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Fiscal Capacity for Euro Area – Towards a Bigger EU Budget?

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Abstract: *The European Union has recently implemented one of the biggest reform packages in its history. Developed solutions are designed to (1) strengthen EU's resilience to shocks and (2) improve its shock absorption capabilities. It seems that so far the stress was mainly placed on the first objective. Among the reforms which satisfied the second objective the European Stability Mechanism (ESM) plays the key role. However, this is not the only solution. The European Union is also developing a fiscal capacity for the European Monetary Union (EMU). On the base of a subject literature study, I have developed a model with boundary conditions of fiscal federalism (FF), which then was compared to macroeconomic data for the EU. The results of my findings show that the European Union, and especially the euro area, share a lot of characteristics typical for fiscal federalism. The biggest difference between EMU's structure and FF model is insufficient size of central budget. As a result, the euro area is not equipped with stabilization tools which could act on the very early stage of a crisis. From this point of view, implementation of fiscal capacity in the form of central budget could*

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fill this gap. However, it could bring further fragmentation of economic integration process in the EU, which probably would not positively contribute towards the stability in the political sphere.

Introduction

Global financial crisis and sovereign debt crisis has launched an unprecedented program of reforms in the European Union. There seem to be no significant disagreements among economists about the causes of crisis, however the proposals for remedies for the EU are not so obvious.

In this work I come forth with the assumption that the European Union is similar in substance to the federation model. As a confirmation of the statement formulated above, I may indicate a number of characteristics which prove that the EU does not differ from countries implementing this model (see: Appendix 1). The presented data show that the European Union is not a unique structure neither by economic development, nor by complexity of administration division. What distinguishes the European Union from other federal countries is the national diversity of the European society. However, cultural patterns seem to be rather close and one can expect that the tendency will be for them to converge. In my opinion, the biggest problem is a high number of official languages which reduces the mobility of labour force within the European Union. This does not bring the EU closer to the fulfillment of Optimum Currency Area criteria and reduces the capacity of shock absorption (Tchorek, 2013, pp. 187-190). That is why I assume that the conducted reforms should lead the European Union to a model of fiscal federalism as a complex solution which could be able to ensure economic stability.

Yet, a lot was done in the monetary sphere of the euro area's economic governance. However, recent economic theory (Rosiak, 2014a, pp. 119-121) and practice, put increasing emphasis on the role of fiscal policy. So far, the aim of reforms in the fiscal policy area within EMU was mainly to reduce the euro area's vulnerability to shocks and strengthen the monetary policy through a fiscal consolidation in member countries. The only permanent solution for shock absorption is European Stability Mechanism (ESM). Functioning of the ESM envisages assistance mainly through loans, but only for countries with solvency problems. Its ability for stabilizing the euro area economy is rather limited also because its lending capacity of 500bln euro, which may not be effective enough for the whole euro area GDP. Therefore, one can say that stabilization functions, like intertemporal stabilization or interregional-insurance, have not been sufficiently provided yet.

The main objective of this paper is to examine whether the new proposal for creating fiscal capacity for the euro area will fill the gap between the EU structures and the model of fiscal federalism. Particular emphasis was put on stabilization functions which would help in ensuring sound economic governance.

Method of the Research

In my research I have used descriptive approach which, thanks to conducted literature study, allowed me to specify essential features of fiscal federalism. Having collected general features, I compared them to the advancement of the EU's pre-crisis integration. Afterwards, I assessed whether recent reforms bring the European Union, and especially the euro area, closer to the model of fiscal federalism.

Knowing main drawbacks of conducted reforms in the fiscal federalism context, I have introduced main motivations of the further reform of EMU. One of its element is an introduction of a new mechanism – tentatively named fiscal capacity. At the end I gave comments about potential forms of fiscal capacity concerning its impact on crucial dysfunctions of EMU which disturb effective shock absorption. My observation were made by taking into account following necessary, from the FF perspective, features:

1. Automatism
2. Minimal lags
3. Maximum possible impact on the economy
4. Capacity of the new solution

Has European Union Developed a Model of Fiscal Federalism?

