Development?". The authors come to a rather unsurprising conclusion. While the euro area does not meet most of the criteria set down for an optimal currency area model, the project is still viable as a result of strong political will of European states.

The paper of I. Vrabková "Quality Management in Public Sector: Perspectives of Common Assessment Framework Model in the European Union" leaves the financial issues behind. The assessment results clearly show significant potential of the Common Assessment Framework model as the tool for Total Quality Management for the public administration as well as other areas of the public sector of the European Union states.

In the Scientific Reports section, O. Schlossberger and V. Pavlát inform about Conference Financial Markets, which recently took place at the University of Finance and Administration. It was now the sixth year of this conference.

All essays deal with current issues from the perspective of the Czech and global economy. Therefore, I believe that you – our readers – will find them very interesting.

Mojmír Helísek
Executive Editor
University of Finance and Administration

Vážení čtenáři,

letošní druhé číslo ACTA VŠFS vám nabízí čtyři statě, které se soustředí převážně na finanční a měnovou problematiku.

J. Tepperová a L. Rytířová analyzují „Diskriminaci zdanění nerezidentů". Z této analýzy vyplývá, že v oblasti daně z příjmů fyzických osob je národní legislativa České republiky v souladu s relevantními rozsudky Soudního dvora Evropské unie. Česká národní legislativa v této oblasti je rovněž v souladu s principy posuzování daňové diskriminace.

Stať L. Sedmihradské a J. Haase si klade otázku „Transparentnost rozpočtu a fiskální výkonnost: mají otevřené rozpočty vliv?". Výsledky statistické analýzy nepotvrdily existenci významného negativního vztahu mezi transparentností rozpočtu a rozpočtovým deficitem a veřejným dluhem. Současně byl potvrzen statisticky významný negativní vztah mezi transparentností rozpočtu a mírou korupce.

I. Vrňáková a H. Bartušková jsou autorkami statě „Je eurozóna optimální měnovou oblastí a jaké překážky by mohly bránit jejímu budoucímu vývoji?". Autorky docházejí k závěru, který není překvapivý. Eurozóna sice nesplňuje většinu kritérií pro model optimální měnové oblasti, ale díky silné politické vůli evropských států je tento projekt stále životaschopný.

Z finanční problematiky se vyčleňuje stať I. Vrabkové „Management kvality ve veřejném sektoru: perspektivy modelu Common Assessment Framework v Evropské unii". Výsledky hodnocení jasně ukazují na vysoký potenciál modelu Common Assessment Framework, jakožto nástroje komplexního řízení kvality jak ve veřejné správě, tak i dalších oblastech veřejného sektoru zemí Evropské unie.

V rubrice Vědecká sdělení informují O. Schlossberger a V. Pavlát o konferenci Finanční trhy, která proběhla nedávno na Vysoké škole finanční a správní. Šlo již o šestý ročník této konference.

Všechny statě se zabývají aktuální problematikou z pohledu jak české, tak i světové ekonomiky. Věřím proto, že vás – naše čtenáře – všechny zaujmou.

Mojmír Helísek
výkonný redaktor
Vysoká škola finanční a správní, o.p.s.

Discrimination in Taxation of Non-residents
Diskriminace zdanění nerezidentů

JANA TEPPEROVÁ, LUCIE RYTÍŘOVÁ

Abstract
The paper focuses on taxation of non-residents from the European Union in the Czech Republic and their possible discrimination from the income tax point of view. It provides detailed comparative analyses of taxation of tax resident and tax non-resident workers (both employees and self-employed) in the Czech Republic. Thorough analysis discusses the issue of discrimination on all levels of taxation taking into consideration tax base, allowances, rates, tax credits as well as tax administration obligations. Unique overview of number of non-residents in the Czech Republic in 2004-2010 shows the importance of the topic. Since the social security contributions are inseparable part of obligatory payments, the paper discusses also their role in international taxation and possible discrimination issues briefly. Results of the analysis show that national tax legislation of the Czech Republic in the field of personal income tax is compliant with the relevant Court of Justice of the EU's decisions. It also meets criteria of tax nondiscrimination principles of locational neutrality (fully) and competitive neutrality (partially).

Keywords
taxation, discrimination, non-residents, social security contributions

JEL Codes
H24, J78

Abstrakt
Článek se zaměřuje na zdanění nerezidentů z Evropské unie v České republice a jejich možnou diskriminaci z pohledu daně z příjmů. Poskytuje detailní komparativní analýzu zdanění českých daňových rezidentů a nerezidentů (jak zaměstnanců, tak osob samostatně výdělečně činných) v České republice. V rámci této komparativní analýzy diskutuje otázku diskriminace při zohlednění daňového základu, odpočtů od základu daně, daňových sazeb, slev na dani, včetně daňových povinností. Článek obsahuje unikátní přehled počtu nerezidentů v České republice v letech 2004-2010. Vzhledem k tomu, že pojistné na sociální pojištění je neodlučitelnou částí povinných plateb z příjmů z výdělečné činnosti, je stručně diskutována právě i role pojistného v mezinárodním zdanění a možná diskriminace. Z analýzy vyplývá, že v oblasti daně z příjmů fyzických osob je národní legislativa České republiky v souladu s relevantními rozsudky Soudního dvora EU. Česká národní legislativa v této oblasti je rovněž v souladu s principy posuzování daňové diskriminace z pohledu místa rezidentury (locational neutrality) a částečně i z pohledu konkurence daňových systémů (competitive neutrality).

Klíčová slova
zdanění, diskriminace, nerezident, pojistné sociálního pojištění

Introduction

With globalization of economies the need for precisely arranged rules for taxation of persons residing in other states in national tax legislations has arisen. Although these rules vary from country to country, the international tax legislation, e. g. regulations of the European Union ("EU ") and double tax treaties, require them not to be discriminatory.

The nondiscrimination rule is crucial for meeting basic freedoms guaranteed to citizens of all member states by Treaty Establishing the European Community. In the personal taxation (including social security) mainly the freedoms of movement of persons and services are in question. Right to move and reside freely is granted to the citizens of the EU member states primarily by Article 45 of The Treaty on the functioning the European Union (European Union, 2008).

Discrimination in general occurs in cases when one person in particular situation is treated differently from another person in the same situation based on discriminating criteria, such as residency, nationality, sex, health condition etc. (European Union, 2000a; European Union, 2000b). Discrimination can be direct or indirect. According to the international tax legislation, both such discriminations must be prevented.

International tax legislation distinguishes between tax residents and tax non-residents. Discrimination in taxation on international level therefore basically means that tax non-residents are taxed differently compared with tax residents, resulting in less favourable treatment of either of them.

Aim of the paper is to analyze the rules of taxation of tax non-residents workers (both employees and self-employed) from the other member states of the European Union in comparison with taxation of tax residents and to discuss the nondiscrimination rule within the Czech income tax policy.

To reach the above mentioned aim, we use text and comparative analysis of relevant legislation and EU case law, followed by deduction method to formulate the conclusions. The important role of the Court of Justice of the European Union in interpretation of European Union law is commented by e.g. Široký (2012).

The structure of the paper is as follows: after this introduction and a brief summary of previous research, the changes in numbers of tax non-residents in the Czech Republic are presented. Then follows a detailed comparative analysis of taxation of tax non-residents and residents, that also includes impacts of social security contributions and their role in international taxation. Discussion and conclusions close the paper.

1 Previous Research and Literature

Mason and Knoll (2012) provided recently a very knowledgeable theoretical analysis of taxation of non-residents with relation to discrimination taking into consideration numerous EU jurisdictions. They present possible approaches to tax nondiscrimination principle, such as locational neutrality (the same tax burden on all income for all tax payers residing in the same country), leisure neutrality (same tax burden on income with the same source country regardless the residence of the tax payer) and competitive neutrality (either uniform residence taxation or source taxation is required depending on the way of achieving competitive neutrality). They favour competitive neutrality approach for nondiscrimination rules in taxation and argue that there is no need for tax rate harmonization or equal taxation of residents and non-residents to meet tax nondiscrimination rules fully.

Graetz and Warren (2012) also emphasize the incoherence in explanations of Court of Justice of the EU of tax nondiscrimination and they find the requirements of Court of Justice to respect both source and residence nondiscrimination at the same time being "labyrinth of impossibility".

Discrimination of tax non-residents in legal conditions of the Czech Republic is only a briefly researched issue which has not been complexly reviewed so far. In the article about amendment to Czech Income Tax Act in 2011, Novotný and Pecka (2011) commented on partial issues in income taxation with emphasize on nondiscrimination settled by EU legislation. Novotný (2010) discussed also arrangements in Czech tax legislation which followed a formal request of European Commission (2009) that the Czech Republic must change particular legal provisions according to which certain types of income of tax non-residents were taxed on gross bases even though tax residents receiving the same income were allowed to deduct related expenses.

Also Brychta (2011) examines the consistency of Czech tax legislation applying to Czech tax non-residents with EU legislation pointing out the same amendment to Czech Income Tax as commented by Novotný (2010), which in 2009, according to Brychta, contributed to significant consistency of Czech national legislation with EU law.

2 Czech Tax Non-residents in Numbers

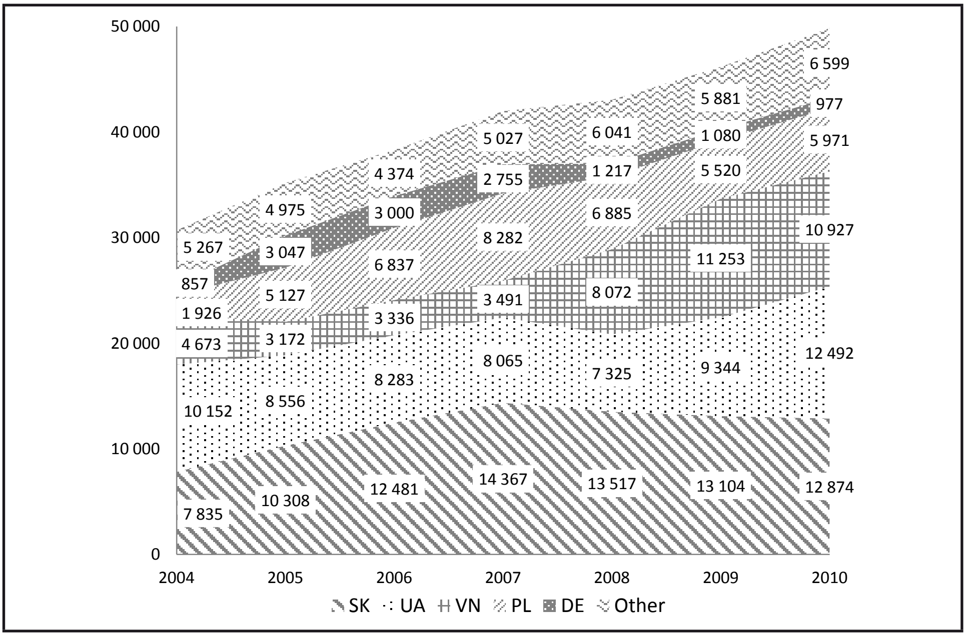
Further we provide overview of numbers of Czech tax non-residents in years 2004-2010, based on primary data from General Financial Directorate (2012). The Czech tax administration collects these data from filed personal income tax returns, i.e. tax non-residents not filing a personal income tax return are not reflected.

To identify who a Czech tax resident and a Czech tax non-resident is, both international double tax treaties and Czech national tax legislation have their say. The primary purpose of the definition of a tax non-resident in Czech national legislation is to define tax obligations of citizens of countries (or more precisely: "taxpayers from countries") with which no double tax treaty has been signed. Since the Czech Republic has signed double tax treaties with all EU member states, the definition stated in the respective treaty should be decisive for our discussion of EU nondiscrimination rule. However, the definition in national legislation has its role also when deciding tax residency status according to a double tax treaty. The treaty comes in use when both countries' national legislations consider an individual to be their tax resident. In other words, the double tax treaty confirms tax residency for one country. On the other hand, the treaty cannot assign a person's tax residency to a country whose legislation does not consider him or her to be its tax resident.

If the definition of a tax resident according to the international treaty differs from the definition found in national legislation, the international treaty prevails. National legislation also cannot limit the definition of a tax resident contained in the treaty.

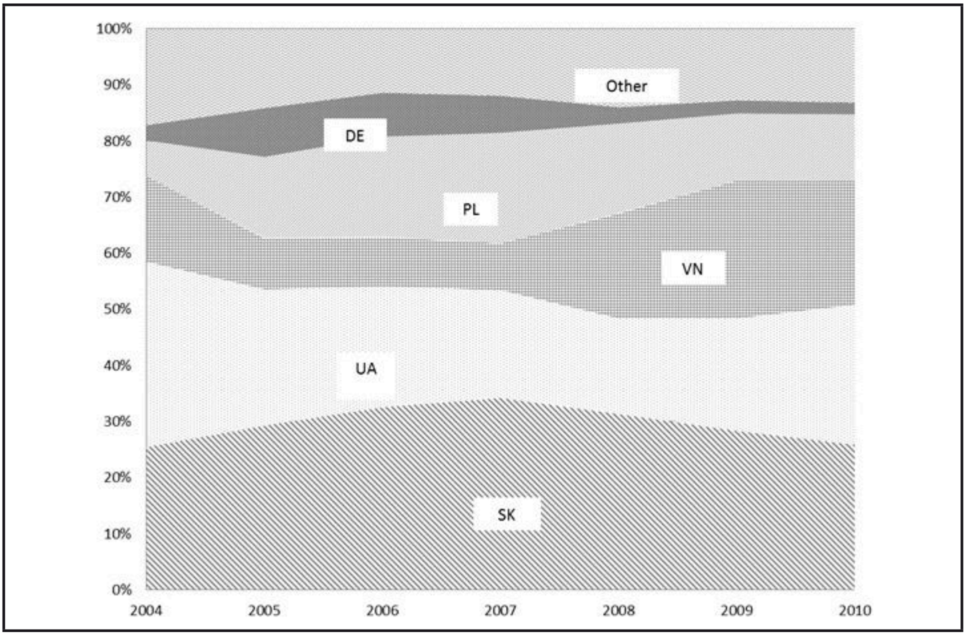
Following figures show numbers of Czech tax non-residents in years 2004 to 2010 structuring 5 most recurrent states, Figure 1 in absolute numbers and Figure 2 in percentage. Both the figures and the comments in this chapter are based on data provided by the General Financial Directorate (2012). It is important to emphasize that data used in the following analyses include only those Czech tax residents and non-residents filing personal income tax return. There are no complex data on total number of Czech tax non-residents including those who have no liability or who do not file personal income tax return. Shortly speaking, the tax return according to Czech tax legislation does not have to be filed for example by an employee having only one employer or more employers successively in a calendar year, because the income tax is collected by the employer(s) in the form of prepayments withheld from income paid to the employee. However, significant part of Czech tax non-residents filing tax return are often tax payers with income from dependent activity (which covers employment) only. Data provided by the General Financial Directorate (2012) show that for example in case of Czech tax non-residents who declared themselves to be Slovak tax residents, the percentage of tax payers filing a tax return and having only income from dependent activity on total number of Czech tax non-residents from Slovakia is 73.3% in 2010. For Czech tax non-residents who declared themselves tax residents of Poland this ratio is even higher, 93.1% in 2010. On the other side the same ratio (i.e. the percentage of Czech tax non-residents from one country filing an individual income tax return and having only income from dependent activity on the total number of Czech tax non-residents from the same country) is quite low for example for Vietnam (5.1%) and Ukraine (3.9%). Reason for such disproportion is due to different status of individuals working in the Czech Republic. Most individuals coming to work in the Czech Republic from Vietnam are in a position of self-employed; for Ukraine the share of self-employed is almost 50 %. On the contrary, most workers coming to the Czech Republic from Slovakia or Poland are in a position of employees (Czech Statistical Office, 2012). The reason for filing a tax return even though the individual has income from dependent activity only is most probably caused by legal obligation to file a tax return for Czech tax non-residents if using tax discounts other than the basic one. This issue is discussed further in the comparative analysis of taxation of Czech tax residents and non-residents below.

Figure 1: Number of Czech tax non-residents filing individual income tax returns in 2004-2010



Source: unpublished data from the General Financial Directorate provided on request.

Figure 2: Share of Czech tax non-residents filing individual income tax returns in 2004-2010, in %



Source: unpublished data from the General Financial Directorate provided on request.

Since 2004, the number of Czech tax non-residents filing an income tax return in the Czech Republic has been increasing gradually year after year. The number of Czech tax non-residents was 30,710 in 2004, which is 2.01% on the total number of taxpayers filing a personal income tax return. Even though the number of Czech tax non-residents rose each year during years 2004–2010, the percentage of Czech tax non-residents on the total number of taxpayers filing a personal income tax return fluctuated during this period. Lower percentage of Czech tax non-residents was during years 2005–2007, approximately 1.7%. The percentage of Czech tax non-residents has been rising gradually since 2007 to 2010 on 2.72% in 2010. The total number of Czech tax non-residents in 2010 was 49,840.

There are several countries from which only one Czech tax non-resident filing tax return comes; in 2004 it applied to 36 countries and 20 countries in 2010. These countries are for example Taiwan, Hong Kong, Estonia, Egypt and others.

As seen on figures above, most Czech tax non-residents come from Slovakia, Ukraine and Vietnam. Quite significant increase in percentage of Czech tax non-residents from Vietnam and decrease in percentage of Czech tax non-residents from Poland and Germany can be observed comparing the data from 2007 and 2010.

To understand reasons of continuous increase in numbers of Czech non-residents properly, deeper analyses would need to be processed and variables such as economic situation in both the Czech Republic and the country of residency, situation on labour markets both domestic and international, individual characteristics of non-residents etc. would needed to be taken into account. It was not our goal to provide such analysis.

3 Comparative Analysis

Taxation of individuals' income in the Czech Republic might be characterized by the following aspects:

- Tax base;
- Tax allowances;
- Tax rate;
- Tax credits;
- Tax administration.

The position of tax non-residents towards these aspects differs. For better understanding of the position of tax non-residents we analyze each of these aspects separately.

Since the social security contributions are an inseparable part of obligatory payments, we also discuss the discrimination issue for these contributions from the international point of view. However, it is important to point out that the international rules and principles in this area are different from those applicable to income tax.

3.1 Tax Base

Calculation of the tax base for taxable income of Czech tax non-residents is generally the same as for tax residents. Until 2007, the tax base was equal to the individual's gross taxable income (salary and other taxable monetary and non-monetary benefits), decreased by the individual's part of the social security contributions regardless in which state these contribution were paid. The actually paid amount of contributions (not the hypothetical one as in the construction of tax base described below) on the individual's side was always deducted from gross income for calculation of the tax base.

In 2008, the concept of a so called "super-gross" salary was introduced, which defined the tax base as the individual's gross taxable income increased by the employer's part of the social security contributions. Same as in 2007, the actually paid amount of contributions was taken into consideration, regardless in which state these contributions were paid. Since calculating tax base with foreign contributions turned up difficult to administer, as of 2009 the hypothetical Czech social security contributions are taken into account, even if the individual does not participate in the Czech social security system. These hypothetical Czech social security contributions mean the contributions that would have been paid if the individual was insured under the Czech social security system. The tax is thus in fact paid on the employer's costs of the labour, though hypothetical for the individuals participating in a non-Czech social security system (see Section 6 para. (13) of Act on Income Taxes; Czech Republic, 1992a).

The impact of inclusion of the employer's part of the Czech social security contributions, either actual or hypothetical, on tax non-residents is questionable. In fact, if the individual is subject to a non-Czech social security system, his or her effective tax rate, taking into account the actual net income, might be either higher or lower than in case of an individual who is subject to the Czech social security system. Nevertheless, Czech tax non-residents might be present in both these groups and thus, this measure cannot be considered specifically targeted on tax non-residents.