Until recently, literature on fiscal federalism has defined only two main boundary conditions of fiscal federalism: presence of a monetary union[1] and a common market (Weingast, 1995). In my paper (Rosiak, 2014b) I introduced the main characteristics of this model based on review of literature of fiscal federalism. Those are:

[1] Literature of fiscal federalism usually envisages such a solution for a state not an international organization, as in European Union case. That is why presence of monetary union and the use of common currency is taken by default

1. Multilevel system of governments
2. Presence of central and local budgets
3. Distinctive features of central budget:
   a. Size in range from 10% of GDP to 50% of GDP
   b. Built in functions:
      – Redistributive
      – Intertemporal stabilization
      – Interregional insurance
   c. Taxation assignment:
   d. Central budget can run deficit while local ones should be balanced
4. Presence of transfers and subsidies as a management tools externalities
5. Specific allocation of competences

The features listed above are typical for the model of fiscal federalism. However, it is not necessary to meet all the criteria cumulatively. From the fiscal policy perspective, the most important ones are the presence of central and local budgets, features of central budget, the presence of transfers and subsidies as management tools for externalities. These features allow for flexible allocation of policies entitlements between central and local budgets.

The role of central budget was studied by several authors. The conclusion of their research was that provision of national public goods and services as well as provision of stabilization functions should be domain of central budget (see: Fatas, 1998; De Grauwe, 2012; Stiglitz, 2004; Borzel & Hosli, 2003). This leads to the question concerning the proper assignment of taxes to the appropriate level of state administration. This dilemma is also called a tax-assignment problem (see: Tiebout, 1965; Gordon, 1983). Literature on fiscal federalism envisages that, to ensure proper financing, revenues from non-benefit taxes should be collected by the central government, while local ones should collect revenues from benefit taxes as a payment for quality of public goods and services they supply (see: Oates, 1999; Mueller, 2004). The role of the central government is supreme in relation to local ones. That is why it should have an influence on local decisions thorough system of transfers and subsidies as a main tool for triggering externalities (Boadway & Shah, 2009).

Table 1 presents a detailed look at the advancement of the pre-crisis European integration in the context of fiscal federalism.

Table 1. Fiscal federalism features in European Union

Feature	Fiscal Federalism	European Union
Multilevel system of governments	Exist	Exist
Presence of transfers and subsidies	Exist	Exist
Size of central budget	At least 5-7% of GDP (optimum 20% - 25%)	≈ 1% of GDP
Budget characteristic	Central: possible deficit Local: balanced	Central: balanced Local: possible deficits
Redistribution mechanism	Exist	Exist
Budget functions	Central: redistribution, inter-temporal stabilization, interre-gional insurance Local: allocative	Central: redistribution, interregional insurance (very limited) Local: intertemporal stabilization, allocative
Taxation	Central gov.: non benefit taxes Local gov.: benefit taxes	Central gov.: 0,3% of VAT Local gov.: all types of taxes

Source: based on Rosiak (2014b, p. 181).

As showed above, the main differences between the model of fiscal federalism and the advancement of pre-crisis European integration are: insufficient size of the central budget, possibility of running deficit by central budget and lack of intertemporal stabilization and interregional insurance functions.

Although the main task of the recent reforms was to strengthen the euro area, and not to construct fiscal federalism within the euro area, many of new solution bring it closer to the analyzed model. First of all the European Economic Governance Package, the so called sixpack, has made a shift of powers, especially in the area of budgetary procedures, towards European institutions. However, Grosse calls it negative federalism, which builds mainly disciplinary functions without creating new incentives for externalities (Grosse, 2013). The ESM has expanded the function of interregional insurance. Nevertheless the size of the central budget remained the same and stabilization capabilities, however extended, remained rather limited compared to the size of the European Union's economy.

As shown in table 2, the main goal for fiscal capacity will be provision of interregional insurance function and enforcement of intertemporal stabilization function. It is worth to mention that full compliance with the fiscal federalism's conditions would be possible only in the case of shift of powers, where local budgets would be balanced and the central one could run a deficit.