Determination of the tax base as a so called "super-gross" tax base, i.e. including employer's part of social security contributions, requested further modification of national legislation in international matters. For Czech tax residents inclusion of the employer's part of social security contributions into their tax base from income which was also taxed abroad and use of the credit method for elimination of double taxation in accordance with the relevant double tax treaty resulted in significant tax underpayments in the Czech Republic. This problem was solved in Czech national legislation which stated that even though the international double tax treaty suggests the credit method for preventing double taxation, for income from a dependent activity (employment) performed in a state with which the Czech Republic has concluded a double tax treaty, the method of exclusion of income from taxation in the Czech Republic will be used. This applies only if the income is paid by a tax resident of the state where the work is performed, or on behalf of permanent establishment of a Czech tax resident in the state where the work is performed and if the income is taxed there (see Section 38f para. (1) and (4) of the Act on Income Taxes; Czech Republic, 1992a). Only if favourable for a payer, the credit method stated in the double tax treaty shall be used. Due to the "super-gross" tax base in the Czech Republic, exclusion of income is more favourable in an absolute majority of cases.

Introduction of a so called "super-gross" tax base and inclusion of the hypothetical insurance contributions, when the employee is insured in another than the Czech social security system, brought up another practical issue of discrimination that needed to be solved. The question arises in situations when employee switches from one social security system during a tax period, which is a quite common scenario when employees are posted abroad. When an employee is for example insured in a foreign social security system for the first half of the year and has income taxable in the Czech Republic, and for the second half of the year he switches to the Czech social security system, the calculation is as follows. During the first half of the year, the so called hypothetical contributions are included into the tax base and no actual contributions are paid into the Czech social security system. After switching to the Czech social security system, the actual Czech social security contributions start to be paid in the Czech Republic and these actually paid contributions are included into the tax base. The total employee's actual social security contributions, paid both to a foreign and to the Czech social security systems, might in fact exceed the maximum assessment base stipulated by Czech social security legislation (Czech Republic, 1992b; Czech Republic, 1996; Czech Republic, 2006). However, for the purposes of calculation of the tax base (i.e., increasing the individual's gross income by the employer's part of the social security contributions), only the amount of contributions which would correspond to the Czech contributions paid from the maximum assessment base might be considered. Another approach would result in discrimination of an employee switching between the social security systems during the tax period compared with an employee being insured under one social security system for the whole tax period. According to an unofficial interpretation, the Ministry of Finance is aware of this issue and agrees that only this approach avoids potential discrimination.

3.2 Tax Rate

Tax rate is currently 15% for all individuals. Although it has been amended in the previous years, the amendments did not differentiate among groups of tax payers. Due to the flat tax rate, individuals who would highly likely have lower income taxable in the Czech Republic (are typically tax non-residents, taxing here only their Czech-source income) are not preferred against individuals probably declaring higher (e.g. total worldwide) income here.[1]

3.3 Tax Allowances and Tax Credits

Same as in case of tax administration described below, another clear restriction for tax non-residents is applicability of tax allowances and tax credits (except for the basic taxpayer tax credits[2]). They are stipulated in single amounts regardless of the individual's tax residency but their applicability is mostly conditioned by Czech tax residency or taxation of more than 90% of income in the Czech Republic (see Section 15 para. (9) and Section

1 *This is true for the the tax non-residents from the other member states of the European Union. Please, notice that a different tax rate (35 %) applies to some types of income of tax non-residents from countries with which the Czech Republic has not concluded a double tax or any simile tax-related treaty.*

2 *Although the basic tax credit had been also subject to the tax residency test, this limitation was valid only for a few months since it was strongly challenged by employers who had to differentiate between their employees according to their tax residency on a monthly basis, which was excessively administratively demanding.*

35ba para. (2) of Act on Income Taxes; Czech Republic, 1992a). This rule has been introduced in 2008 for interest on mortgage financing an individual's main living (up to CZK 300,000 per year); as of 2011, it was extended to all tax allowances (among others charitable donations, private pension contributions, life insurance premium and trade union fees). In addition to this limitation, tax residents might deduct certain tax credits (e.g. for a dependent child) on a monthly basis, while tax non-residents can do so only via an annual tax return (which is reasoned by the necessity to prove the 90% income rule). In our opinion, introduction of this limitation for tax credits and allowances was one of the reasons for significant increase in the number of tax non-residents filing annual tax returns, which can be seen from the data provided by the General Financial Directorate.

Nevertheless, this approach should not contradict the EU law, referring to the decision of the European Court of Justice in the Schumacker case (C-279/93) which required the state of the source of the income to allow tax allowances to a tax non-resident who has "almost all" of his income taxed in that state. When introducing the 90% rule, the Czech government referred to this decision and to the recommendation of the European Commission (1993). Also the decision of the European Court of Justice in the Gerritse case (C-234/01), according to which exclusion of tax non-residents from applicability of the basic tax credit was in compliance with the EU law, and states that these rules should not be challenged as discriminatory. The non-discrimination of tax non-residents was also discussed by the Court of Justice of the EU in the Egon Schempp case (C-403/03), in which the Court of Justice concluded that the European Treaty offers no guarantee that the transfer of an individual's tax residence to another member state will be neutral from the tax perspective.

On the other hand, international aspects were reflected in the extension of the allowances to include also private pension contributions and life insurance premiums paid abroad, which was passed after a formal request from the European Commission (2010).[3] Even though such discrimination was considered to be aimed at foreign pension funds, it could be also found discriminatory for tax non-residents who are expected to use the services of foreign pension funds rather than Czech pension funds more often than Czech tax residents. The cancelation of this discrimination was effective since January 2011 (Amendment No. 346/2010 Coll.), when the possibility of such deduction was also made available for premiums paid to a pension fund from other EU countries, Norway and Iceland.

Recent amendments related to conditions for deduction of charitable donations: while until 2008, only donations to Czech entities were deductible from the tax base, as of 2009 (Amendment No. 2/2009 Coll.; Czech Republic, 2009) also donations to foreign entities are deductible. In 2009, the individual had to prove that the donation is considered charitable based on legislation of the country in which it was made. Since this was difficult to proof, in 2010 the rules were modified (Amendment No. 346/2010 Coll.; Czech Republic, 2010) and the charitability is now determined based on Czech legislation. This should not contradict the EU law, since the conditions for non-Czech donations and Czech donations are thus comparable.

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3 *The reasons stem from the Bachmann case (C-204/90), in which the Court of Justice of the EU ruled that since tax non-residents were more likely to hold life insurance policies abroad, limitation of tax allowances only to life insurance premium paid in the country was likely to disadvantage other EU nationals.*

3.4 Tax Administration

Although calculation of tax base described above is generally the same, way of tax administration might significantly disadvantage tax non-residents. Specifically, this applies to independent professionals and artists, as well as members of the boards. While for tax resident independent professionals and artists, calculation of their tax base takes into account the related expenses and the tax is paid by themselves after filing of an annual tax return, for Czech tax non-residents the tax is withheld at source at the moment of payment of the income disregarding the related costs. Tax non-residents thus suffer from different treatment from two points of view. Firstly, they do not receive their remuneration in the full amount but decreased by the Czech income tax withheld at source, compared to tax residents who are required to pay the tax only after filing their annual tax return.[4] Secondly, they are excluded at the moment of taxation from the possibility to deduct the related expenses from the taxable income.

This approach was challenged by the European Commission (2009) as contradicting the free movement of persons and free movement of capital. In July 2009, the legislation was thus amended to allow tax non-residents, residing in another EU or EEA country, to include such income in their annual Czech personal income tax return and deduct the withheld tax as a tax prepayment. This amendment brought up several questions, which were also discussed at the Coordination Committee of the Ministry of Finance and the Chamber of Tax Advisers (2010). Potential discrimination of tax non-residents by this treatment was not commented, because the authors of the analysis discussed at this Committee described this treatment in an introductory note as not introducing so high level of discrimination which would contradict the EU law, while the effective taxation is in fact the same for both tax residents and tax non-residents. Issues opened in the discussion included thus only practical application of the amendment of legislation, among others the obligations of a taxpayer voluntarily filing the tax return to register for the Czech tax purposes and pay the Czech tax advances (after they file their first tax return). The Ministry of Finance stressed the voluntariness of the filing of the tax return and no intention to advantage tax non-residents, which, in their opinion, must be kept in mind when interpreting the law. Therefore, the Ministry of Finance did not find any reason for stipulation of a different treatment of tax non-residents in the area of tax registration, payment of tax advances, deadlines for tax filing etc. With respect to the related costs which might be deducted, the Ministry of Finance did not give any specific instructions (e.g., on determination of direct and/or indirect costs etc.) but referred only to a general request to prove connection between the deducted costs and the income taxable in the Czech Republic. Since the burden of proof lies upon the taxpayer in this case, he or she, having no binding guidelines, has to carefully consider each of the incurred expenses, both direct and indirect, and prepare sufficient proofs for their deductibility.

Members of a Czech company's boards are in similar situation; the Czech tax is withheld from their income at source without possibility to apply tax allowances. However, disadvantage of tax non-residents compared to tax residents is in this case only a delayed ap-

4 *That throughout the year, the individuals who file annual tax return (i.e. tax residents in this case) and their tax exceeds the statutory limits have to pay quarterly or semiannual tax advances.*

plication of tax allowances because no costs are deductible against the members of the boards' income according to Czech law. The formal request of the European Commission mentioned above covered this group of individuals as well; the amendment of legislation allowing tax non-residents to include their income to the annual tax return and deduct the withheld tax as a prepayment applies to them, too.

The resulting taxation of Czech tax non-residents is thus the same as for Czech tax residents; differences remain from the cash-flow point of view, since tax non-residents incur the tax costs immediately (with mostly a tax refund being paid to them after filing the tax return), tax residents keep the money until the tax filing (and tax payment) deadline. The Court of Justice of the EU (2008) in the Truck Center Case (C-282/07) did not find this approach contradicting the EU law, pointing at obligation of tax residents to pay tax advances during the year. Nevertheless, in another decision (Scorpio C-290/04) the Court of Justice of the EU (2006) required immediate deduction of the costs already at the moment of taxation, refusing their application via a tax return as too administratively demanding. According to the Court's opinion in the Gerritse Case (C-234/01), tax withholding at source without deduction of costs is in compliance with the EU basic freedoms only in case of progressive taxation being applied to net income and a lower single tax rate being applied to the gross income taxed at source (Court of Justice of the EU, 2003).

3.5 Social Security Contributions

Important, and due to their amount very significant from the labour cost point of view, obligatory payments from personal income (both from employment and self-employment) are social security contributions. It is still questionable whether and to what extent the social security contributions can be classified as taxes or whether they are of different character.[5] To discuss this issue properly, it is crucial to differentiate between various subsystems of the Czech social security. As for the health insurance it can be said, that the nature of the contributions is very close to income tax, pointing out the missing connection of amount paid on contributions with the amount of benefits received. On the other hand, old-age pension insurance and sickness insurance possess more of the elements of classical insurance, with benefits being closely correlated to the amounts of contributions to the system, although the solidarity aspect widens this connection significantly.

For the social security purposes other principles and rules than for the income tax apply. International agreements on social security are used for situations with cross-border element.[6] Even though the actual residency status (in a broader view as the centre of vital interest) of the individual is important to determine the applicable social security legislation, the concept of a resident and a non-resident with matching source income as used for taxation does not apply. According to the international agreements the applicable national legislation is determined and provisions of this national legislation apply fully on the total world-wide income of the individual, regardless of the country of source.

5 *More to this topic e.g. Vostatek (1996) or Rytířová and Tepperová (2012).*

6 *International agreements in this case refer both to the multilateral and bilateral agreements on social security as general rule for coordination of social security. See European Union (2009), European Union (2004), Ministry of Labour and Social Affairs (2012) - an overview of bilateral agreements about social security.*

Contributions are thus paid to one social security system at a time only, supposing coordination of the systems of the respective countries by the international agreement.

The question of discrimination in Czech social security legislation also occurs, although the most disturbing provisions have been already removed. Till 2009 Czech legislation covering sickness insurance and old-age pension insurance excluded employees working for the employer seated in a country with which no agreement on social security existed regardless the residency of the employee (see Section 5 of the Act on Sickness Insurance of Employees; Czech Republic, 1996). Such exclusion of employees covered by an international treaty or the EU social security regulations could have been found discriminatory. For this reason, since 2009 the old-age pension insurance and sickness insurance enable employees working for an employer seated in a country with which no agreement on social security exists to enter the Czech old-age pension insurance and sickness insurance voluntarily.

Specific conditions for employees working for the employer seated in country with which no agreement on social security exists apply also for the purposes of health insurance, for which these employees are not considered as "employees" (see general definition of an employee and an employer in the Act on Contributions on General Health Insurance; Czech Republic, 1992b). Since the voluntary participation in the Czech health insurance system is not possible due to a different character of the health insurance system compared to the sickness and old-age pension insurance systems, if these employees are covered by an international agreement or the EU social security regulations, they are insured in Czech health insurance system under a special category called "individuals without taxable income".

Even though the parameters in national legislation about calculation of the social security contributions are fully at the discretion of each country, they should not contain discriminatory provisions. However, such discriminatory provisions can be found in health insurance legislation for employees with employment contracts based on a non Czech law. Reason for this is the current definition of the assessment base for the Czech health insurance contributions (see Section 3 para. (2) and (13) in the Act on Contributions on General Health Insurance; Czech Republic, 1992b). While in case of a labour contract based on the Czech Labour Code certain types of income are excluded from the assessment base, no such exclusion is applied for labour contracts based on foreign law. This differentiation has not been challenged so far. Similar provisions existed also in the old-age pension insurance and the sickness insurance till 2009, but were removed due to their discriminatory character. However, it can be said that the discriminatory character was not so significant for old-age pension insurance and sickness insurance, because the benefits paid from the system are calculated from the assessment base and thus, the higher the base, the lower the contribution. However, due to involvement of solidarity, the increase in benefits does not fully correspond to the increase in the contributions.

In the field of social security contribution the term "posted employee" has a significant role. For the purposes of social security international agreements and regulations, a posted employee is an employee who works for a limited period of time (usually 24 months at maximum) in another country than the country where his employer has its seat. Further other conditions must apply, such as that there is still an organic link between the posted employee and his employer who posted him, meaning who sends him to work abroad. Application of such provisions means that in the area of social security, the structure under which the employee is assigned abroad (e.g. posted, hired out or locally employed) is very important when determining all obligations. On the other hand, for the purposes of personal income tax when calculating the employee's final tax liability, it is much more important whether the employee is a Czech tax resident or a Czech tax non-resident. The applied structure of assignment has certain impacts on calculation of tax prepayments and their administration, but it is reflected only insignificantly in the total tax liability where the tax residency has its main say.[7]

3.6 Tax Nondiscrimination Principles

In theoretical structuring of approaches to nondiscrimination published by Mason and Knoll (2012) as mentioned above, locational, leisure and competitive neutrality are recognized.

It can be said that Czech legislation in the field of taxation of non-residents fully satisfies criteria of locational neutrality, i.e. there is the same taxation of payers with respect to where they reside.

On the other hand, it is clear from the analysis above that there are some differences between taxation of Czech tax residents and non-residents and thus the theoretical criteria for leisure neutrality are not fulfilled. However, it corresponds to Mason and Knoll's assumptions that it is not possible to fully meet the criteria both for locational and for leisure neutrality at the same time without completely harmonized effective tax rates. The differences in taxation of Czech tax residents and non-residents are within the relevant Court of Justice of the EU's decisions.

Competitive neutrality approach to tax nondiscrimination is according to Mason and Knoll (2012) dual. Competitive neutrality can be achieved either via worldwide taxation or via ideal deduction, where worldwide taxation assumes unlimited credits for source taxes and ideal deduction assumes uniform source taxation. When judging whether the criteria for tax nondiscrimination principles are met, the concrete situation of a particular payer must be taken into account. Czech legislation in the field of taxation of non-residents potentially meets the criteria for competitive neutrality via worldwide taxation. Potential difficulties in this approach could arise in particular cases with unlimited foreign tax credit.

Conclusions

Based on international tax agreements no discriminatory tax policy of the participating countries might be in force. In addition, the states must adjust their national legislation if any discrepancies occur. The topicality of this issue is also noticeable from the European Commission statement which examined tax measures for cross-border workers (European Commission, 2012).

7 *Further to question of tax and social security consequences Rytířová, Tepperová (2012).*

We present data on Czech tax non-residents filing a personal income tax return, in which a continuous growth between the years 2004 and 2010 can be seen. There is a noticeably higher increase between 2007 an 2008, which is probably encouraged by the amendment of conditions for most of the tax credits that can be applied by Czech tax non-residents.

Even though we provided interesting data showing numbers of Czech tax non-residents in the years 2004-2010 in comparison with Czech residents, it was not our goal to analyze potential variables in construction elements of taxation causing such development. Our goal was to make a thorough research on actual legal arrangements of Czech tax non-residents in comparison with Czech tax residents and question these arrangements from the point of view of theoretical conception of tax nondiscrimination principle as well as with available court decisions.

According to results of the above analyses, Czech national legislation in the field of personal income taxation is within the relevant Court of Justice of the EU's decisions. As discussed, some discrepancies in Czech national legislation were questioned by formal requests of the European Commission in the past. The Czech Republic always responded with an amendment to relevant legislation, which removed the discriminatory provisions.

Different conditions in taxation of Czech tax non-residents compared to Czech tax residents can still be found in tax allowances and tax credits, where Czech tax non-residents must declare more than 90% of worldwide income from source in the Czech Republic to be allowed to deduct most of the allowances and tax credits. However, such treatment of tax non-residents should not be, according to the Court of Justice of the EU, challenged as discriminatory.

Another difference in taxation of non-residents can be found in tax administration, when withholding tax at source is used for Czech tax non-residents compared with standard way of taxation (via filing a tax return) for Czech tax residents with the same income. Nevertheless, also for this approach the Court of Justice of the EU decided that such treatment is not against EU law.

We also discussed the discrimination issue in Czech social security legislation, where different international treaties than for income taxation apply. Some discriminatory provisions in the field of social security contributions could be found in past, however, in present only a single provision covering the health insurance contributions can still be considered as clearly discriminatory, as it suggests a less favourable calculation of the assessment base for the health insurance contributions for employees with employment contract concluded according to another than Czech labour law.

Theoretic conception of tax discrimination provides a different view on nondiscrimination principles, when locational, leisure and competitive neutrality are in question. Even though it is difficult to generalize and each case should be judged separately with a special care, it can be said that Czech national legislation in the field of personal income taxation is fully in compliance with locational neutrality approach and is preconditioned to meet criteria of competitive neutrality via worldwide taxation.

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Budget Transparency and Fiscal Performance: Do Open Budgets Matter?

Transparentnost rozpočtu a fiskální výkonnost: mají otevřené rozpočty vliv?

LUCIE SEDMIHRADSKÁ, JAKUB HAAS

Abstract

Existing published research into the relationship between budget transparency and fiscal performance confirms the expectations that higher budget transparency is associated with smaller budget deficits and lower public debt. However, our previous research did not bring such clear results but raised a fundamental question: Why should greater transparency improve fiscal performance? The objective of this paper is to re-evaluate the relationship between budget transparency and fiscal performance. Based on the literature review we have identified three channels through which increased transparency may limit excessive public expenditure resulting in budget deficit and public debt: (1) reduced fiscal illusion, (2) decreased information asymmetry between politicians and voters which may improve accountability and increase political competition, and (3) strengthening in the enforcement of fiscal rules. The results of statistical analysis (conditional means analysis for 2008, correlation and regression analysis for 2003 to 2009) did not prove a significant negative relationship between budget transparency, measured by the Open Budget Index, and budget deficit or public debt. We found a negative and statistically significant relationship between corruption and budget transparency.

Keywords

budget transparency, fiscal performance, Open Budget Index

JEL Codes

D73, H60

Abstrakt

Stávající výzkum vztahu transparentnosti rozpočtu a fiskální výkonnosti potvrzuje očekávání, že vyšší transparentnost rozpočtu souvisí s menším rozpočtovým deficitem a nižším veřejným dluhem. Náš předchozí výzkum nepřinesl tak jednoznačné výsledky a otevřel zásadní otázku: Proč by měla vyšší transparentnost zlepšovat fiskální výkonnost? Cílem tohoto článku je zhodnotit vztah mezi transparentností rozpočtu a fiskální výkonností. Na základě obsahové analýzy literatury jsou identifikovány tři procesy, díky kterým může větší transparentnost omezit nadměrné veřejné výdaje vedoucí k rozpočtovému deficitu a veřejnému dluhu: (1) omezení fiskální iluze, (2) snížení informační asymetrie mezi politiky a voliči, která zvýší odpovědnost politiků a konkurenci mezi politiky a (3) posílení vymahatelnosti fiskálních pravidel. Výsledky statistické analýzy (analýza podmíněných průměrů pro rok 2008 a korelační a regresní analýza pro období 2003-2009) nepotvrdily existenci významného negativního vztahu mezi transparentností rozpočtu měřenou Indexem otevřeného rozpočtu a rozpočtovým deficitem a veřejným dluhem. Současně jsme

potvrdili statisticky významný negativní vztah mezi transparentností rozpočtu a mírou korupce.

Klíčová slova
transparentnost rozpočtu, fiskální výkonnost, Index otevřeného rozpočtu

Introduction

Existing published research into the relationship between budget transparency and fiscal performance confirms the expectations that budget transparency is associated with smaller budget deficits and lower public debt. However, our previous research (see Sedmihradská, Haas and Štefek, 2011) did not bring such clear results but raised a fundamental question: Why should greater budget transparency improve fiscal performance?

The objective of this paper is to evaluate the relationship between budget transparency and fiscal performance. In order to fulfill this objective we raised and answered four research questions:

1. What are the main reasons why excessive public expenditure results in budget deficit and public debt and how can these be limited by improved budget transparency?
2. What kind of relationships have been proved in research published to date?
3. Do countries with higher ranking in the Open Budget Survey show lower budget deficit or smaller public debt?
4. Is higher corruption associated with lower budget transparency?

In order to answer the first two questions we underwent a detailed literature review. The answer to the third question is based on statistical analysis (conditional means analysis for 2008 and correlation and regression analysis for 2003 to 2009). Budget transparency is measured by the Open Budget Index and fiscal performance data are taken from the International Monetary Fund (2011). The last question is answered based on correlation analysis. Corruption is measured by the Corruption Perceptions Index (see Transparency International, 2011).

The next section of the paper deals with the relationships between fiscal institutions, budget transparency and fiscal performance and shows three channels through which increased transparency may limit excessive public expenditures resulting in budget deficit and public debt. It also summarizes the results of the existing research into budget transparency impacts on fiscal performance. Finally, there is a brief discussion about the relationships between corruption, transparency and fiscal performance. The third section describes the data and methods used and the final section presents and discusses the results of the provided analysis.

1 Fiscal Institutions, Budget Transparency and Fiscal Performance

Extensive research into the effects of political and institutional factors on fiscal performance, such as budget deficit and public debt, has been carried out in the past three decades. Results obtained confirm without any doubt that institutions do really matter.

The term "institutions" is very broad and encompasses any rule or procedure which may influence the decision-making regarding public budgets. Among the constitutional institutions belong the rules of election or the form of government (see Persson and Tabellini, 2003). "Budget institutions" comprise rules and regulations according to which budgets are prepared, approved and implemented, e.g., the character of the relationship between executive and legislature or existence of numerical targets or multiyear budgeting (see Alesina and Perotti, 1999, p. 14). A recent detailed review of the existing research about the relationship of institutions and fiscal performance and fiscal sustainability is offered for example in Rose (2010).

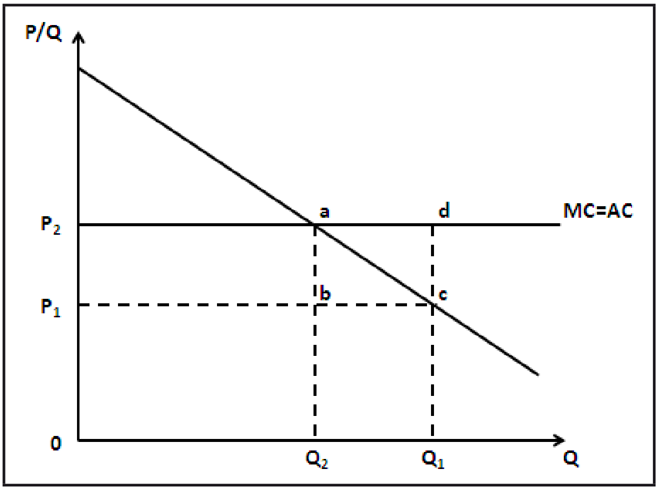
Budget transparency is usually defined as full disclosure of all relevant fiscal information in a timely and systematic manner (see OECD, 2002). Kopits and Craig (1998) define fiscal transparency as "an openness toward the public at large about government structure and functions, fiscal policy intentions, public sector accounts, and projections. It involves ready access to reliable, comprehensive, timely, understandable, and internationally comparable information on government activities (…)"[1]. Budget transparency is one of the features of the institutions shaping the environment of the budgetary process (see von Hagen, 2007, pp. 29 and 31).

There are three main reasons for the inefficiency of resource allocation which originates in the framework of the budgetary process: fiscal illusion, deficit bias and misuse of public funds (see von Hagen and Harden, 1994). The first two reasons are quite similar to each other: in both cases citizens underestimate the true price of public good which leads to oversupply of that good, i.e., to excessive public expenditures and consequent debt financing. In the case of fiscal illusion citizens fail to recognize the total tax burden and in case of the deficit bias the future obligations are discounted at an excessive discount rate. The third reason is a consequence of the principal-agent relationship between citizens and politicians.

The impact of fiscal illusion and the deficit bias is shown in Figure 1. P_2 and Q_2 show the tax price and the desired quantity of public good in case fiscal illusion is not present. The total budget (expenditures = revenues) is the area $0Q_2aP_2$. In case of fiscal illusion or deficit bias the perceived price falls to P_1, desired quantity grows to Q_1. At this moment the perceived budget is the area $0Q_1cP_1$, however the real budget (expenditures) is $0Q_1dP_2$. The area P_2P_1cd is the excessive budget (expenditures – revenues = deficit). We can observe a mix of different forms of fiscal illusion specified by Fasora (2012, pp. 143-145): the public does not recognize the total tax burden (i.e., tax illusion) or full costs of government borrowing (i.e., debt illusion) and it believes that the benefits of public expenditures are higher than the real relationship price = tax (i.e., expenditure illusion).

1 *KOPITS, G.; CRAIG, J. (1998), p.1.*

Figure 1: Fiscal illusion and deficit bias



Source: Dollery and Worthington (1996, p. 263).

Improved budget transparency could limit the difference between the real tax price P_2 and the perceived tax price P_1, which would lead to a smaller excessive budget.

The decision making process about public finances has the character of a principal-agent relationship as the voters delegate the power to elected politicians. This creates space for politicians to behave differently from voters desires. Improved transparency can limit this behavior through improved accountability and increased political competition (von Hagen, 2007, p. 37).

Increased transparency enables voters to better understand the budget, i.e., the financial plan of the government, and to evaluate the actual performance of the government. It reduces information asymmetry: the more voters know about and understand the budget process the less politicians can act strategically and use fiscal deficits and excessive expenditures to achieve opportunistic goals. Lack of budget transparency may increase voters' confusion and reduce politicians' commitment to be fiscally responsible (Benito and Bastida, 2009, p. 405). Thus the budget transparency increases the accountability of the politicians.

Budget transparency may increase political competition as the conditions for both the incumbent (i.e., politicians currently in the office) and the competing candidates (i.e., currently in the opposition) get closer. The information advantage of the incumbent will decrease and the promises of the competing candidates will be more realistic (see von Hagen, 2007, p. 37).

Nowadays, many countries use fiscal rules, such as expenditure ceilings, deficit targets or tax ceilings, as a tool to safeguard fiscal sustainability (see Joumard et al., 2003, p. 120). These fiscal rules can only lead to fiscal discipline if they are backed by transparent reporting. Otherwise they create various "perverse" incentives. Fiscal transparency is essential for enforcement of fiscal rules.

The above presented arguments show that expectations that improved budget transparency is associated with better fiscal performance are justified.

Table 1 lists four recent studies into the relationship between budget transparency and fiscal performance together with a summary of the applied methods and main findings. All studies were cross-sectional and took place between 1999 and 2005. Researching of the influence of budget transparency on fiscal performance required the establishment of a reliable budget transparency indicator, which would allow comparison across countries and time. All authors constructed their own budget transparency indicator using internationally comparable data sources (OECD questionnaire or database and IMF Reports on the Observance of Standards and Codes - ROSCs). Results of different budget transparency indicators comparison that were provided by De Simone (2009, Tab. 2) show, however, substantial differences among them. For example the correlation coefficient between index of Alt and Lassen (2003) and index of Benito and Bastida (2009) amounts to only 0.316 and is statistically insignificant. The comparison of the coverage of IMF, OECD and Open Budget Index (OBI) transparency standards provided by Popelářová (2012, p. 45) shows that the coverage of the IMF Code is the broadest and that OECD and OBI overlap by almost 80%.

Table 1: Existing research on the relationship between budget transparency and fiscal performance

Authors	Fiscal performance indicator	Transparency indicator	Countries	Method	Results
Alt and Lassen (2003)	General government debt/GDP (1999)	Own indicator based on OECD questionnaire (1999)	19 advanced	Multiple regression	Significant (0.05), negative, transparency and debt
Benito and Bastida (2009)	Government debt/GDP Budget balance/ GDP (2003)	Own indicator based on the OECD/World Bank Budgeting Database (2003)	41 advanced and developing	Correlation	Significant (0.05), positive, transparency and budget balance
Hameed (2005)	Average primary budget balance (2000-2004)	Own indicator based on IMF ROSCs (2005)	57 advanced and developing	Multiple regression	Significant (0.05), positive, transparency and average primary balance
Jarmuzek (2006)	General government debt/GDP (2005)	Own indicator based on IMF ROSCs (2005)	27 CEE countries	Multiple regression	Weak, negative, transparency and debt

Source: own compilation based on the listed studies.

With only one exception (Jarmuzek, 2006) the studies have proved the expected relationship: better transparency is associated with higher budget balance (= lower budget deficit) and lower public debt. Jarmuzek (2006, p. 11) concludes that there is "no strong statistical evidence for importance of fiscal transparency"[2] in transition economies.

2 *JARMUZEK, M. (2006) p. 11.*

Lack of transparency is one of the main factors leading to corruption (see Tanzi, 1998, p. 569) and corruption reduces the overall economic efficiency (see Grochová and Otáhal, 2012) including excessive public expenditures. Empirical evidence confirms the relationship between transparency and corruption. For example Bastida and Benito (2007, p. 690) found that "the less corrupt a country is, the more transparent its budget reports are"[3]. Corruption can among others affect tax administration and public spending decisions. A corrupted tax administration is unable to collect tax revenues efficiently, i.e., public revenues are lower than expected. At the same time corruption may increase public expenditure at least through investment projects, distorted in both size, composition, and public procurement (see Tanzi, 1998, pp. 567-568). These negative effects of corruption lead to lower budget balances, i.e. inferior fiscal performance.

2 Data and Methods

The data used in our analysis come from three sources: The data on fiscal transparency came from the results of the Open Budget Survey, which is available electronically at the web page of the Open Budget Partnership (2010a). Data on fiscal performance comes from the International Monetary Fund (2011) World Economic Outlook Database from April 2011. Data on corruption came from Transparency International (2011).

For the purposes of evaluation into budget transparency we have used the Open Budget Index for the years 2006, 2008 and 2010. The Open Budget Index (OBI) is computed using the data from the Open Budget Survey which has been compiled from questionnaires completed for each country by independent budget experts not associated with the national government. The Survey in over 120 questions examines the availability of eight key budget documents and their comprehensiveness, the extent of oversight provided by legislatures and supreme audit institutions and opportunities available to the public to participate in national budget decision-making processes (see Open Budget Partnership, 2010).

Descriptive statistics of OBI are shown in Table 2. During the analyzed years the number of surveyed countries (N) grew from 60 to 94 (93 analyzed; due to lack of fiscal data we have excluded East Timor from the analysis). Based on the OBI countries are divided into 5 groups: scant or no information (0-20), minimal (21-40), some (41-60), significant (61-80) and extensive (81-100) (see Open Budget Partnership, 2010). The ranking of many countries has changed, sometimes substantially. This explains why the correlation coefficient is only between 0.747 and 0.827 for the OBI in different years. OBI tends to be higher in richer countries; the correlation coefficient of OBI in 2010 and GDP per capita in 2008 is 0.532.

3 *BASTIDA, F.; BENITO, B. (2007), p. 690.*

Table 2: Descriptive statistics of OBI

	N	Mean	Min	Max	Std. Dev.	Number of countries					Correlation	
						scant or no	minimal	some	significant	extensive	obi 2008	obi 2010
obi2006	60	45.500	3	89	21.781	8	15	23	8	6	0.747*	0.827*
obi2008	83	40.434	0	88	24.684	23	15	26	15	4		0.802*
obi2010	93	42.301	0	92	24.644	22	18	33	13	7	0.802*	

*Note: * correlation is significant at 0.01 %.*
Source: own calculations.

Fiscal performance was evaluated using relevant indicators available in the International Monetary Fund (2011) World Economic Outlook Database. Table 3 lists the applied variables together with a short description.

Table 3: Fiscal performance variables

Subject Description	Subject Notes	Units
General government gross debt	Gross debt consists of all liabilities that require payment or payments of interest and/or principal by the debtor to the creditor at a date or dates in the future.	Percent of GDP
General government net lending/borrowing	Net lending (+)/ borrowing (-) is calculated as revenue minus total expenditure.	Percent of GDP
General government primary net lending/borrowing	Primary net lending/borrowing is net lending (+)/borrowing (-) plus net interest payable/paid (interest expense minus interest revenue).	Percent of GDP
Gross domestic product per capita, current prices	GDP is expressed in current U.S. dollars per person. Data has been derived by first converting GDP in national currency to U.S. dollars and then dividing it by total population.	U.S. dollars
Gross domestic product, constant prices	Annual percentages of constant price GDP are year-on-year changes; the base year is country-specific.	Percent change
Unemployment rate	Unemployment rate can be defined by either the national definition, the ILO harmonized definition („unemployed" are those who are currently not working but are willing and able to work for pay, and have actively searched for work), or the OECD harmonized definition (unemployment rate gives the number of unemployed persons as a percentage of the labor force).	Percent of total labor force

Source: International Monetary Fund (2011), World Economic Outlook Database.

Missing data has been supplied from Eurostat in the case of unemployment rate for Bulgaria and Sweden and in the case of general government primary net lending/borrowing for Poland and Romania. Data on unemployment rate for Turkey came from OECD.

The OBI indicator is the publishing year, however, the evaluation reflects the transparency of the budget document for one or two years before publishing, thus the OBI 2006 reflects the situation in 2004 and 2005 for most of the countries. As the OBI is published biannually we have naturally used the same OBI for two years.

We have used multiple methods in order to find out whether there is a relationship between budget transparency and budget balance and public debt.

First we focused on the cross-sectional research: we undertook analysis of conditional means for the year 2008 and correlation analysis for the years 2004-2009 in the software STATISTICA 7.1.

For the longitudinal research we decided to use, similarly to our previous research (see Nitschová, 2001), the model of Roubini and Sachs (1989), which allows evaluation of the factors influencing annual budget deficit (i.e., the change of the debt to GDP ratio):

$$d(\mathrm{b}_{it}) = a_0+a_1.d(b_{it-1})+a_2.d(r_{it})+a_3.d(q_{it})+a_4.d(u_{it})+a_5 OBI_{it}+v_{it}, \qquad (1)$$

where

- $d(\mathrm{b}_{it})$ is the difference between general government gross debt as a % of GDP in the years t a t-1;
- $d(b_{it-1})$ is the difference between general government gross debt as a % of GDP in the years t-1 and t-2;
- $d(r_{it})$ is difference between the real interest rate in the years t and t-1[4];
- $d(q_{it})$ is the difference in the percent change of the gross domestic product in constant prices in the years t and t-1;
- $d(u_{it})$ is the difference in the unemployment rate in the years t and t-1; and
- OBI_{it} is the Open Budget Index.

For estimation of the model we have used panel data fixed-effects model analysis in the software Gretl 1.9.2. The model is estimated for 18 countries (Brazil, Bulgaria, Chad, Costa Rica, Croatia, Czech Republic, Egypt, France, Jordan, Nepal, Norway, Poland, Romania, Slovenia, Sweden, Turkey, United Kingdom and United States). For the other countries data were not available for the whole period or for all variables.

4 *First, we calculated the interests paid (as a % of GDP) as the difference between general government net lending/borrowing and general government primary net lending/borrowing (both as a % of GDP). Second, we calculated the nominal interest rate as a share of the interests paid in public debt (both as a % of GDP). Third we have adjusted the nominal interest rate for inflation.*

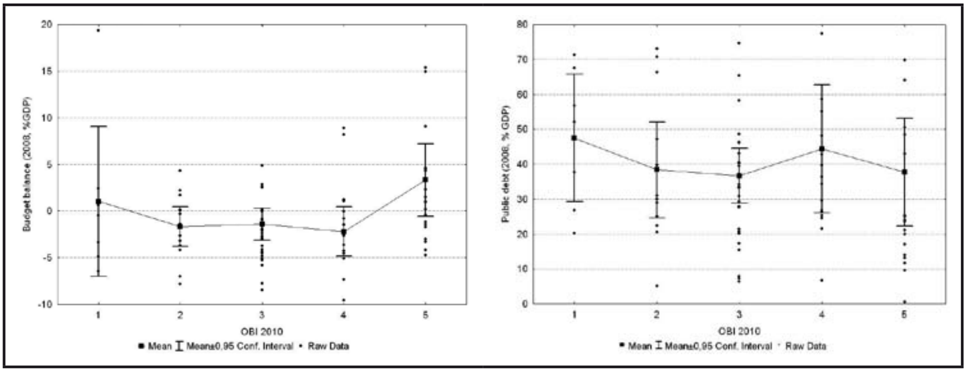
For measuring of the relation between corruption and public budget transparency we use Corruption Perceptions Index which is published by Transparency International every year. It can reach values from 0 (the highest rate of corruption) to 100 (the lowest rate). We have undertaken correlation analysis for the years 2006, 2008 and 2010 in the software STATISTICA 7.1.

3 Results

First we present the results of the cross-sectional analysis into the relationship between budget transparency measured by the OBI and budget balance and public deficit. After this we present the results of the estimation of equation (1).

The figure 2 of the conditional means shows that the budget balance is decreasing, (i.e., budget surplus turns into budget deficit between the countries with extensive (1) and significant (2) budget transparency) with the exception of the group of countries with scant or no transparency, which shows the highest budget balance. With regard to the fact, that these countries provide hardly any fiscal data, the quality of the provided data is extremely questionable. Analysis of variance proved that there were significant differences in the budget balance among the five groups and the LSD (least significant difference) test proved that differences between the last group (5) and all the remaining groups except the first one (i.e., 2, 3 and 4) are significant at 5 % level. The analysis of the conditional means of the public debt did not prove any significant differences between the groups of countries based on their transparency level.