Table 2. EU reforms in the fiscal federalism context

Area of FF	Impact of reforms on EU integration development
Increase in the size of the EU budget	NO
Possibility of running deficit by central budget	NO
Building-in an intertemporal stabilization function	YES – to a limited extent by ESM
Building-in interregional insurance function	NO
Centralization of fiscal policy	YES – to some extent by centralization of some aspects of budgetary procedures
Centralization of economic governance	YES – by better coordination of structural policies through sixpack (European Semester + MIP)

Source: based on Rosiak (2014b, p. 185).

Fiscal Capacity for Euro Area – the Purpose of Implementation

Fiscal capacity will be the second mechanism, after ESM, with abilities to stabilize the euro area's economy through transfers. All previous solutions (e.g. Sixpack, Twopack, Fiscal Compact and Pact Euro plus) imposed restrictions on national budgetary procedures and thus limited the demand generated by national governments (Heins & de la Porte, 2015, p. 4).

The legitimacy of its creation is motivated by the same rationale that is imposed by the literature of fiscal federalism referring to the functions performed by the federal budget – the ability to stabilize the economy (starting from the very early stage of the crisis) and influence (through transfers) structural reforms conducted in the euro area. More precisely, the ability to stabilize the economy would rely on the incorporation of two functions that fiscal federalism envisioned in the central budget, and that the EU budget did not have: the intertemporal stabilization and interregional-insurance. As was shown in table 2, ESM provides intertemporal stabilization function, but only to the limited extent, mainly because of its insufficient capacity and time lags.

The necessity to establish a mechanism for the fiscal capacity of the euro area was expressed in two reports from 2012 named Four Presidents

Reports[2] (*Towards…*, 2012a; *Towards …*, 2012b) and one from July 2015 – Five Presidents Report[3] (*Completing …*, 2015).

The June (2012) Report defined the broad lines of the further integration of the euro area. Lowering the euro area's vulnerability to shocks and an improvement of its absorption capabilities was indicated as the main goal. Referring to the integrated budgetary framework, clearly identified and named was the need to build a fiscal union that would ensure the stability and security of the euro area. The Authors consider, also in the medium term, the possibility of joint debt issuance, which also contributes to a further fiscal integration and the need to redefine the role of the central budget in new institutional and economic realities. At the end, the need is expressed for further development of a road map that would lead to the creation of a genuine Economic and Monetary Union.

The December Report goes deeper into the topics raised in the June Report, focusing mainly on aspects of coordination of budgetary policies and joint economic governance. It has also developed a general framework of implementation of the vision from the first report. It has been divided into 3 stages. The goal of the first one, planned from the end of the year 2012 and for the year 2013, was to found the fiscal stability of the euro area and to break down the relationship between the liquidity of banks and public debt. The second, planned for the years 2013–2014, assumed the implementation of integrated financial framework and further support of structural reforms. The third stage, covering the period after 2014, is the most important one from the point of potential fiscal federalism in the European Union, because it envisages improvement in flexibility of the EMU's functioning by creating a central mechanism for shock absorption.

The Five President Report in the section dedicated to fiscal policy postulates a creation of a fiscal union within yhe euro area. It should be based on:

- National fiscal councils, which will provide a public and independent assessment (at the European level) of how budgets – and their execution – perform against the economic objectives and recommendations set out in the EU fiscal governance framework (*Completing …*, 2015, p.14)
- A new central authority European Fiscal Board. Its main objective will

[2] These two Reports were developed by President of the European Council – Herman Van Rompuy with close collaboration with: José Manuel Barroso, President of the European Commission, Jean-Claude Juncker, President of the Eurogroup, Mario Draghi, President of the European Central Bank.

[3] Report was developed by President of the European Commission – Jean-Claude Juncker with close collaboration with: Donald Tusk, President of the European Council, Jeroen Dijsselbloem, President of the Eurogroup, Mario Draghi, President of the European Central Bank and Martin Schultz, President of European Parliament

be coordination and complementation of national fiscal councils.