Figure 2: Average budget balance and public debt in different transparency groups (2008)



Note: Based on the OBI countries are divided into 5 groups: 1 = extensive (81-100), 2 = significant (61-80), 3 = some (41-60), 4 = minimal (21-40) and 5 = scant or no (0-20). Outliners, i.e. budget surplus above 20 % of GDP (1 case), budget deficit above 10 % of GDP (1 case) and public debt above 80 % of GDP (4 cases), are not shown for ease of presentation.
Source: own presentation.

Table 4 shows the results of the correlation between OBI and budget balance (general government net lending/borrowing) and OBI and public debt (general government gross debt) for the years 2004 and 2009. The expected relationship (+ for budget balance and –

for public debt) can be found only in a few cases: budget balance in 2004, 2007 and 2009 and public debt in 2004 and 2005. The results shown are not statistically significant at the 5% level with only two exceptions – budget balance in 2006 and 2008. However, in these cases the sign is opposite to the expectation.

Table 4: Correlation results: Budget balance and government debt (% GDP) and OBI (2004-2009)

Y	X	r(X,Y)	r2	t	p	N	
balance2004	obi2006	0.0548	0.0030	0.4178	0.6777	60	Y = -1.7635+0.0091*X
balance2005	obi2006	-0.0041	0.0000	-0.0314	0.9750	60	Y = -0.2299-0.0009*X
balance2006	obi2008	-0.302*	0.0912	-2.8502	0.0055	83	Y = 6.4878-0.1074*X
balance2007	obi2008	0.0253	0.0006	0.2280	0.8202	83	Y = 1.0954+0.0146*X
balance2008	obi2010	-0.242*	0.0585	-2.3789	0.0195	93	Y = 2.4029-0.0637*X
balance2009	obi2010	0.1204	0.0145	1.1569	0.2503	93	Y = -6.1568+0.0208*X
debt2004	obi2006	-0.1846	0.0341	-1.3415	0.1857	53	Y = 66.1715-0.2524*X
debt2005	obi2006	-0.1901	0.0361	-1.3964	0.1685	54	Y = 62.0766-0.2468*X
debt2006	obi2008	0.1129	0.0127	0.9774	0.3315	76	Y = 38.1844+0.1877*X
debt2007	obi2008	0.1211	0.0147	1.0494	0.2974	76	Y = 33.8007+0.1361*X
debt2008	obi2010	0.0241	0.0006	0.2209	0.8257	86	Y =38.341+0.0262*X
debt2009	obi2010	0.0508	0.0026	0.4659	0.6425	86	Y = 41.2135+0.0571*X

*Note: * correlation is significant at 0.01 %.*
Source: own calculations.

The results of the estimated equation (1) presented in Table 5 shows that the model predicts reasonably well the budget deficit and that all independent variables have the correct sign, i.e., the budget deficit is higher as economy slows down, unemployment and interest rates increase and the budget deficit in the previous year is high. The impact of budget transparency is negative, i.e., higher transparency is associated with lower budget deficit. However, our results do not allow us to reject the null hypothesis that budget transparency does not influence budget deficit.

Contrary to most of the previous research we did not confirm a clear relationship between budget transparency and budget deficit or public debt. The main contribution of our paper is in the longitudinal design of the research and the application of an independent, internationally recognized measure of budget transparency.

The weakest point of the research is in the selection of countries used in the longitudinal research. While the cross-sectional research (correlation analysis) included 53 to 93 countries, there were included only 18 countries in the longitudinal research (regression analysis) and this selection was purely dependent on the availability of the whole set of fiscal and economic data.

The answer on the fourth question can be seen in Table 6. We see strong and significant correlation between corruption and budget transparency in all three years with available data. This finding complies with theoretical assumptions (see Tanzi 1998) and earlier empirical findings (see Bastida and Benito, 2007).

Table 5: Fixed-effects estimates of budget deficit - d(b_{it}) (18 cross-sectional units, 6 time periods, 108 observations)

	(1)		(2)		(3)	
const	6.2694		6.6811		6.3652	
	(4.5737)		(4.2897)		(4.2995)	
q(t)	-0.3169	**	-0.3146	**	-0.3039	**
	(0.0850)		(0.0842)		(0.0841)	
u(t)	2.0052	**	2.0271	**	2.0914	**
	(0.3420)		(0.3305)		(0.3280)	
r(t)	0.1038		0.1046			
	(0.0811)		(0.0806)			
OBI	-0.1151		-0.1225	*	-0.1174	
	(0.0763)		(0.0708)		(0.0710)	
b(t-1)	0.0268					
	(0.0989)					
Adjusted R-squared	0.5809		0.5854		0.5821	
Durbin-Watson statistic	2.1197		2.0829		2.0962	

*Note: std. error reported in parenthesis, ** significant at 0.01 %, * significant at 0.1 %.*
Source: own calculations.

Table 6: Corruption Perceptions Index and Open Budget Index

Year	No. of countries	Corr. coeff.	p-value
2006	59	0.7052	0.000
2008	78	0.5029	0.000
2010	92	0.6532	0.000

Source: own calculations.

Conclusions

Institutions, including budget transparency, influence fiscal performance. There are at least three channels through which increased transparency may limit excessive public expenditures resulting in budget deficit and public debt: (1) reduction of fiscal illusion, (2) a decrease of information asymmetry between politicians and voters which may improve accountability and increase political competition, and (3) stronger enforcement of fiscal rules.

The results of statistical analysis which combined conditional means analysis for 2008 and correlation and regression analysis for 2004 to 2009 did not prove the expected significant negative relationship between budget transparency, measured by the Open Budget Index, and budget deficit or public debt. The main reason that increased budget transparency did not limit budget deficit and public debt in the expected magnitude is the fact that transparency by itself, i.e., without engagement of civil society or advocacy groups, is insufficient to improve governance (Open Budget Partnership, 2013, p. 4). The OBI score measures mainly the timely availability of budget information. The assessment of conditions for public participation was included for the first time in OBI 2012.

The discrepancy between our findings and findings of other studies (Alt and Lassen (2003), Benito and Bastida (2009), Hameed (2005) and to some extend Jarmuzek (2006)) has several reasons: country sample, evaluated time period and budget transparency indicators. Our results are influenced by the fact that OBI and also our samples include many poor and very poor countries and many developed countries are missing. The ability or capacity to borrow is higher in rich countries which are more transparent. All the cited studies deal with the first five years of this century, when the variability of the debt levels was higher. While in 2008 almost 70% of the countries operated with public debt lower than 50% of GDP in 2000 it was only 31%. Many countries managed to considerably lower their debt without improving budget transparency. The definitions of applied budget transparency indicators differ. The OBI is narrower than indicators based on the IMF Code of Good Practices on Fiscal Transparency and does not evaluate budget transparency outside the central government. The mismatch in the coverage of the OBI and the indicators evaluating fiscal performance of the general government may weaken the relationship between them.

In accordance with previous research we found negative and statistically significant relationships between corruption, measured by Perception Corruption Index, and public finance transparency, measured by Open Budget Index.

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Is Euro Area an Optimal Currency Area and What Barriers Could Obstruct Its Future Development?

Je eurozóna optimální měnovou oblastí a jaké překážky by mohly bránit jejímu budoucímu vývoji?

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Abstract

European monetary integration has been a really ambitious project since the very beginning and during last decade it succeeded in many areas. The euro was launched without serious problems and since then the European Central Bank has managed to achieve a low inflation rate in the whole euro area. The European Union and the euro experienced the world economic crisis in 2008 and dealing with the impacts of this crisis was a real challenge for the EU, for all the member states, single monetary policy and the euro area and also for the whole integration process. In our paper we will proceed from the Optimal Currency Area model (OCA, developed by Robert A. Mundell, Peter Kenen and Ronald McKinnon) to conditions of the euro area and European currency integration process. The paper will summarize the OCA model and test the criteria for OCA in European conditions and identify barriers to the OCA as imperfect mobility of the labour market, an unfinished single market, insufficient coordination and cooperation in common macroeconomic areas within the euro area, asymmetric shocks and others. The findings will show us that euro area does not exactly meet majority of criteria for OCA model but due to strong political will of European states is the euro project going to continue. This paper also discuss the perspectives of European monetary integration.

Keywords

euro, euro area, monetary integration, European Union, Optimal Currency Area theory, single currency, single monetary policy

JEL Codes

E42, N14

Abstrakt

Evropská měnová integrace byla skutečně ambiciózní projekt od samého začátku evropského integračního procesu a během posledního desetiletí byla v mnoha oblastech jistě úspěšná. Euro bylo zavedeno bez vážných problémů a od té doby se Evropské centrální bance podařilo dosáhnout nízké inflace v celé eurozóně. Evropská unie a euro zažily světovou ekonomickou krizi v roce 2008 a řešení dopadů této krize bylo skutečnou výzvou nejen pro EU samotnou, pro všechny členské státy, jednotnou měnovou politiku a eurozónu, ale také pro celý integrační proces. V naší stati jsme vycházely z modelu optimální měnové oblasti (OCA, vyvinutého Robertem A. Mundellem, Peterem Kenenem a Ronaldem McKinnonem) v podmínkách eurozóny a evropské měnové integrace. Článek shrnuje model OCA, jehož kritéria testuje v evropských podmínkách a identifikuje překážky OCA jako nedokonalou mobilitu na trhu práce, nedokončení jednotného trhu, nedostatečnou koordinaci a spolupráci ve společných makroekonomických oblastech v rámci eurozóny, asymetrických šoků a další. V závěru shrnutí dat ukáže, že eurozóna sice nesplňuje většinu kritérií pro model optimální měnové oblasti, ale díky silné politické vůli evropských států je tento projekt stále životaschopný. Tento článek se rovněž zabývá perspektivami evropské měnové integrace.

Klíčová slova
euro, eurozóna, měnová integrace, Evropská unie, teorie optimální měnové oblasti, jednotná měna, jednotná měnová politika

Introduction

European monetary integration was a really ambitious project from the very beginning and more importantly without any historical precedent. Monetary integration in Europe between numerous independent countries is a new issue in world economy with quite a daring goal – a single currency for a single European market.

Optimal Currency Area (OCA) theory is a part of international economics trying to understand conditions and optimal circumstances for monetary integration between countries with their own currencies. OCA models are trying to state crucial criteria that should have been met before single currency was implemented in order to ensure future smooth economic growth and development. There are a few theoretical presumptions for OCA models stated by different economists, for example a high degree of production factors mobility, openness of member economies, political will or fiscal cooperation between the members.

This paper is going to focus on these criteria and compare current development and conditions of European Economic and Monetary Union (EMU) and its members with theoretical approach to OCA models. The primary goal of the paper is to decide whether EMU is meeting any of the criteria for an OCA model and if European monetary integration is able to deal with major economical problems. So the question of the paper stands: Is the Euro area an Optimal Currency Area as defined by the OCA models? The main hypothesis of the paper is going to be: *"Euro area is not an optimal currency area and does not meet the majority of OCA models criteria."* as we presume EMU not to be an optimal currency area and we are going to focus on the OCA criteria while trying to approve or decline the hypothesis. The real data about economic performance and real and nominal economical variables of euro member states are going to serve as a base for comparison with OCA models and as a starting point to analyze real conditions of currency integration in Europe.

Although real convergence inextricably links with the nominal convergence, it is necessary to consider both approaches in parallel as an evolving process. Understanding of both nominal and real convergence, however, is not among the authors unambiguous, it always depends on the economic theories that the survey is based on. Nominal convergence can be understood as the convergence of economies in terms of nominal variables (such as inflation, interest rates, GDP per capita, etc.), real convergence, taking into account the level of economic development, usually measured by GDP per capita. In our paper, however, we consider only nominal convergence, which reflects the success of the single monetary policy.

1 OCA as a theoretical approach to monetary integration

There are a lot of different approaches (originally the idea of OCA came from Mundell in 1961) that examine if the floating exchange rate between the currencies of individual countries would lead to a compensatory process and wonder if in some circumstances it would be better to create a single currency area (or the area of fixed exchange rates). The argument for the use of either floating rates or single currency must therefore be based on economical characteristics of concerned area and conditions for economical growth. The optimal currency area is then the region that is able to meet the criteria. The main criteria were originally stated by Mundell as a high degree of mobility in labour and capital (Mundell, 1968).

Mundell´s theoretical model of OCA was accepted by many of latter economists and mainly broaden by them with other criteria. This chapter is going to summarize these criteria. The idea behind the OCA models is simple. What criteria should be met if two countries decide to implement a single currency and a single monetary policy? With the decision of implementing a single currency the countries lose their independence in monetary affairs and their control over flexible exchange rate as a part of macroeconomic policies. The criteria for OCA are then the conditions that allow stable growth for the economies while exchange rates are fixed and cannot be used as part of government policies.

The emergence of macroeconomic imbalances can at least be partially eliminated by the following assumptions, according to theoretical OCA models developed by different economists there are different criteria for successful monetary integration:

- high degree of mobility of production factors between economies,
- wages and price flexibility,
- size and openness of the national economy,
- variety in production, consumption structure and export diversification,
- nominal and real convergence of national economies,
- political integration and political will of member countries,
- fiscal integration and coordination.

The basics of OCA theory were involved by Canadian economist Robert A. Mundell. His basic assumption was high mobility of labour and capital, if prices and wages are fixed. A prerequisite for an optimal currency area is also a synchronization of economic cycles so that in the case of macroeconomic instability (demand or supply asymmetric shocks) in the single currency area, the countries would be able to respond in one effective way with a complex solution. As a main factor for monetary integration Mundell saw high mobility of labour as movements of workers can balance the missing exchange rate mechanism during economic disbalancies.

McKinnon extended the theory to the criteria of an open economy, which he defined as the ratio between tradable and non-tradable goods in relation to domestic production and consumption and its impact on the balance of external and internal economic process. Large amount of internal trade within the concern area with a single currency is then the main presumption for successful monetary integration (McKinnon, 1988) as the single currency will bring more benefits than disadvantages.

Peter Kenen later introduced a factor of production and concluded that countries with a high degree of diversification of production are suitable for membership in the monetary union even at low labour mobility between countries. Kenen argued that the area with sufficiently diversified production is able to face any economical shocks better even when a single currency within the area has been implemented. A diversified economy with a wide range of export products is able to trade with more diversity and so in the case of asymmetric shocks this area can reduce negative consequences. A country may face, on the one hand, a decrease in demand for a product of a wide range of exported goods, and on the other hand, may increase demand for other goods. In consequence the countries with little diversified production should opt for a floating rate.

More important Kenen states a so called "optimum policy mix". Currency and fiscal policy need to go hand in hand. As Kenen states (1969) the main purpose of fiscal policy is to balance differences between regions and use the both side of common budget to diminish these differences. Single fiscal policy can serve as the most important factor for successful single currency integration and common tax system and state transfers can balance any other lacking OCA criterion.

Friedman was in fact the first one to consider exchange rates regimes in a group of states (Friedman, 1953). Friedman argued that the more the wages and prices are flexible the more convenient is to introduce a fixed exchange rate between states. He also stated that if the wages and prices are highly flexible then the stabilizing exchange rate mechanism between two states is not needed. It is mainly important in the short run following a shock as the economies can then adopt new conditions faster and in a more effective way. However, he still favored a flexible exchange rate.

Nominal and real convergence of national economies is quite an important characteristic for OCAs as the more countries are similar to each other the more single monetary cooperation and policies can be effective. Similar inflation and interest rates can minimize problems for a country while adopting a single currency. The more the countries converge the better and more effective the single monetary policy could be.

Some authors argued that all the real and nominal characteristics of countries within a single currency area are important but there are some factors that can balance the unfavorable conditions for example missing mobility of labour or rigid prices in the area. If for example countries also decide to enter a fiscal union with fiscal transfers between the members than these transfers could serve as an establishing economical mechanism as a replacement for missing flexible exchange rate (Kenen, 1969). The same goes for political integration as the political will of the single currency area members can replace some missing economical characteristics stated by OCA theory and the political will to integrate is probably the most important agent for a monetary integration process.

1.1 Endogeneity Theory in OCA models

This theory was developed by Jeffrey Frankel and Andrew Rose in 1998. The hypothesis is based on the idea that the criteria for OCA stated by the theory are not necessary to meet before entering the monetary union but can be met after joining. In a way this theory presumes that the single currency integration process is going to start some changes in the economies that can eventually cause member economies to converge and the area of single currency will gain characteristics of OCA during some period. The authors highlight the significant influence of the single currency on international trade and investment flows. Correlation of business cycles and other changes in OCA member economies are seen as a result of growth of international trade within the internal market of the single currency area. Based on this theory, business cycles and trade intensities of twenty industrialized countries, between 1959 and 1993, were analyzed and positive statistical relation between these two variables was found. Frankel and Rose said that more intensive economic integration is associated with tighter synchronization of business cycles between members. The most important thing is if the currency area has the potential to create an optimal currency area in the future.

The methodology and the findings

We are going to use available data of economic variables to describe a current situation within the euro area of 17 states (which differ in size, degrees of openness and structure of economy) and compare it with the OCA model presumptions and criteria for optimal currency integration. In the context of OCA models we will follow casual connections and contrasts while focusing on the macroeconomic phenomenon of the euro currency area. To analyze its supranational conditions and coherency we will compare the optimal conditions of OCA models with the real imperfections of the current euro area.

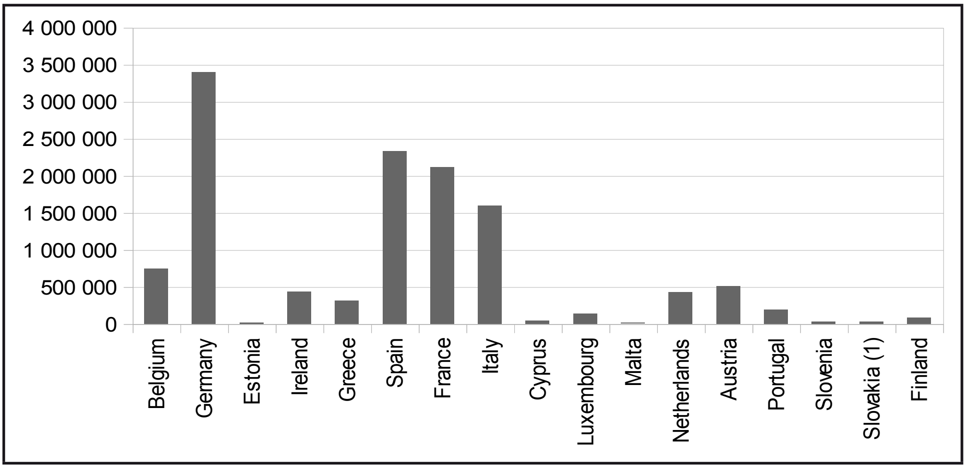
In this chapter we are going to evaluate the theoretical criteria for OCA on real data of the period of ten years between 2001 and 2011 and we will try to conclude whether or not is EMU an optimal currency area. As EMU is not a single isolated process we will also put European currency integration to wider circumstances and we will evaluate the EMU as a part of European integration process.

1.2 Labour Mobility

Mundell sees the mobility in production factors (labour and capital) as one of the main stabilizing mechanism in a single currency area. Increasing mobility in capital is considered to be an instant feature of the world economy during the last globalization decades. No exception in Europe, European capital is highly mobile and European financial markets are strongly integrated, so this chapter is going to focus on labour mobility as a main factor. Free movement of persons is one of the four freedoms of EU and also a core part for a European single market.

Unfortunately Europe is not as mobile as the European Commission would like it to be. We can look on the latest statistics about the migrating population of Europe. Figure 1 illustrates the total numbers of how many citizens of the European Union are living in EU member state other than their own by origin. You can see from Figure 1 that there are almost 3.5 million EU-foreigners living (and working) in Germany. Other countries with significant large amount of EU-foreign-inhabitants are Spain, France, Italy and UK (not part of euro area).

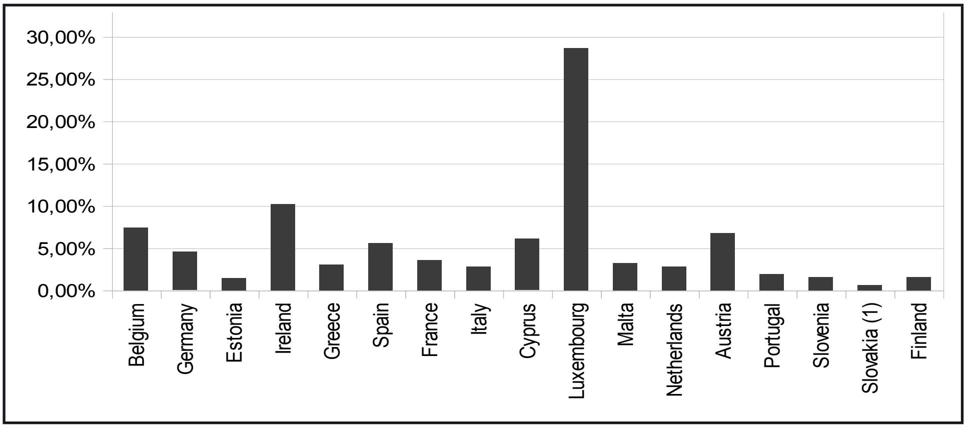
Figure 1: Total amount of EU foreigners living in specified country in 2010 or (1) 2009, data for each country of EA17



Source: Eurostat (2012a).

In Figure 2 we will look at the same data but this time as a percentage rate of total number of EU citizens (domestic + other EU-member citizens living in a state). You can see a high rate in case of Luxembourg or Ireland. So in fact there are a lot of EU-foreigners working in Germany in absolute numbers but compared to a total number of German inhabitants and labour force the value of 4.5% is merely just a little more than the European average and in fact not so significant to the labour power in Germany. The same goes for UK or Italy.

Figure 2: Percentage of EU foreigners living in a country in 2010 or (1) 2009, data for EA17 countries



Source: Eurostat (2012a).

You can see from Figures 1 and 2 that there are not so many member states having a high percentage of inhabitants that come from other EU member state. There are only 6 out of 17 EMU member states that have a higher percentage of EU-foreign-inhabitants than 5%. And, for example, the data for Belgium are not really relevant as majority of foreigners working in Belgium is due to European institutions which tend to be seated in Belgium. The high rate for Luxemburg is not a result of high worker mobility but mostly a historical progress. Average rate for the whole EU is less than 4%.

According to a public opinion survey declared by the EU most Europeans think that seeking a job in a different EU member state is good for the economies. But on the other hand only one third of correspondents mean that it is also good for their families, as stated in Eurobarometer 337 (European Commission, 2010). 84% of the European population has no experience at all with living in another EU country than the original one as published in Eurobarometer 337 (European Commission, 2010) and the same level of EU population did not work or study in any other European country than their own. Last but not least most Europeans do not intend to move to any other EU country any time sooner or later in the future (European Commission, 2010).

Some other surveys of Eurobarometer 337 (European Commission, 2010) and Eurobarometer 264 (European Commission, 2006) also say that almost half of the correspondents would consider moving to another country if they were unemployed. But as a long line of surveys shows there is a strong tendency for a not-moving-anywhere mood in Europe and this unwillingness of Europeans to move is a long-term condition as a percentage of people living in other countries of Europe is steadily low – less than 2% during last 30 years.

And what are the European reasons for such a low worker inter-state mobility? The multilingual character of Europe, historical and cultural traditions of European states, European bureaucracy, rigid labour markets, different types of education systems and necessity for recognizing diplomas and other education qualifications etc. And worldwide economic crisis did not make it any easier. Low labour mobility in Europe is not a temporary condition and is not going to change any time soon. The labour markets in Europe are really rigid due to the national politics of the member states but there are also a lot of cultural, historical and linguistic reasons why the European labour markets will not be any time soon highly mobile as Mundell´s model assumed. In short... the euro area is not even close to an optimum currency area concept as far as the labour mobility is concerned.

1.3 Wages and price flexibility

Wages and prices in the EU are not very flexible. In most member countries of EMU wage costs are rising every year. And it also negatively affects the unemployment rate as states Arpaia (2007). The average hourly labour costs were estimated in 2011 to be €27.6 in the euro area (EA17). However, there are significant differences between Member States, with hourly labour costs ranging from €8.1 in Estonia to €39.3 in Belgium (Tab. 1 below). Which in a way could possibly serve as a source of higher labour mobility in the European single market but due to all the obstacles it just shows the differences between member states and the labour markets' rigidity.

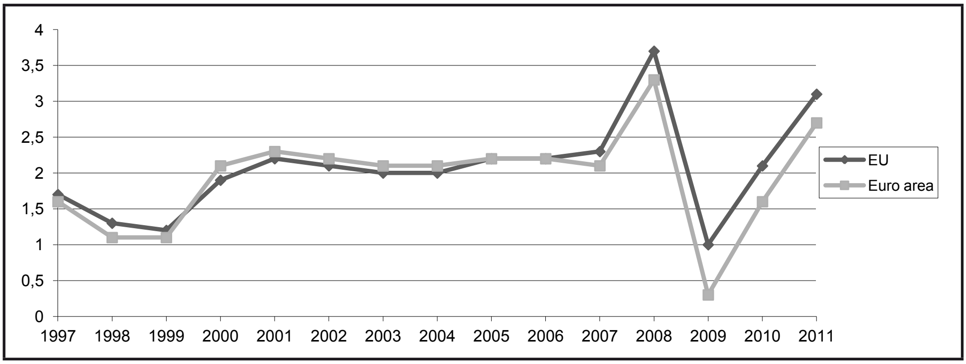
Table 1: Labour cost per hour in euros (costs for wages and salaries plus employer's social contributions)

	2009	2010	2011		2009	2010	2011
EU17	26.5	26.9	27.6	Cyprus	15.9	16.2	16.5
Belgium	37.0	38.2	39.3	Luxembourg	32.0	32.7	33.7
Germany	29.0	29.1	30.1	Malta	11.3	11.5	11.9
Estonia	7.9	7.7	8.1	Netherlands	29.8	30.5	31.1
Ireland	28.0	27.9	27.4	Austria	27.7	28.1	29.2
Greece	17.6	17.5	-	Portugal	11.9	12.1	12.1
Spain	20.0	20.2	20.6	Slovenia	13.8	14.1	14.4
France	32.1	33.1	34.2	Slovakia	7.9	8.1	8.4
Italy	25.6	26.1	26.8	Finland	28.7	28.9	29.7

Source: Eurostat (2012b).

The inflation rate in the euro area was recorded at 2.6 % at the beginning of 2012. Historically, from 1999 until 2012, the euro area inflation rate averaged 2.3 % reaching an all-time high of 5.0 % and a record low of -0.7 % in 2009. Inflation rate records a general rise in prices measured against a standard level of purchasing power. Below we can find Figure 3 with historical data of the inflation rate of the euro area.

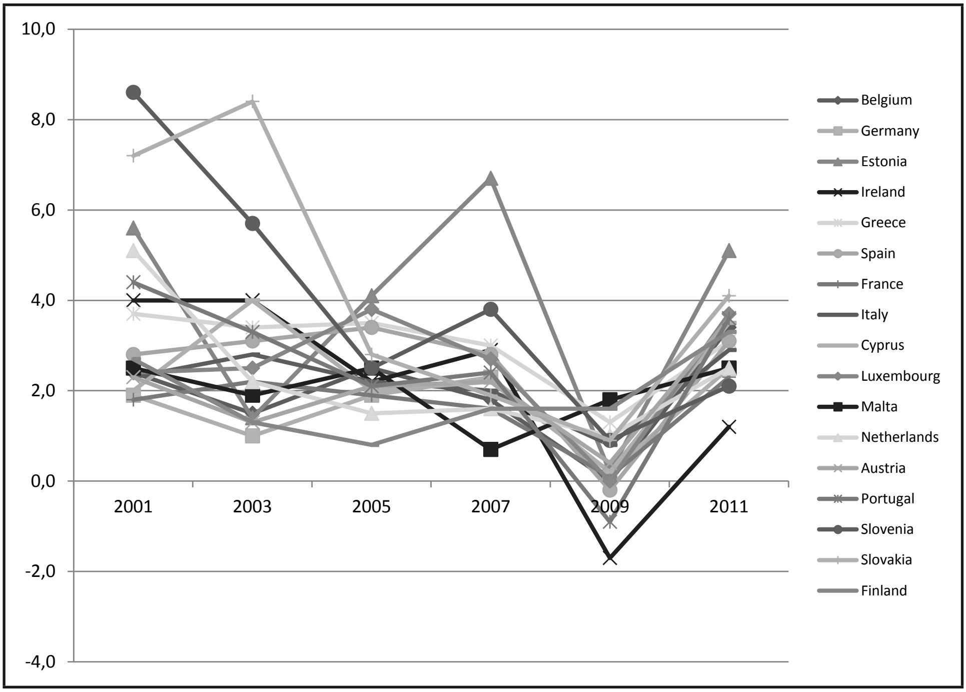
Figure 3: Inflation in Europe (in %)



Source: Eurostat (2012d).

You can see from Figure 4 how the EA states are synchronized with regards to national inflation rate. Inflation rates are influenced by single monetary policy managed by ECB but there are a lot of differences between the euro member states. In 2011 there was a 4 percentage points difference between the lowest (1.2 in Ireland) and the highest (5.1 in Estonia) inflation rates in the euro area.

Figure 4: Inflation in EA17 member states, two years interval (in %)



Source: Eurostat (2012d).

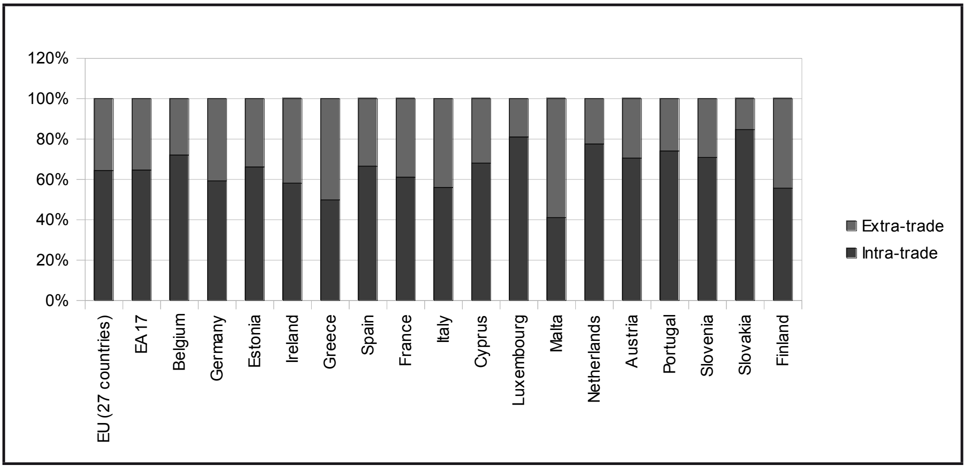
The euro area does not meet the criteria of wage and price flexibility in its single currency area. You can see from Figure 3 and 4 and Table 1 that even with a single monetary policy and a strict inflation policy managed by ECB the euro area is not converging and differences between the members exist.

The differences in inflation rates reflect the particular economic conditions that exist at national and regional levels. The individual citizens, households and businesses can experience differences in inflation due to income differences, varied consumption preferences and patterns, the extent of local price competition, different tax rates etc. Here we would like to briefly mention about the causes and application of the Balassa-Samuelson model of real equilibrium exchange rate with a model of capital accumulation and with the demand side of the economy. As some empiric studies claim it could be show how the model can be used toward projecting price convergence in some economies (more Holub, Čihák, 2003). The key empirical observation of the Balassa-Samuelson model is that countries with higher productivity in the tradable sector compared with the non-tradable sector tend to have higher price levels. Holub and Čihák (2003) extended the model of more than two goods. Their calculations suggested that for countries with relatively low price level, there should be a negative relationship between the price dispersion and price levels; it means the relationship should become less negative for countries with higher price level, and eventually turn positive with increasing price levels.

1.4 Sufficient size and openness of the national economy

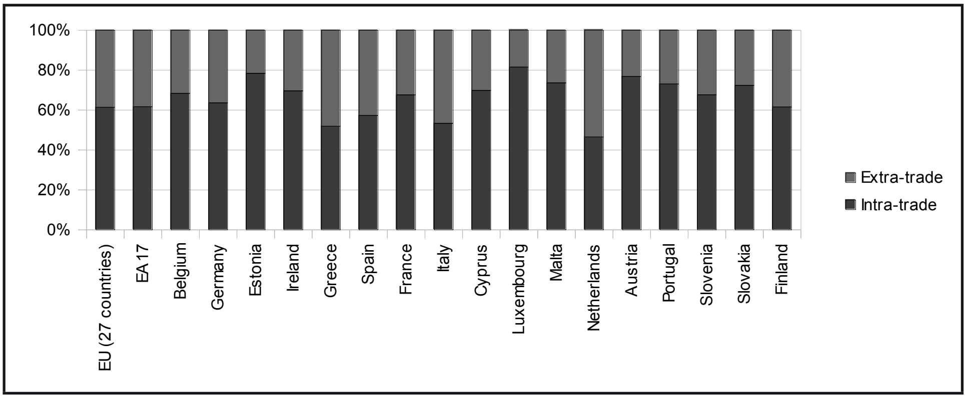
Most EU countries are open and are therefore good candidates for monetary integration. European countries also have a long history of trade between European states and the inner-European trade is at the core of the integration process from the very beginning. A common trade policy, a single market and a single currency just developed a highly concentrated area within Europe with intensive trade between the EU-members as we can see on Figure 5 and 6.

Figure 5: Intra and extra EU-27 trade in 2011 (exports, % share of total trade)



Source: Eurostat (2012e).

Figure 6: Intra and extra EU-27 trade in 2011 (imports, % share of total trade)



Source: Eurostat (2012e).

According to Figure 5 and 6, smaller countries are more open than the others. One reason is the inability of the economy to satisfy domestic demands and the economic dependence between the EU countries. The intra EU-27 trade achieved high levels over a long period. Especially for smaller countries, the share of intra trade is between 60 and 80 percent. We can say that the euro area meets the criteria of OCA models as far as the openness of the economies is concerned.

1.5 Variety in production, consumption structure and export diversification

Diversification of the economy and production structure can be monitored using exports indicators by the Standard International Trade Classification (SITC). SITC 0: Food, live animals, SITC 1: Beverages, tobacco, SITC 2: Raw materials, SITC 3: Fuels, lubricants, SITC 4: Animals, vegetable oils, SITC 5: Chemicals, SITC 6: Manufactured Goods, SITC 7: Machinery, transport equipment, SITC 8 Miscellaneous manufactures, SITC 9: Others. You can see data for the EA17 countries in Table 2.

Based on these data we can conclude that diversification in the euro area is sufficient. The most important export commodity is machinery and transport equipment. There are some countries that have large export shares in machinery but other EU countries depend more on other industry sectors such as beverages, fuels or other manufactured goods. As the data shows the European single market is diversified and there are a lot of differences in industry specialization in different countries and if we slightly modify the original Kenen's criterion (which says that it is advisable to enter the monetary union for a country whose production and export are sufficiently diversified), we can say that EMU meets the OCA model criteria. Kenen was not involved in the production and export diversification of the monetary union as a whole, but he saw it from the perspective of a potential member. For the euro area is a shining example of strong export specialization economies Germany, France and the Netherlands.

Table 2: Extra-EU27 trade - Share of Exports (%) by Member States, SITC Classification

	SITC 0+1	SITC 2+4	SITC 3	SITC 5	SITC 7	SITC 6+8
Belgium	4.4	5.9	10.3	11.7	3.0	7.7
Germany	13.1	14.2	5.4	24.3	37.5	25.0
Estonia	0.4	0.5	1.1	0.1	0.2	0.2
Ireland	2.1	0.9	0.2	10.1	0.7	1.5
Greece	1.1	1.3	5.9	0.3	0.1	0.6
Spain	7.2	7.3	10.9	4.3	3.4	5.1
France	20.1	6.6	7.9	11.9	10.7	9.6
Italy	9.3	6.5	11.5	6.6	9.8	15.5
Cyprus	0.1	0.1	0.1	0.0	0.0	0.0
Luxembourg	0.0	0.0	0.0	0.0	0.2	0.3
Malta	6.1	0.0	0.7	0.0	0.1	0.0
Netherlands	13.1	13.6	18.4	6.4	5.9	4.0
Austria	2.3	2.2	0.3	2.4	2.4	3.4
Portugal	1.4	1.6	1.8	0.4	0.4	1.0
Slovenia	0.4	0.7	0.5	0.7	0.3	0.6
Slovakia	0.1	0.2	0.1	0.1	1.0	0.5
Finland	0.8	4.6	1.4	0.9	1.5	2.1

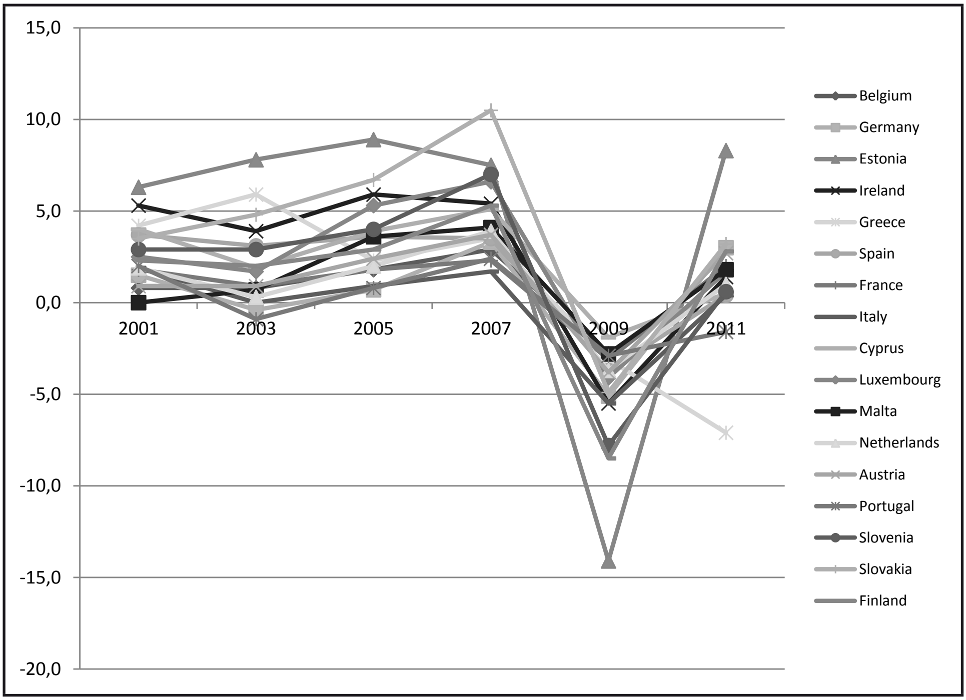
Source: Eurostat (2012e).