In terms of fiscal capacity, The Five President Report precise, that (*Completing* …, 2015, p.15):

– it should not be an instrument of crisis management, because EMU already has one – ESM.
– it should not lead to permanent transfers (which corresponds to stabilization functions described by literature of fiscal federalism)
– it should be consistent with existing EU fiscal framework

In general, fiscal capacity should be a solution, which all mature monetary unions are equipped with to better deal with shocks, which could not be effectively managed at the national level alone (*Completing* …, 2015, p. 14).

Possible Forms of Fiscal Capacity

All monetary unions have their fiscal capacity mechanisms (*Towards…*, 2012b, p. 9). Vulnerability to shocks and the lack of effective mechanisms of shock absorption seems to confirm the need to implement such an instrument also within the EMU. In the euro area the additional function that would implement such a mechanism would be a promotion (through various financial incentives) structural reforms which could contribute to higher economic growth in the future. However, the form of the fiscal capacity has not been clarified yet. The December Report only sets out that the contribution and the payment from the fiscal capacity will match the position of the member country in its economic cycle. That is why I assumed that it would be valuable to look at the Vetter's proposition of 4 possible forms of fiscal capacity (Vetter, 2013, p. 1): (1) a common budget, (2) an insurance mechanism against strong cyclical fluctuations, (3) a common unemployment insurance scheme, (4) an equalization scheme for interest burdens, and add an extra option from The Five President Report (5) and then confront them with fiscal federalism assumptions on stabilization functions.

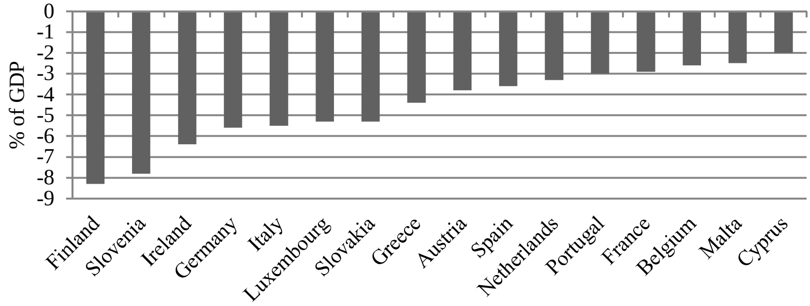
The idea of separate euro area budget is not new and quite popular among economists studying European Union's problems (see: Verdun, 2015). Implementation of the fiscal capacity in the form of a separate budget for the euro area (1) would require an indication of its revenue sources. From a few concepts of revenue sources one may indicate: membership fees proportional to the size of the member country's economy or in form of taxation. There are two possible ways of tax collection: by introducing a new tax e.g. financial transaction tax or as part of the nationally collected tax e.g. part of an income from collected VAT. Each approach has its drawbacks. The new membership fee or a portion of VAT revenues will adversely affect the condition of tight local budgets. The financial transaction tax would require fairly complex algorithms for receiving this revenue from various countries (the proportion of the financial markets in different countries relative to GDP vary considerably). No matter the source**,** economists estimate that the euro area budget would need approximately 2% of GDP in revenues (see: Wolff, 2012) .

Budget form of fiscal capacity would incorporate interregional insurance function. Another advantage of this solution would be the possibility to install automatic stabilizers, which, on the one hand, allow for a quick response to economic fluctuations (automatism) and the support for the counter-cyclical fiscal policy stance on the other. From the point of view of the European integration process, creation of a new, separate budget could be considered a step back (the current shape of the central budget of the European Union is in fact the result of the consolidation of budgets of European Communities). Other reforms such as the Fiscal Compact or the Euro Plus Pact are intergovernmental agreements, so as for now they can be perceived as a disintegrating mechanisms as well or as a part of bigger disintegration process within European Union (Vollaard, 2014, p. 4). However, documents include a commitment to incorporate them into the EU law. On the other hand, fears about the collapse of the euro area seem to be exaggerated. The EU citizens are becoming more utilitarian in their understanding of the euro and its institutional framework, so they rather would not vote for withdrawal from the euro area or the European Union (see: Ioannou *et al*., 2015, p. 169)