1.6 The existence of positive shock and correlation among countries

Europe is a diversified continent and the European Union is a heterogeneous unit with large differences between member states. First, there is a large difference in development and economic wealth between the original states (as we consider EU6, EU9, EU10, EU12 or even EU15) and the new members of the EU (12 member from central, southern and eastern Europe). Second, there are also few really strong economies such as Germany or the United Kingdom that represent a kind of economical core to the European integration with a main influence on the European economy and a high dependence of other smaller member states on these large members. And third, there are big differences in economic growth in different countries; we can find a large growth in some smaller countries from the east (Baltic countries for example) and some really low growth rates in original EEC states (for example France, Belgium or Italy). And the same differences that go for the EU can also be applied for the euro area. Currently the euro area is a mixture of small and big, strong and weak, rich and poor countries.

If we simply look at the data of economical growth in Europe we will not really see a lot of similarities in progress. Yes, all the European states were hit by the last world crisis, but the degree of growth decreased and the time needed for recovery also differed.

Figure 7: Economical convergence in EMU area, GDP growth in two years interval (in %)



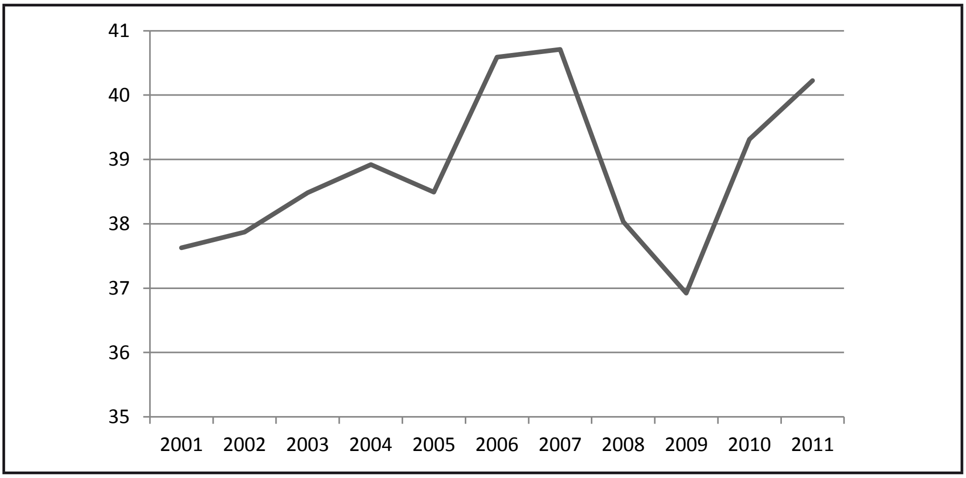
Source: Eurostat (2012f).

Figure 7 illustrates economical growth during the last decade in Europe. We can see that the correlation between different states is not really coordinated. There are some similarities within growth or depression tendencies but there are always big differences between states in a mind of how deep the recession is or how big the economical growth is. The difference between highest and lowest economical growth in 2011 was 7.6% in Estonia compared to -6.9% in Greece.

Very beginning of the investigation of convergence can be combined with the theory of economic growth. For a better understanding of the problem here we mention only studies dealing with this issue, one of them is the so called beta-and gamma-convergence, authored by Barro and Sala-i-Martin (more Barro, Sala-i-Martin, 1992). They say that when the dispersion of real per capita income across a group of economies falls over time, there is gamma-convergence. When the partial correlation between growth in income over time and its initial level is negative, there is beta-convergence. Beta convergence refers to the case when poor regions experience faster economic growth than richer ones. (Barro, Sala-i-Martin, 1992).

Following a single monetary policy requires that economies were matched in terms of the business cycle, which contributes to the structural similarity variables, in particular the level of GDP. The Figure 8 shows that the differences in economic level between member countries until the beginning of the financial crisis widened and then decreased and since 2009 it has been again widening. The reason for reducing the variance was primarily a relatively larger decrease in real GDP in rich countries in 2009 than in poorer countries (ČNB, 2011). Euro area does not converge.

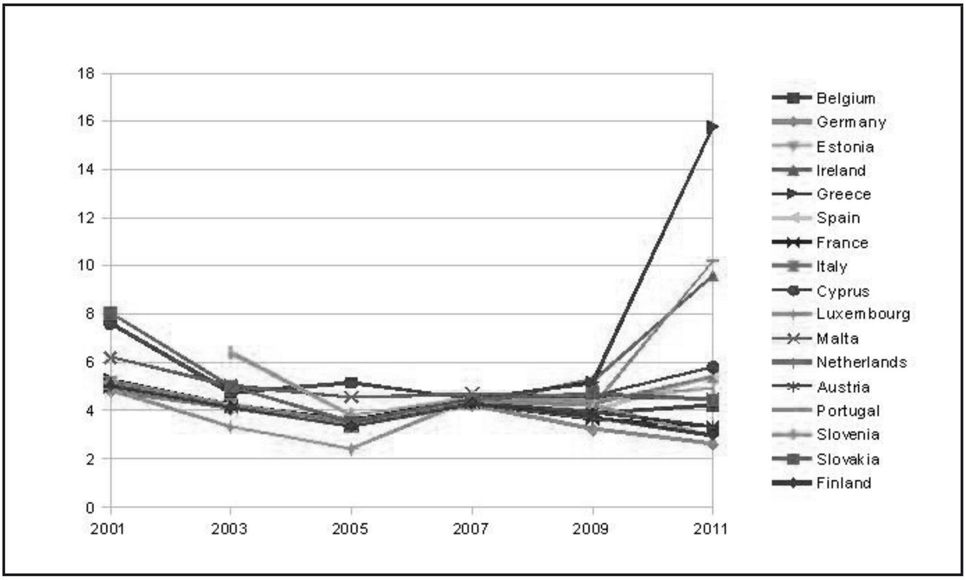
Figure 8: Dispersion of GDP/population in PPP between euro area members (variational coefficient)



Source: Eurostat (2013), (authors' own calculation).

If we consider economic convergences as one of the presumptions for currency integration then we have to admit that the euro area is not really a converging area and does not meet the criteria stated by the OCA model. In Figure 9 we will look at interest rates which were mainly controlled by ECB during the last decade in Europe but in the moment of economical problems showed a diversified development in member states.

Figure 9: Long-term interest rate in euro area, in two years interval (in %)



Source: Eurostat (2012c).

You can see from Figure 9 that the national interest rates in Europe were quite synchronized (more than the inflation rate – see Figure 4) but in the moment when world economic crisis came to Europe national interest rates started to diverge in large scales. There are big differences between the states with tight and strict national fiscal policies and the states with quite a long tradition with expansive government sectors (even with a single monetary policy). In 2011 the difference between the lowest (2.6 in Germany) and the highest (15.8 in Greece) was more than obvious.

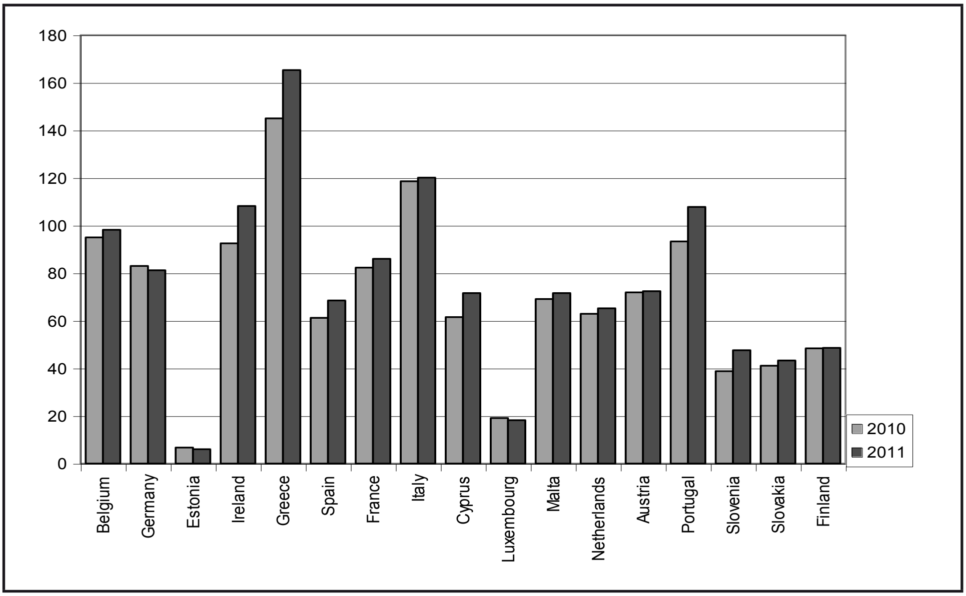
2 Fiscal integration and coordination

For the coordination of fiscal discipline and to avoid excessive government deficits and public budgets the EMU countries established a 'Stability and Growth Pact' in 1997. This pact is an agreement between members of the euro area, which concerns the coordination of budgetary policies to safeguard the stability of the euro and to prevent the increase of inflation in the euro area. This Agreement shall also apply to some countries outside the European Economic and Monetary Union. Extra-large countries such as Germany and France violated the pact and especially at the Initiative the EU Council in March 2005 agreed on new rules. Increased number of options when a member state can exceed three per cent deficit in public finances and the period before the EU accedes to sanctions has been extended.

The general government deficit as stated in the Agreement shall not exceed 3% of GDP and public debt must be less than 60% of GDP, or must at least diminish. If any country does not fulfil these conditions, the European Commission issue a warning signal and even a money penalty can be imposed (0.2 to 0.7% of GDP depending on the violation). These penalties do not apply in case of emergencies such as natural disasters or in the case of a prolonged economic crisis.

Figure 10 shows the debt of individual EU Member States (whether member states or non-EMU) as a percentage of GDP. It is also one of the Maastricht criteria, allowable value being 60% of GDP.

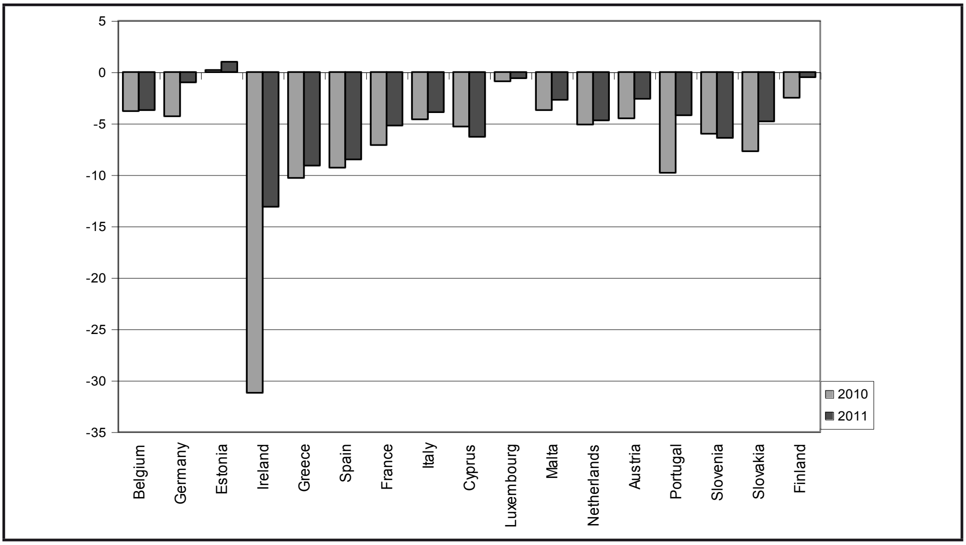
Figure 10: General government debt in percentage of GDP, 2010 and 2011



Source: Eurostat (2012g).

The border of three percent of budget deficit over the years failed to be complied to by several states, including Germany and France. In the long term, however, more states had difficulties in fulfilling the criteria, mainly Italy, Portugal, Spain and Greece. We can see the fall in the deficit immediately after the crisis erupted in Europe in Figure 11.

Figure 11: Government deficits in percentage of GDP, 2010 and 2011



Source: Eurostat (2012g).

In 2011 the largest government deficits in percentage of GDP were registered in Ireland (-13.1%), Greece (-9.1%), Spain (-8.5%), Slovenia (-6.4%), Cyprus (-6.3%), France and Romania (both -5.2%). The lowest deficits were in Finland (-0.5%), Luxembourg (-0.6%), Germany (-1.0%) and Estonia (+1.0). However, 15 of EA17 Member States recorded an improvement in their government balance relative to GDP in 2011 compared with 2010 (Eurostat, 2012).

We can see that the European rules for national budgets of member states are not followed and basically are broken really often. Even if we consider Europe as an area with coordinated national budgets and fiscal policies, we cannot still speak about fiscal transfer in EU (in a way the OCA theory sees it) as these are not even part of any of the European agreement. Fiscal transfers are not part of the European integration process and are not supposed to be any time soon. European common budget is strictly defined and can be used only in certain areas, so this budget cannot serve as a fiscal policy mean in a common way. So the euro area is not meeting the criteria for the OCA model as far as the fiscal transfer, fiscal cooperation and single fiscal policy is concerned.

As the evolution of integration process continues we can admit that the latest development of economic governance in EU goes to a direction of fiscal union. New Stability and Growth Pact along with the European Financial Stabilization Mechanism (EFSM), the European Financial Stability Facility (EFSF) and with the European Stability Mechanism (ESM) can serve as a mechanism for balancing the economic disequilibrium inside euro area. And this can serve as a Kenen's "optimum policy mix" (Kenen, 1969). This is not a single fiscal policy yet but the euro area is as close as it is possible to get right now.

3 Political reasons for currency integration

We can see from previous chapters that Europe is not an economical homogeneous area or any kind of suitable area for monetary integration and it fails to meet quite few of the OCA models presumptions. The mobility in the labour factor is really low, wages are rigid and European economies do not really absorb any kind of shocks in perfect symmetry. And in fact the introduction of the euro was mainly a political step in a long walk of European economic cooperation rather than an economical decision.

In the beginning of the euro (during preparation for the Maastricht treaty in the early nineties) Europe was a successful and highly integrated region. The single market was introduced in 1986 and a Single European Act should have been a core of a future economic development in Europe. Free movement of goods, services, persons and capital should have represented the main substantial ingredients of the growing European markets and the euro just compromised a highly convenient instrument for a better single market.

As we look at the economical standards for optimal currency area (from the OCA model) we can notice that this view can be also seen a little differently. Europe wanted to implement the euro not because it was economically reasonable and because of an optimal European currency area. The euro was more seen as an ingredient maintaining better free movements of goods, persons or capital and also serving as a new impulse for integrating the European single market. For many reasons introducing the euro currency also seemed as a logical step to further economical and maybe also (in a distant future) political integration. The euro represented mostly a step in a big wish to have a real single European market. Single market – single currency – single Europe. From this point of view the single euro did just make much more sense than evaluating optimal currency area conditions and making the European currency integration fulfill political criteria of OCA model.

4 Economical vs. political standards of optimal currency area

The fathers of the European single currency tried to incorporate some of the prerequisites for an optimal currency area into the currency cooperation. The convergence criterion had been set up and was supposed to be followed. Participation in Exchange Rate Mechanism (ERM II) was some kind of a main test for every single member state to see how they can handle fixed exchange rates and if it is possible for them to meet the convergence criteria even under this condition.

Member state economies were expected to converge by meeting the Maastricht criteria: fiscal stability, stable price level and strict maintainance of a monetary policy were about to support a real convergence of the euro area member states and the endogeneity of the currency area: as long as European states participate in the currency integration process the more is the European currency area (euro area) closer to the concept of an optimal currency area. However data mostly show the facts that economical variables are stable and differ across the whole euro area and not even a little closer to a converging process. For more information please see for example a study about economical diverging of euro area Matthes (2009). Even though some small countries are actually converging (for example as stated in Bank of Greece, 2009) it is not the case for the whole single currency area.

It is quite evident from these studies that small and open economies (like the new EU member states) are converging to the euro area. These countries usually have national currencies bonded to the euro anyway and their economical growth largely depends on progress in bigger European countries (mainly Germany). In a theoretical sphere (and not speaking about political opinions and actions) the question whether to adopt the euro currency is mostly a question of when rather than if so, as offered in Šaroch, Tomšík, Srholec (2003). These states are anyway so much dependent on the change in the euro area that they can get more profit if they are part of the European currency.

Recent development in Europe also shows us that the single currency has brought some big problems for various European states like Greece or other highly indebted countries. Not only is the European single currency area not converging into an optimal currency area but also the single currency and single monetary policy with low interest rates and a single exchange rate were steadily increasing the differences between member states. Not having an optimal use of fiscal policies and with a lack of a controlling process for fiscal stability within the area the euro area has to face nowadays such a big problem with indebtedness and instability as stated in Matthes (2009).

Conclusions

So is the European currency area an optimal currency area? As we can see from the previous chapters – not even close. There are a lot of obstacles and some of them (such as a high mobility of labour) are not easy to remove. As discussed in previous chapters many problems and insufficient conditions of the European economy for an optimal currency area can be resolved by fiscal cooperation and fiscal union. Right now the EU is on a careful and gradual way to a fiscal union. A new fiscal pact for coordination in the budget area has been introduced last year. But this pact is maintaining only national budget problems with deficit and it put some restraining limits for national fiscal policies.

Possibility of fiscal transfers (as the OCA model presumes) is not a question for European states right now. The common budget of the EU is used strictly for single policies and should not serve as a European single fiscal policy instrument. Willingness of member states is not ready for such a transfer of national competencies and not big enough to sacrifice independent nation fiscal policies. On the other hand the new stabilization mechanisms (EFSM, EFSF and ESM) can point out a new way for single currency and mark an "optimum policy mix" for an optimal currency area in Europe.

The strongest point of European currency integration is the political will of member states. From the very beginning this political will was a main reason and core characteristic of the single currency. Not only could the euro have served as an impulse for a European single market but there were also strong expectations for a growing international position of the European single currency in world economy. European politicians were and still are ready to fight for an idea of a strong Europe and a strong euro.

There are a few possible future development scenarios for the euro and monetary integration in Europe. First: European markets will sooner or later converge and the endogeneity of the currency area will serve as a starting point for establishing a European optimal currency area. Second: fiscal union as much as not possible as it seems today will happen as the member states will be forced by the circumstances of the European integration process. Third: right now European states are getting ready for the possibility of Greece leaving the euro, and this will set the precedent and other states will gradually leave the euro and return to their national currencies. The development mainly depends on the member states and political will in Europe as we stated in the previous chapter. The euro is an economical phenomenon but with a strong political feeling. And maybe the theoretical point of view can be that the euro area is not the right thing to fight for but the European politicians still do.

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Quality Management in Public Sector: Perspectives of Common Assessment Framework Model in the European Union

Management kvality ve veřejném sektoru: perspektivy modelu Common Assessment Framework v Evropské unii

IVETA VRABKOVÁ

Abstract
The paper deals with a particular quality management problems of the public sector. Organisations implement quality management by means of specific models and tools within the Total Quality Management concept. Common Assessment Framework represents one of these public sector models. The purpose of the paper deals with origin, growth and application within the member countries of the European Union. The aim is to evaluate perspectives of the Common Assessment Framework within the public sector of EU countries, mainly aspects such as conditions and structure of the Common Assessment Framework Users in 2008 and 2012. Evaluation of the Common Assessment Framework Users conditions results from CAF Resource Centre. In the paper, growth of the number of the Common Assessment Framework Users in the European countries in 2008 and 2012 is assessed. Further, the paper deals with evaluation of launching the Common Assessment Framework in the specified countries of the European Union and its Users structure within the specified public sector spheres. Results of the evaluation clearly indicate the high potential of the Common Assessment Framework as a tool Total Quality Management in Public Administration, as well as in other areas of the public sector in EU countries.

Keywords
CAF Users, EU states, model Common Assessment Framework, public sector, Total Quality Management

JEL Codes
H50, H70

Abstrakt
Příspěvek je orientován na dílčí problematiku managementu kvality v podmínkách veřejného sektoru. Organizace uplatňují management kvality ve smyslu koncepce Total Quality Management prostřednictvím specifických modelů a nástrojů. Ve veřejném sektoru k těmto modelům patří model Common Assessment Framework. Jeho vznik, rozšíření a míra uplatňování v podmínkách zemí Evropské unie je předmětem tohoto příspěvku. Cílem příspěvku je vyhodnotit perspektivy modelu Common Assessment Framework ve veřejném sektoru zemí EU, a to z hlediska stavu a struktury uživatelů modelu Common Assessment Framework v roce 2008 a 2012. Hodnocení stavu uživatelů modelu Common Assessment Framework vychází z údajů poskytnutých CAF Resource. Příspěvek hodnotí

vývoj počtu uživatelů modelu Common Assessment Framework v členských státech EU v roce 2008 a 2012. Dále se zabývá zhodnocením zavedení modelu Common Assessment Framework v jednotlivých státech EU a struktury uživatelů tohoto modelu dle stanovených oblastí veřejného sektoru. Výsledky hodnocení jasně ukazují na vysoký potenciál modelu Common Assessment Framework, jakožto nástroje komplexního řízení kvality jak ve veřejné správě, tak i dalších oblastech veřejného sektoru zemí EU.

Klíčová slova
uživatelé modelu CAF, státy EU, model Common Assessment Framework, veřejný sektor, komplexní řízení kvality

Introduction

An important part of whatever organisation's management system is a present quality management concept applied within Total Quality Management (hereafter TQM). No matter what is the company size (small or large), or if is profit-making or non-profit-making, manufacturing or trading company. According to Robbins&Coulter (2008), the principle of TQM consists in complex and perpetual improving of all organisation activities with respect to customer's needs. Imler (2006), supporting the above mentioned statement, submits that the effective quality system of the specified organisation presents an infinite process with customers, their requirements and needs.

In 20th century, since the second half of the 80s, propensity for quality management in the public sector has been obvious in connection with New Public Management (hereafter NPM) concept, according to Ferlie, Lynn and Pollitt (2005). Lane (2000) describes NPM as a modern management concept of the public sector aimed at improving the public service efficiency and quality. In fact, the NPM concept was inspired by the best private sector management procedures. Caddy&Vintar (2004) as well as Christensen&Laegreid (2007) see reasons for NPM implementation in increasing demand for public services with no equivalent resources growth, providing and increasing public service quality for their users, strengthening transparent public affairs administration or in an effective utilization of the public funds.

According to Bovaird&Lőffler, development of quality management implemented in the public sector led into integration between the system and strategic management and lawful customers'/citizens' requirements. Specific methods or models enabling planning, organising, evaluating and improving quality play very significant role at management quality implementation. Besides ISO 9000, ISO 14 001, ISO 27 001, Excellence European Foundation for Quality Management (EFQM), Balanced Scorecard, bench-marking, Citizen's Charters and Eco-Management and Audit Scheme (EMAS), Six Sigma and, in particular, Common Assessment Framework[1] (hereafter CAF) can be found within the range of such tools.

The CAF model, the tool of TQM philosophy, is a complex method improving quality of the public sector organisations. As said in the theories, the main impetus to modernize,

1 *See details by ENGEL (2003).*

manage public affairs effectively, improve efficiency and practice customer-oriented activities within the public sector institutions, which contributed to the origin of the CAF, was given by activities and cooperation among EU ministers responsible for Public Sector. Similarly, in the 20th century, since the beginning of the 90s, quality management tools, which found their implementation in the private sector but were disunited and unsuitable for public organisations, penetrated into the public sector institutions in Europe. Since 2000, the CAF has been the original European quality improvement tool for the public sector.

Development and implementation of the CAF are to be studied by the European Institute of Public Administration (hereafter EIPA). Studies done by Staes&Thijs (2010), Staes, Thijs, Stoffels and Geldof (2011) are the latest ones.

The aim of this paper is evaluating perspectives of the CAF within the public sector of EU countries in terms of CAF implementation rate in 2008 and 2012.

In the first chapter of this paper, descriptive analysis represents development and perspectives of the CAF, quality-improvement tool for public sector. Conditions and development of the CAF Users of EU member countries are analysed carefully in the second chapter. Conclusion deals with merging the given results and questions for disscussion about perspectives of the CAF within EU conditions.

Assessment of the CAF Users conditions is based on the data by CAF Resource Centre, the information institution of EIPA, which operates the public-accessible web application about the CAF as well. Within this application, the CAF[2] Users (hereafter Users) Database is operated as well. The data about Users obtained were classified, assorted, compared and analysed statistically.

Assessment of the Users conditions and structure is based on the following:

- Comparing development of the number of CAF Users in the member countries of EU in 2008 and 2012.
- Stating the CAF implementation rate in the particular EU member countries and its comparing depending on the country size measured by number of inhabitants.
- Analysing the structure of Users according to the specified spheres of the public sector.

2 *Registration upon the CAF Resource Centre Database is not compulsory for organisations (the CAF Users). Nevertheless, the CAF Resource Centre is initiative itself or by means of national informants (representatives in all 27 EU countries) in appealing the CAF Users to registrate upon this Database. When being registred into the CAF Resource Centre, the CAF User fills in the following data - name, type and size of the company based on the number of employees. All active CAF Users from all countries around the world can be registered in this Database.*

1 Perspectives of the CAF
1.1 Development of the CAF

The CAF has been existed for 12 years now (see Table 1). Preparations for the CAF launching were based on ministerial declaration from November 1998 in which general principles for improving the public services quality for customers were defined (Staes, Thijs, 2011).

Innovative Public Services Group[3] (hereafter IPSG), being inspired by Excellence Model of the European Foundation for Quality Management (hereafter EFQM) and model by Speyer, the German University (The Model of the German University of Administrative Sciences in Speyer), gave the final form to the CAF. The CAF has been designed for use in all parts of the public sector applicable to public organisations at national/federal, regional or local level. The model can be applied under a wide variety of circumstances, such as a part of a systematic programme of reform or as a basis for improvement targeting in the specific public service organisations. Providing that company is very large, the CAF is allowed to be applied only in some parts of the company, e.g. selected section or department.

Development and application of the CAF on the European level has been associated with regular activities nowadays (see Table 1):

- European Conference of the Public Administration Quality.
- Conferences and workshops of the CAF Users.
- Publication and assessment by the CAF Resource Centre (publications, presentations and studies).

Since 2001, the European Institute of Public Administration, through the CAF Resource Centre, has been acting as an information resource centre for the CAF to support its usage. Operating the web sites about the CAF on the European level represents another activity of the CAF Resource Centre. On the web sites[4] (see note below), the CAF can be found in the number of European languages. Moreover, the database of all organizations in which the CAF was applied and the results were registered at EIPA, can be found here as well.

A pilot version of the CAF was presented in May 2000 at the First European Public Administration Quality Conference in Lisbon. While being used and experienced, the CAF became necessary to be revised for the first time. The first revised version, the CAF 2002, was launched in 2002 at the Second European Public Administration Quality Conference in Copenhagen.

3 IPSG represents a part of the European Public Administration Network (EUPAN) which is informal association of Gerenal Directors responsible for public administration in the member states of EU, nominees and other European countries and Council of Europe.

4 The web sites: http://www.eipa.eu/en/topic/show/&tid=191.

Table 1: 12-years CAF timeline

1998	Agreement on the construction of the Common Assesssment Framework within the EUPAN Network
2000	Launch of the CAF at the1st European Quality Conference in Portugal
2001	Creation of the European CAF Resource Centre at EIPA Maastricht
2002	Launch of the reviewed CAF 2002 model at the 2nd European Quality Conference in Denmark
2003	1st European CAF Users Event in Italy; 1st European study on the use of CAF
2004	CAF Master Class at the 3rd European Quality Conference in Netherlands
2005	2nd European CAF Users Event in Luxemburg; 2nd European study on the use of CAF
2006	„CAF Works" publication; Launch of thereviewed CAF 2006 model at the 4th European Quality Conference in Finland.
2007	3rd European CAF Users Event in Portugal; CAF movie
2008	CAF Center at the 5th European Quality Conference in France
2009	Presentation of the Procedure on External Feedback
2010	Celebration of 2000 CAF Users; Launch of the CAF and Education vision; 4th European CAF Users Event in Romania
2011	6th European Quality Conference in Poland; 3rd European study on the use of CAF – "Growing Towards Excellence in the European Public Sector. A decade of European collaboration with CAF."
2012	5th European CAF Users Event in Norway

Source: ammended according to Staes, Thijs (2011). Filling in years 2011 and 2012.

The next revision of the CAF (i. e. revision of the CAF 2002), presented as the CAF 2006 at the Fourth European Public Administration Quality Conference in Tampere, in September 2006, was based, among others, on the results of the CAF usage surveys within the member states of EU provided by the CAF Resource Centre, the information institution of EIPA. Such surveys were done at the CAF Users Event in Rome in 2003 and Luxemboug in 2005.

As compared to the CAF 2002, the CAF 2006[5] version has brought new perspectives and criteria, for example as follows:

- Stronger emphasis on modernization and innovation (changes obvious especially in criteria 1, 2 and 5).
- New examples of assessment contributing to so-called good governance.
- Extension[6] and specification[7] of the scoring system aimed at improving actions (CAF 2006).

By 2012, the third revision of the CAF, the CAF 2012, will have been finished and presented at the CAF Users Event in Oslo.

5 *Note: In the Czech Repuplic, a Czech version of the CAF 2002 model was published for the public sector institutions in 2003. The next version, the CAF 2006 (named as "Společný hodnotící rámec CAF 2006"), was published in the Czech language in 2007 and adapted version named as „Společný hodnotící rámec - CAF CZ 2009" in 2009.*

6 *Scoring system was extended from score between 0 and 5 up to the score between 0 to 100.*

7 *The so-called Finetuned CAF Scoring.*

CAF External Feedback from 2010 as the latest designed tool based on analysing the CAF Users' needs and requirements promises further development in the matter of the public sector quality improvement.

1.2 Basic Features of the CAF and External Feedback

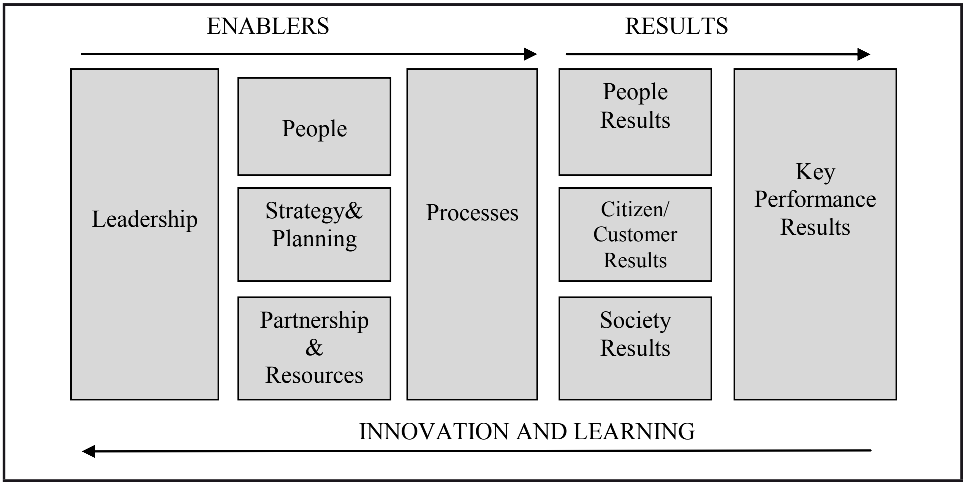
The CAF, as well as Excellence by EFQM, is aimed on the results, customer, clear-goals management, management by means of processes and facts, active work of employees, continual improvement and innovation, mutually profitable partnership and social liability. The main purpose comes in improving the public institutions efficiency.

Here are the main purposes of the CAF model:

- To introduce the public sector to the principles of TQM and advantages of self-assessment and progressively guide them to apply the improving principles through the sequence of activities PDCA (Plan-Do-Check-Art).
- To facilitate the self-assessment of public sector institutions in order to obtain an analysis and improvement activities for the given organization.
- To act as a bridge across the various tools used in quality management.
- To facilitate bench marking and bench learning between public sector institutions, (CAF 2006).

In principle, according to the CAF, there are two existing methods of the self-assessment. The first of them, presented as "Speyer" (Deutsche Hochschule fűr Verwaltungswissenschaften Speyer – University of Administrative Sciences in Speyer cooperated with EIPA to modify the Excellence tool by EFQM in order to be applicable to the public institutions), is based on the assessment of 260 examples within the structure of 9 criteria and 28 sub criteria of the CAF (see Figure 1). The second method, recommended by EIPA workmen, assesses strengths and weaknesses of the particular sub criteria. This model does not deal with examples in details and is called "EIPA".

Figure 1: Structure of the Common Assessment Framework



Source: CAF 2006, p.3.

The CAF External feedback represents common results of the CAF Users who implemented the CAF within of the EU member countries on national levels or CAF Resource Centre.

The main task of the CAF External feedback is providing the external objective evaluation of the following:

- Detachement and level of the CAF self-assessment procedure.
- Organisation work with results of the self-assessment - elaboration and implementation of the improvement plan.
- Growth and level of the quality management in the specified organisation.

The CAF External Feedback (2010) is built upon three pillars. The first pillar serves as an assessement of planning, performing and results of the self-assessment process in the specified organisation. The second pillar qualifies how the improvement plan is implemented by organisation. The third pillar of the CAF External Feedback is based on the eight fundamental Principles of Excellence (these principles framed the CAF body) and refers to the results of the first two pillars.

Within the third pillar the organisation maturity is assessed (in terms of TQM – Total Quality Management) as a result of the self-assessment process and improvement plan.

Pursuant to the assessment results according to the CAF External Feedback, the organisation can be awarded an Effective CAF User label.

2 Assessment of the Users Conditions and Structure and the CAF Implementation in the European Union

2.1 Comparison of the Users in the Member States of EU in 2008 and 2012

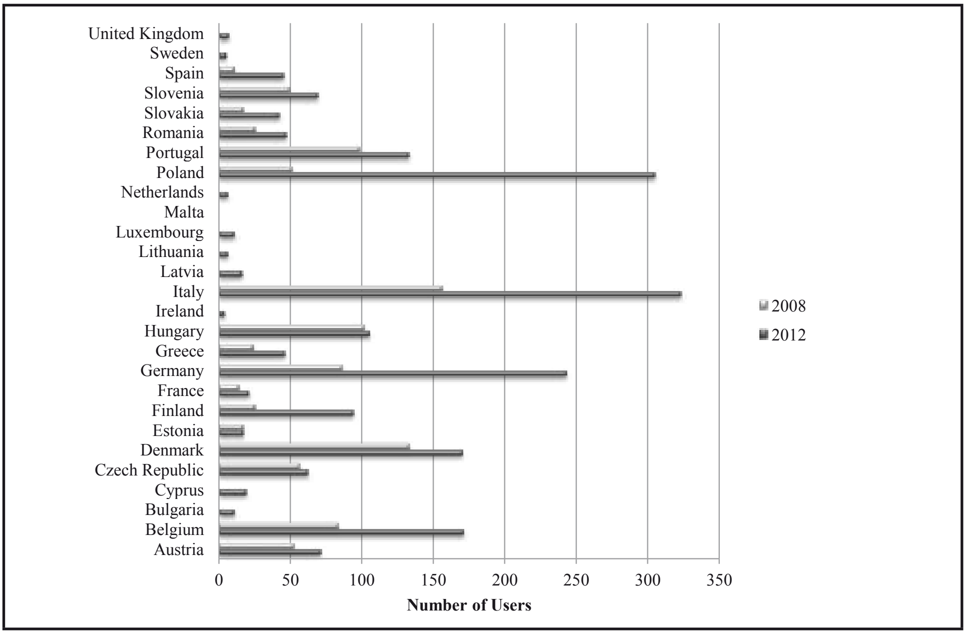
In 2008, 1,136 CAF Users were registred within the European Union. Figure 2 presents shares of the particular EU member countries. On April 30, 2012 there were 2,407 CAF Users registered in the CAF Resource Centre Database. By dividing the Users according to the country, types and number, numerous duplicate registrations in the Database were found out. Such duplicate registrations have been deleted and the actual number of the CAF Users decreased of 359 records. Therefore, the survey works with 2,048 Users for 2012 (see Figure 2).

By comparing the number of Users in 2008 (1,136) and 2012 (2,048), 55% rising between these years is obvious. Likewise, it must be empasized that the growth represents not only the number of Users increase but, in particular, growth of the CAF utilization in another member countries of EU. Based on the CAF Users registered in 2008, the tool was implemented in 17 member countries while in 2012 there are already 26 countries performing the CAF.

In period under the survey, the highest increase of Users was recorded in Poland, Italy, Germany and Denmark. The registrations here increased of 190 Users on an average. To be more specific, the highest increase from 51 up to 311 Users, i.e. sixfold growth, was registered in Poland. On the contrary, number of Users in Estonia between 2008 and 2012 stayed unchanged.

The Figure 2 shows the greatest shares of Users represented by Italy, Poland, Germany, Denmark, Belgium and Portugal (countries in alphabetic order). On the average, 75 users fall on one member country of EU. Moreover, it is obvious that the CAF has been applied and used in all member coutries of EU, except for Malta.

Figure 2: Growth of the CAF Users in 2008 and 2012 within the member countries of the EU



Source: interpretation based on the CAF Resourse Centre (2012).

2.2 The CAF Implementation Rate

It is impossible to specify the CAF implementation rate in the EU member countries based only on their number of inhabitants. To know the size of the country specified by the number of inhabitants[8] is also very important. Hence, for analysing the phase of the CAF implementation in the countries two indexes are used, as follows:

- Index 1 represents number of inhabitants of the country in proportion to the total EU number of inhabitants (on January 1st, 2012, there were 503,492,041 inhabitants recorder).
- Index 2 shows the number of Users in the specified country in proportion to the total number of Users (on April 30th, 2012 there were 2,048 Users recorded).

The fourth column of the Table 2 shows the difference between these two indexes (implementation rate). It was presupposed that the size of the specified country would be comparable to its Users share in proportion to the total number of the Users within EU member countries. The following basic scales have been set for the implementation rate (hereafter IR). Basic statistical values of the IR resulting, i.e. average value of 0.04, medium

8 *Statistics Database Eurostat 7/2012.*

value of -0.44 and standard deviation of 4.67, were considered for fixing the three below stated IR levels.

- IR within the limits (-4.4; 4.4) means corresponding IR
- IR ≥ 4.5; represents low IR
- IR ≤ -4.5; represents higher IR

In Table 2 the member countries are ordered from the greatest to the smallest CAF implementation rate, according to the resulting IR value.

Table 2: The CAF implementation rate in the member countries of the European Union

State	Index 1	Index 2	IR	Description
Poland	7.6	14.89	-7.29	higher
Denmark	1.1	8.30	-7.20	higher
Belgium	2.2	8.35	-6.15	higher
Portugal	2.1	6.49	-4.39	corresponding
Italy	12.1	15.76	-3.66	corresponding
Finland	1.1	4.59	-3.49	corresponding
Hungary	2.0	5.12	-3.12	corresponding
Slovenia	0.4	3.37	-2.97	corresponding
Austria	1.7	3.47	-1.77	corresponding
Slovakia	1.1	2.05	-0.95	corresponding
Czech Republic	2.1	3.03	-0.93	corresponding
Cyprus	0.2	0.93	-0.73	corresponding
Estonia	0.3	0.83	-0.53	corresponding
Luxembourg	0.1	0.54	-0.44	corresponding
Latvia	0.6	0.78	-0.18	corresponding
Greece	2.2	2.24	-0.04	corresponding
Lithuania	0.4	0.29	0.11	corresponding
Ireland	0.9	0.20	0.70	corresponding
Bulgaria	1.5	0.54	0.96	corresponding
Sweden	1.9	0.24	1.66	corresponding
Romania	4.3	2.29	2.01	corresponding
Netherlands	3.3	0.29	3.01	corresponding
Germany	16.3	11.86	4.44	corresponding
Spain	9.2	2.20	7.00	low
France	13.0	1.02	11.98	low
United Kingdom	12.5	0.34	12.16	low

Source: interpretation based on the CAF Resourse Centre (2012).