Insurance mechanism against strong cyclical fluctuations (2) could be financed from contributions made by the member states in time of economic growth. Payments would be realized if a negative shock occurred. The problem, which is associated with this solution, is the selection of an appropriate methodology to determine the moments of mobilizing resources and their total amount. They should, on the one hand, correspond best to the realities of the euro zone and been acceptable to all 19 states on the other. There are suggestions that assistance should be provided in a country where the negative output gap will reach 2% of GDP (Vetter, 2013). Country experiencing such problems could then receive a payment from the insurance mechanism in the amount of e.g. 25% of the shortfall.

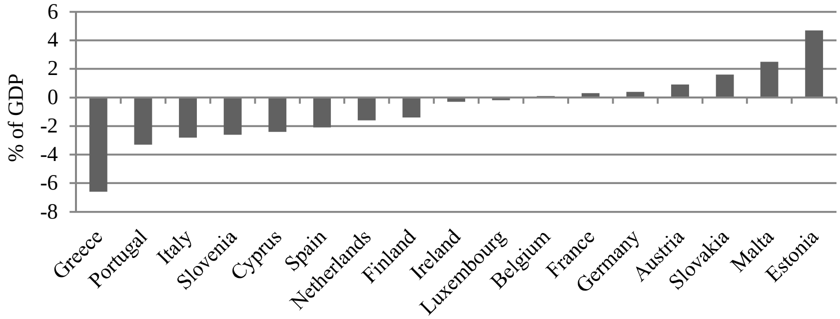
The most significant disadvantage of this solution is the need to develop additional scenarios for years in which almost all euro area countries fell into recession. This occurred in 2009, when all euro area countries fell into recession, as well as in 2012 and 2013, when nearly half of them had negative economic growth.

Figure 1. GDP growth in euro area member countries (17) in 2009



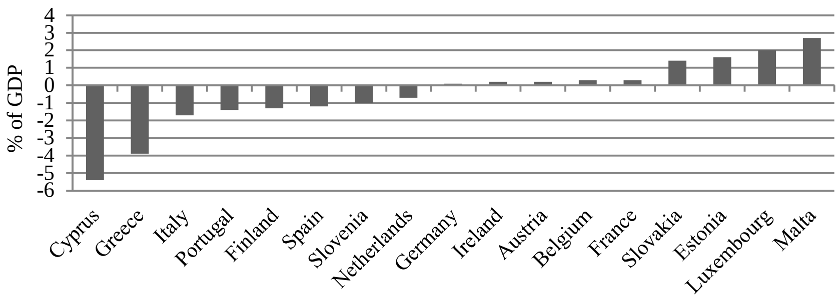
Source: own calculations based on Eurostat (2015).

Figure 2. GDP growth in euro area member countries (17) in 2012



Source: own calculations based on Eurostat (2015).

Figure 3. GDP growth in euro area member countries (17) in 2013



Source: own calculations based on Eurostat (2015).

It is possible that in such a situation, when over half of member countries need assistance, financial capabilities of the insurance mechanism would not be sufficient, as the number of contributor-countries would be too low.

The advantage of the common unemployment insurance scheme (3) is its automatism. It can be set up in a way that enables launching the stimulus upon exceeding a certain level of unemployment in the region, and not necessarily in a whole member country. That is why assistance would be given directly where it is needed the most and resources of the unemployment insurance scheme are managed most reasonably. The problem, which arises, is that most often companies do not lay off its employees in the first place, when economy is affected by the negative shock. It is therefore possible that the aid flowing from such a scheme would stimulate the economy too late, that is, when the worst consequences are already being felt – employment reduction are made and increased number of people are unemployed.