It is obvious out of the IR results the number of users is in relation to the size of the specified country in 77% of countries (20 states).

In other words, the highest CAF implementation rate falls to Poland, Denmark, Belgium and Portugal. Italy and Finland represents the limit between the high and comparable implementation rate. From the country size point of view, there are mostly middle-sized countries, except for Poland and Italy (see Table 2 – Index 1). The largest countries of the EU such as Germany, Spain, France and United Kingdom, represents very low CAF implementation rate.

2.3 The CAF Implementation in the Public Sector Spheres

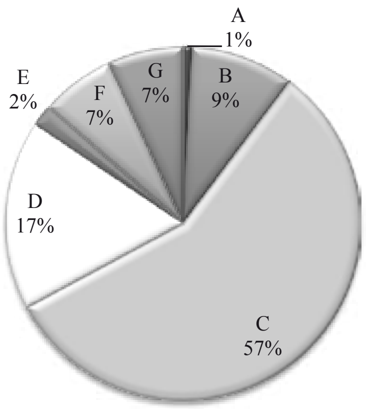
The structure of Users has been composed according to the public sector spheres, marked with letters from A to G, in which the User concentrates its activities. The structure was organized with reference to the number of Users registered in the Users Database for the particular public sector spheres (see Table 3).

The following basic structure of the public sector has been organized:

- A – Justice (Courts, Public Prosecutor's Office, Prison service)
- B – Defence, Public Policy and Security (Military Forces, Police)
- C – Public Administration (Municipal Authorities, State Administration)
- D – Educational System, Science and Research (Schools, Universities, Grant agencies)
- E – Religion, Culture and Sport (Churches, Parishes, Museums, Libraries, Special agencies and associations)
- F – Health and Social Services (Hospitals, Houses for Elderly People, Social service agencies)
- G – Others (Transport, Telecommunications, Housing, Environment, Industry)

By dividing the public sector into the spheres, it is obvious that the highest percentage of the Users, 57%, is concentrated in the sphere "C"– Public Administration. 17% share, which is very significant rate, falls to the sphere "D" – Educational System, Science and Research while the sphere "B" – Defence, Public Policy and Security represents 9% of the Users. Figure 3 illustrates the overview of the Users percentage share in the particular spheres.

Figure 3: Users share in the selected public sector spheres



Source: interpretation based on the CAF Resourse Centre (2012).

Table 3: The number and structure of Users within the public sector spheres of the specified EU countries as of April 30th, 2012

27 EU states	A	B	C	D	E	F	G	**Sum**
Belgium	3	20	91	18	2	26	11	**171**
Bulgaria	0	0	9	0	0	0	2	**11**
Czech Republic	0	1	59	2	0	0	0	**62**
Denmark	2	10	17	89	15	16	21	**170**
Estonia	0	0	12	1	1	0	3	**17**
Finland	0	27	39	11	2	6	9	**94**
France	1	0	10	5	0	2	3	**21**
Ireland	0	0	2	1	0	1	0	**4**
Italy	6	9	119	137	1	29	22	**323**
Cyprus	0	0	4	3	0	2	10	**19**
Latvia	0	1	14	1	0	0	0	**16**
Lithuania	0	0	4	1	0	0	1	**6**
Luxemboug	0	0	8	1	0	1	1	**11**
Hungary	0	54	48	1	0	0	2	**105**
Malta	0	0	0	0	0	0	0	**0**
Germany	4	27	149	22	5	16	20	**243**
Netherlands	0	0	4	1	0	0	1	**6**
Poland	0	0	300	3	0	0	2	**305**
Portugal	0	0	60	29	9	24	11	**133**
Austria	0	1	60	3	0	5	2	**71**
Romania	0	29	15	1	0	0	1	**47**
Greece	0	7	29	2	1	3	4	**46**
Slovakia	0	0	20	15	0	3	4	**42**
Slovenia	0	5	64	0	0	0	0	**69**
Great Britain	0	0	2	3	0	1	1	**7**
Spain	0	1	23	4	5	3	9	**45**
Sweden	1	0	4	0	0	0	0	**5**
Summation	**17**	**192**	**1166**	**354**	**41**	**138**	**140**	**2048**

Source: interpretation based on CAF Resource Centre data from April 2012.

Table 4 illustrates the CAF implementation (according to the public sector spheres) as well as the Users growth in the public sector based on Frequency Statistical Analysis. There can be seen that only in three countries the Users have applied the CAF only in two public sector spheres, in six countries the CAF has been implemented in three spheres, seven countries has applied the CAF in four spheres, in three countries the CAF has been used in five spheres, in three countries the tool has been implemented in six spheres and, finally, in four countries the Users have applied the CAF in all seven public sector spheres.

Table 4: The CAF implementation in the public sector spheres

Number of public sector areas	1	2	3	4	5	6	7
Number of states	0	3	6	7	3	3	4
States	x	Bulgaria, Slovenia, Sweden	Czech Republic, Ireland, Latvia, Lithuania, Netherlands, Poland	Estonia, Cyprus, Luxembourg, Hungary, Romania, Slovakia, Great Britain	France, Portugal, Austria	Finland, Greece, Spain	Belgium, Denmark, Italy, Germany

Source: interpretation based on CAF Resourse Centre data (April, 2012).

Table 5: Comparison of the CAF implementation rate and public sector areas with the highest CAF implemenation

State	IR	Description	Public sector
Poland	-7.29	higher	98 % (C)
Denmark	-7.20	higher	52 % (D)
Belgium	-6.15	higher	53 % (C)
Portugal	-4.39	corresponding	45 % (C)
Italy	-3.66	corresponding	42 % (D)
Finland	-3.49	corresponding	41 % (C)
Hungary	-3.12	corresponding	51 % (B)
Slovenia	-2.97	corresponding	93 % (C)
Austria	-1.77	corresponding	84 % (C)
Slovakia	-0.95	corresponding	48 % (C)
Czech Republic	-0.93	corresponding	95 % (C)
Cyprus	-0.73	corresponding	53 % (G)
Estonia	-0.53	corresponding	71 % (C)
Luxembourg	-0.44	corresponding	73 % (C)
Latvia	-0.18	corresponding	87 % (C)
Greece	-0.04	corresponding	63 % (C)
Lithuania	0.11	corresponding	88 % (C)
Ireland	0.70	corresponding	50 % (C)
Bulgaria	0.96	corresponding	82 % (C)
Sweden	1.66	corresponding	80 % (C)
Romania	2.01	corresponding	62 % (B)
Netherlands	3.01	corresponding	66 % (C)
Germany	4.44	corresponding	60 % (C)
Spain	7.00	low	51 % (C)
France	11.98	low	48 % (C)
United Kingdom	12.16	low	43 % (D)

Source: author's interpretation.

Last table (see Table 5) shows comparison between the CAF implementation rate in the particular states and specific public sector areas with the highest CAF implementation rate (IR) in the specific country. It is evident from Table 5 that the IR does not impact on preference of the specific public sector area. The CAF implementation in the public administration prevails at 77% of states.

Conclusions

Since 2000, the CAF as an European tool of the Total Quality Management has been implemented by the public institutions. The origin and lifetime of the CAF is connected with impetus and efforts on the level of the EU institution, especially EIPA, Innovative Public Services Group and CAF Resource Centre. The CAF Resource Centre, which operates the CAF Users Database too, provides the Users constant organizational and technical support.

The self-assessment tool, the CAF, provides the public institutions complex assessment and quality improvement within the nine criteria framework. Within this framework, activities of the organisation are assessed by two aspects. Within its activities, organisation develops conditions and expectations for its quality and effective performance, which represents the first aspect. The second aspect is focused on the results to be reached by organisation in relation to the given expectations. In 2010, the CAF was improved with the evaluation tool called the CAF External Feedback providing external objectification and confirmation of the CAF self-assessment results. This tool enables organisation being awarded the Effective CAF User label.

Within this paper, assessment of the CAF implementation rate was carried out by the positive survey of the CAF Users conditions and structure in the member countries of EU.

Here are the most significant conclusions:

- The CAF has been implemented in 2,048 public sector organisations in all member countries of the European Union, except for Malta.
- It is necessary to submit that in the most of the member countries (20 countries) the number of CAF Users is comparable or little higher or lower in proportion to the size of the specified country. From this point of view, Poland, Denmark, Belgium and Portugal represent the highest implementation of the CAF within EU. Italy and Finland are the next ones. On the contrary, Germany, Spain, France and United Kingdom represents very low CAF implementation rate.
- Basically, 57% of the CAF Users concentrate in the sphere of Public Administration. Further, in Educational system, Science and Research, Defence, Public Policy and Security or Heath and Social Services the CAF has been used intensively.
- The CAF Users registered in all public sector spheres can be found only in Belgium, Denmark, Italy and Germany. On the other hand, in Bulgaria, Slovenia and Sweden the CAF has been applied only in two public sector spheres. On an average, the CAF has been implemented in the member countries of EU.

- No contiguity nor higher orientation on the specific area were proved comparing the implementation rate (IR) and orientation of the CAF implementation on the specific area of the public sector. Implementation in the public administration predominates at 77% of states.

Assessment of the number and structure of CAF Users within the European Union illustrates extensive differences at the CAF implementation in the specified countries. The whole range of the specific factors and features, such as activities and support on the EU level, political or economic situation of the specified country, could be the cause of such differencies.

The structure of CAF Users divided into the particular public spheres shows that the CAF can be implemented in all public sector spheres. Also extension of the CAF Users is obvious.

In sequence of the CAF extension rate in the public sector, growing number of users and CAF Resource Centre activities the CAF can be submitted as a quality and efficiency improvement tool for the public services which has high potential in all areas of the public sector.

Acknowledgement

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International Conference "Financial Markets in 2013"

Mezinárodní konference „Finanční trhy v roce 2013"

VLADISLAV PAVLÁT – OTAKAR SCHLOSSBERGER

On 29 – 30 May 2013, Vysoká škola finanční a správní, o.p.s. (University of Finance and Administration) organized 6th Annual International Conference entitled **"FINANCIAL MARKETS IN 2013 AND KEY PROBLEMS OF THEIR FURTHER DEVELOPMENT"**. Individual topics discussed during the conference may be classified into approximately three categories: topics relating to current development of financial markets in the short and medium run; topics dealing with economic-political issues associated with the financial market developments; and finally, issues related to insurance and commodity markets and the regulation thereof. It is possible to only point out some of the presented pieces in this brief overview.

The keynote was presented by **Miroslav Singer**, Governor of the Czech National Bank (CNB); the theme of the presentation was *"Crisis of the euro area, banking union, and current development of the banking sector in the Czech Republic".* In the first part of his presentation, the CNB Governor evaluated the situation within the euro area; Singer stated, among others, that the growth in the EU was very uneven in the 1st quarter of 2013. While the unemployment is low in the euro area core countries, it is very high on the periphery. Very high risks continue to persist within the euro area. Following the decline of the euro area in 2013, mild recovery should take place in 2014. The second part of the presentation was related to the banking union. The CNB Governor explained why the CNB currently does not see any reasons for the participation of the Czech Republic in the banking union. In the third part of the presentation, which addressed the banking sector developments, the CNB Governor stated, among others, that the growth rates of loans remain stable and low; the availability of loans has not changed recently. Negative growth rates still prevail in the category of consumer loans. The development of newly granted loans to nonfinancial companies reflects the declining economic activity and weak demand after investments. The share of defaulted loans to total loans has slightly decreased; however, the period of decreasing share of defaulted loans has probably ended. Consumer loans represent a risky loan component: the share of such loans in the defaulted loans exceeds their share in total loans. Adjustments created by banks in respect of defaulted loans amount to CZK 82 billion (3.6% of total loans), covering less than a half of defaulted loans. The share of highly liquid assets has increased over 30%. At the end of February 2013, capital adequacy amounted to 16.5% in total. The profit margins for new loans to business have significantly declined in the past months; this implies pressure on the reduction of operating profits in the upcoming years.

In the first section of his piece entitled *"Globalization – regulation processes of the global economy market segment"*, **Tadeusz Sporek** deals with the multi-dimensional definition of the global economy globalization process. He examines the characteristic signs of globalization, such as its complexity, international dependency, as well as the emergence of a global financial market, dominant position of transnational corporation, and others. In the second part of the presentation, the author discusses global markets, global competition, education, environment, changes to culture and social identity as the key determinants of globalization.

In the piece entitled *"Macroeconomic relations between the financial sector and the real economy – application within the Slovak Republic/Czech Republic"*, **Jana Kotlebová** investigates the connection between the macro accounts and GDP of the Slovak Republic/Czech Republic since 2005. For example, the finding that commercial banks in both the Czech Republic and the Slovak Republic show excess liquidity, which is reflected in the dominance of sterilization transactions with regard to central banks. Based on the outcome of this interesting analysis, the author comes to a conclusion that, as a result of a weak transfer channel of impulses between the financial sector and real economy, there is no economic growth recovery. Therefore, it is advisable to support the growth of domestic demand, with a view to increase the consumption of population.

In the piece entitled *"Iceland banking crisis of 2008 – methodological problems relating to future estimates"*, **Jaroslav Brada** shows how fundamental analysis applied in the area of economic decision-making on investments is inherently inconsistent, in terms of methodology, as a result of problems arising from the definition of causality. The Iceland crisis of 2008 documents that the application of standard fundamental analysis processes results in a problem consisting in the need to interpret large amount of information. The author points out that identical information may be interpreted and applied in a different manner by individual economic entities.

In the piece entitled *"Foreign exchange loans of the International Monetary Fund today"*, **Anežka Jankovská and Martina Konečná** analyze the extensive area of activity of the IMF, particularly the development and structure of the foreign exchange loans granted by the IMF. They characterize the reform of foreign exchange reserves, which is part of the overall reform of the IMF. As a result of the reform, objectives of the foreign exchange loans, their use, and terms and conditions for the provision thereof were all reevaluated. Consequently, the loan structure changed, whereas the loans became more accessible, flexible, readily available, and higher volumes may be granted recipients.

In the piece entitled *"Euro adoption as the first step to emergence of the current problems of Cyprus"*, **Petr Wawrosz and Herbert Heissler** discuss the development of the economy of Cyprus following the country's accession to the European Union and adoption of the euro. They confront the development with the current economic situation of Cyprus, mainly giving attention to the structure and scope of the banking sector. The current problems mainly arise from the fact that Cyprus failed to comply with the terms and conditions set down for the euro adoption. The authors point out that, when contemplating the euro adoption for countries with similar economy to the one of Cyprus, it is necessary to pay special attention to analyzing the economic structure of such countries.

In his piece *"Impact of the current European regulation on the provision of payment services in the Czech Republic"*, **Otakar Schlossberger** first sums up the development of the cross-border payment system in the past, and specifically the origin of the SEPA project. He states that the project objective is to promote European integration by creating a single market of payment system services for small payments. The existence of a single market for all payments in EUR will promote competition and innovations, thus offering better services for customers. Changes in the domestic payment system application, which may be expected by 31 October 2016 at the latest, are revolutionary.

In the piece *"Risk on the European government bond market"*, **Božena Chovancová** analyzes the changing approach to assessing risk associated with government bonds. The term "risk free" only makes sense for a very narrow range of government bonds. The increasing risk margins give rise to increasing issuers' costs, adversely affecting government budgets. From the perspective of investors, this increase may contribute to higher returns; however, only at the expense of higher risk. The author also assesses the importance of the bond issue of a new European institution – Euroval (European Stability Mechanism) – which currently represents an absolutely new phenomenon, both in terms of risks and yield of such bonds.

In his piece *"Current forms of trading at stock exchanges around the world"*, **Vladislav Pavlát** briefly summarizes key changes on the financial markets, issues associated with algorithmic and high-frequency trading and with the market fragmentation, together with the problem of the so-called dark liquidity. The existing contradicting research results of the issues do not enable straightforward regulatory solutions. Should stock exchanges serve investors or speculators? It will be necessary to find an answer to the aforementioned burning question in the form of an adequate level of regulation – not only of stock exchanges, but of financial markets as a whole.

In the piece *"Crisis management of bank within the context of the financial crisis"*, **Mária Klimíková** referred to the absence of rules for the crisis management of banks, which resulted in the need to invest public funds in order to prevent panic and domino effect of bank failures, with an adverse effect on the real economy. It will be necessary to create a system of effective instruments for the purpose of timely and effective intervention that would allow operation of banks at risk. Moreover, it will be necessary to ensure the bank management focuses on the creation of an internal system that would make it possible to resolve critical situation at the level of the bank itself.

In his piece entitled *"Czech pension policy: The worse, the better"*, **Jaroslav Vostatek** pointed out that, when considering the fiscal costs of the reform, it is only beneficial for approximately 10% of the wealthiest employees. In this situation, hypotheses and claims were made and developed with regard to significant reduction of public pensions by 40-50% in the future as well as about the alleged burden for the young people, which is to consist in the fact that they would pay 2 or 3 times more in the form of insurance premium compared to what they get in the form of old-age pensions. However, this is not supported by an intergenerational contract or population aging.

To summarize, more than 100 participants from the Czech Republic and 10 international guests from Poland and Slovakia attended the conference.

First day of the conference included a panel discussion of financial analysts on the prospects of financial markets, with **Aleš Michl** (*Raiffeisenbank*), **Michala Moravcová** (*BOSSA*), **František Bostl** (*Cyrrus*); and **Petr Zahradník** (*Conseq*) taking part in the discussion as guests. The discussion was moderated by **Petr Budinský**, Vice-Rector of the University of Finance and Administration, who added his own evaluation of the situation on financial markets at the end of the panel. The discussion demonstrated that it is currently still very difficult to arrive at a more reliable opinion regarding the expected immediate developments of financial markets. Although the tone of the discussion was mostly optimistic, many different opinions were expressed during the evaluation of situation on different financial market segments.

Second day of the conference also comprised a discussion in two separate sections – in the section of graduate students and in the section of pre-graduate students, where 20 high-quality pieces were presented.

The International Conference of the University of Finance and Administration on financial markets has been positively received and brought a number of new impulses for further research in the area.

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PREVIEW /PŘIPRAVUJEME:

Especially articles dealing with development in the sector of the unincorporated self-employed persons in the Czech Republic, with determinants of an effective system of financing and delivering long-term care and other topical issues of Czech and world economies will be published in next issue of the journal ACTA VSFS.

V následujícím čísle ACTA VŠFS budou publikovány zejména statě, zabývající se vývojem v sektoru osob samostatně výdělečně činných v České republice, efektivním systémem financování a poskytování dlouhodobé péče a dalšími aktuálními problémy české a světové ekonomiky.

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Please number your notes as you go along. Add a bibliography in alphabetical order, including page numbers when citing magazines or a journal. Inside the text, please use e.g. Afonso (2001), and when citing include the page number. Use the compatible forms for tables and figures. Highlight where pictures, graphs and tables will be placed in the text. Write your contact address: full name and titles, name and address of your work, telephone number and email, including the same for all co-authors.

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