The last, named by Vetter (2013, p. 1), possible form of fiscal capacity – interest equalization scheme of government bonds (4) would have to eliminate unjustified differences in interest rates on government bonds of euro area countries. This would be provided through a specially established European agency. An explanation for setting an interest equalization scheme of government bonds are the consequences of the recent crisis, when interest rates on bonds of euro area countries have varied considerably. As a result of this situation, some countries have suffered significant losses (i.a. Greece, Portugal, Spain), some have gained (e.g. Germany, the Netherlands). What is interesting, countries like Belgium, which theoretically should be in the group of losers, have also benefited.

Interest equalization scheme of government bonds would give member states a chance to issue some portion of the debt (e.g. 10%) by the European agency. This would significantly increase the liquidity of government bonds market in Europe and lower interest rates for countries in the process of debt refinancing. The program could also provide a larger tranche for a country which will experience problems with the debt issuance (when its cost could increase considerably). Other, similar solution envisages issuing, agency collateralized debt obligations (CDO) with varying degrees of risk covered by the purchase of approx. 60% of the bonds issued by the euro area countries, by a special European.

Both of these approaches can solve the problem with excessive fluctuations in bonds' interest rates and help to stabilize public debt borrowing costs. However, they are based on the assumption that each crisis has to negatively affect borrowing costs, while for example the German economy being in recession in 2009 did not suffer from higher costs of borrowing. In that case assistance would not have been provided, although stimulus action, especially in certain regions, would probably help their economies to recover.

Five Presidents Report indicates, however, another possible form of fiscal capacity (5). It admits that the new instrument could be built on European Fund for Strategic Investments (EFSI) (*Completing* …, 2015, p. 15). EFSI is a project of an investment plan which will allow for additional 315bln euro investments in the euro area (European Commission, 2015). The initial funding given by European Union will reach 21bln euro (16bln euro of guarantee authorized by EU regulations and 5bln euro from European Investment Bank). Thanks to the leverage of the financial markets initial funding should be raised to 60bln euro EIFIS capacity. Additional 255bln euro could be financed by private investors. This structure of EFSI financial capabilities is very important from the fiscal capacity perspective, because:

– as some experts predict, it would be hard to achieve a total amount of 315bln euro;
– even if it was possible, it would be still a very scarce source of stabilization funds for the whole euro area economy.

Another problem with this concept is that EFSI is dedicated for strategic investments within the euro area. Usually this kind of projects are very complex, so it would be hard to match them with business cycle, as the report envisages. The strategic projects should rather be, by assumption, independent from economic situation – they should concentrate on strategic goals set by central authorities. Therefore, it would be difficult to match properly EFSI's objectives with fiscal capacity's ones.

Conclusions

European Union shares a lot of characteristics with the model of fiscal federalism. However, it does not benefit fully from all profits which can be provided. This is mainly because of insufficient size of the central budget, which is not equipped with functions that could help in stabilizing an output in the euro area i.e. function of intertemporal stabilization and interregional insurance.

European leaders took actions to strengthen the European Union and especially the euro area. In general conducted reforms can be classified as those which have preventive and reactive nature. Of rather preventive nature are: Sixpac, Twopack, Fiscal Compact and The Euro Plus Pact. Among existing solutions of reactive nature there is only ESM. However, its potential impact on the whole euro area's economy is rather limited. That is why

ESM cannot be considered as the only stabilization mechanism for the European economy.

The President of European Council – Herman van Rompuy launched the project which purpose, among the others, is to fill this gap with creation of fiscal capacity. There are many proposition of form which it could take. However, no matter which solution will be implemented, EU authorities should put maximum effort to ensure:

- Automatism – to avoid the temptation of discretionary decision making
- Minimum lags – fiscal capacity should provide assistance when it is the most needed (e.g. before wave of redundancies happen)
- Maximum financial impact on the economy – usually a fiscal multiplier is the greatest at the beginning of a crisis / recession (this is actually a follow-up of point 2)
- Capacity – the solution should solve not only the economic problems of small countries or a small group of countries.

Taking into account stabilization functions which fiscal federalism provides through central budget, separate budget for euro area seems to be the best form of fiscal capacity. However, creating a separate budget for the euro area can bring significant negative consequences for the European integration process as a whole.

Giving comments about possible forms of fiscal capacity, I indicated the problem of revenue sources only in the case of the budget and EFSI. In fact, concerning high ratio of debt in most euro area countries, one may expect that financing for other solutions will be the issue as well. This is why skepticism about fast launching of fiscal capacity for euro area seems to be justified.

References

Boadway R. & Shah A. (2009). *Fiscal Federalism: Principles and Practice of Multiorder Governance.* Cambridge: Cambridge University Press, http://dx.doi.org/10.1017/CBO9780511626883.

Borzel, T. A. & Hosli, M. O. (2003). Brussels between Bern and Berlin: Comparative Federalism Meets the European Union. *An International Journal of Policy, Administration, and Institutions*, 16(2). http://dx.doi.org/10.1111/1468-0491.00213.

Completing Europe's Economic and Monetary Union, (2015). Report by President of European Commission Jean-Claude Juncker, European Commission, Brussels

European Commission. (2015). The European Fund for Strategic Investments (EFSI). Retrieved from http://ec.europa.eu/priorities/jobs-growth-investment/plan/efsi/index_en.htm (19.12.2015).

Fatas A. (1998). Does EMU need a fiscal federation? *Economic Policy*, 26. http://dx.doi.org/10.1111/1468-0327.00031.

Gordon, R. H. (1983). An Optimal Taxation Approach to Fiscal Federalism, Q*uarterly Journal of Economics*, 98(4). http://dx.doi.org/10.2307/1881778.

Grosse, T. G. (2013). Semestr Europejski: poprawa zarządzania czy zmiana ustrojowa. *Analiza Natolińska*, 7(65).

Heins, E. & de la Porte, C. (2015). The sovereign debt crisis, the EU and welfare state reform. *Comparative European Politics*, 13. DOI: 10.1057/cep.2014.38.

Ioannou, D., Leblond P. & Niemann, A. (2015). European integration and the crisis: practice and theory. *Journal of European Public Policy*, 22(2). http://dx.doi.org/10.1080/13501763.2014.994979.

Mueller, D. C. (2004). Why federalism? In Molander P., *Fiscal Federalism in Unitary States*. Norwell: Kluwer Academic Publishers. http://dx.doi.org/10.1007/978-1-4615-0503-7_7.

Oates, W.E. (1999). An Essay on Fiscal Federalism. *Journal of Economic Literature*, 37(3). http://dx.doi.org/10.1257/jel.37.3.1120.

Rosiak, T. (2014a). Ewolucja roli polityki fiskalnej w najnowszej teorii ekonomii i praktyce gospodarczej. In Piątek, S. (Ed). *Rola sektora publicznego w okresie kryzysu*. Warszawa: Wydawnictwo Wydziału Zarządzania Uniwersytetu Warszawskiego.

Rosiak, T. (2014b). Fiscal federalizm as a solution for eurozone problems. *Problemy Zarządzania*, 12(4).

Stiglitz, J. E. (2004). *Ekonomia sektora publicznego*. Warszawa: Wydawnictwo Naukowe PWN.

Tchorek, G. (2013). Nierównowagi fiskalne i makroekonomiczne w strefie euro a nowe rozwiązania instytucjonalne. *Management and Business Administration. Central Europe*, 21(2).

Tiebout, Ch. M. (1965). A pure theory of local expenditures, *Journal of Political Econom*y, 64(5). http://dx.doi.org/10.1086/257839.

Towards A Genuine Economic And Monetary Union, (2012a). Report by President of the European Council Herman Van Rompuy, European Council, EUCO 120/12, 26 June 2012, Brussels

Towards A Genuine Economic And Monetary Union, (2012b). Report by President of the European Council Herman Van Rompuy, European Council, 5 December 2012, Brussels

Verdun, A. (2015). A historical institutionalist explanation of the EU's responses to the euro area financial crisis. *Journal of European Public Policy*, 22(2). DOI: 10.1080/13501763.2014.994023.

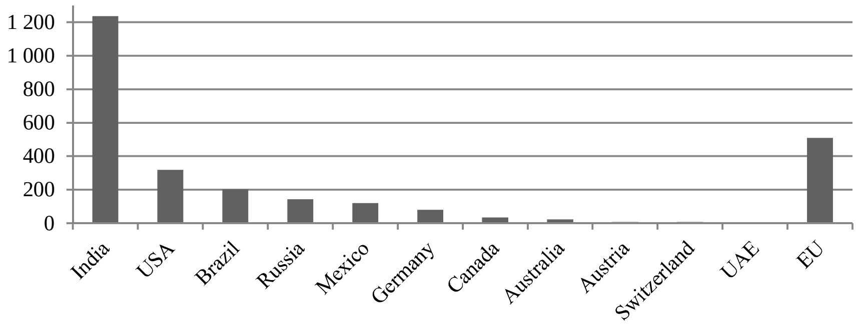
Vetter, S. (2013). Do all roads lead to fiscal union? *EU Monitor, European integration*, 11 April 2013.

Vollaard, H. (2014). Explaining European Disintegration. *Journal of Common Market Studies*, DOI: 10.1111/jcms.12132.

Wolff, G. (2012). A budget for Europe’s monetary union. *Bruegel Policy Contribution*, 2012/12.

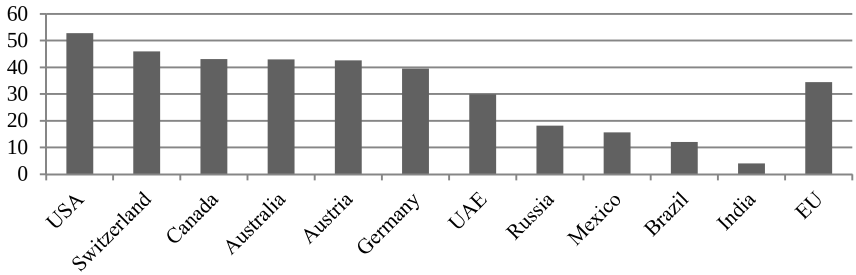
Appendix 1

Figure 4. Population in selected federations in 2013 in miln



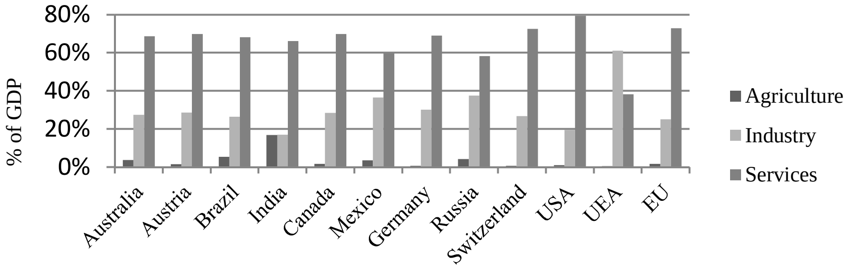
Source: own work based on CIA World Factbook (2015).

Figure 5: GDP per capita (PPP) in selected federations in 2013 in thousands USD



Source: own work based on CIA World Factbook (2015).

Figure 6. GDP composition in selected federations in 2013



Source: own work based on CIA World Factbook (2015).

Table 3. Administrative units subordinated to the federal government in selected federations

Country	**Administrative units**	**Total number of administrative units subordinated to the federal government**
Russia	Provinces (46), republics (21), autonomous okrugs (4), krays (9), federal cities (2), autonomous oblast (1)	83
Germany	States (16)	16
USA	States (50), federal district (1)	51
Australia	States (6) territories (2)	8
Brazil	States (26), federal district (1)	27
Canada	Provinces (10), territories (3)	13
Mexico	States (31), federal district (1)	32
Austria	States (9)	9
United Arab Emirates	Emirates (7)	7
Switzerland	Cantons (26)	26
India	States (28), union territories (7)	35
European Union	**Member countries (28)**	**28**

Note: Russian statistics do not include annexed territories in 2014.

Source: own work based on CIA World Factbook (2015).