NEWFOUND INVESTORS PRUDENCE ON THE CAPITAL MARKET WITH EMU MEMBERS GOVERNMENT BONDS

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Abstract

Europe, or some of the states of the European Monetary Union (EMU), is undergoing an interesting, though unfavorable, period. The flaws of the EMU which were pointed out by some studies about the optimum currency areas (OCA) were finally fully manifested with the emergence of financial crisis coming from the United States of America and during the following debt crisis. This report is focused on selected states of EMU, their policies of financing the national budgets in the environment of a united monetary area with common monetary policy using government bonds on the one hand and the access of investors depositing their coffers into those instruments of capital market on the other hand. Due to the fact that monetary areas will be evolving – fading out and coming up – authors consider analysis and description of certain aspects in attitudes of states and investors towards financing their economic intentions along with rising and continuation of those areas, particularly the EMU, to be beneficial.

Introduction

Economies of European Union (EU) got, after the financial crisis ignited in the United States of America, into the debt crisis of each more or less sovereign economy. It is the limited sovereignty of individual countries of European Monetary Union (EMU) that is manifested by the collective monetary politics, which is in such vast and economically fairly inhomogeneous area hardly conductible using traditional and functional tools of monetary politics of central bank. Much criticism coming from the economists is aimed towards former politicians of today's member states of EMU, stating they did not respect economic studies about optimum currency areas (OCA) [14] which were and still are pointing out inhomogeneity and thus impropriety of certain countries to be part of EMU (e.g. [2, pp. 233], [4], [15, pp. 89–104], [24]). The situation is now worsened by the fact that the question of eventual resignation from EMU is unthinkable during ongoing crisis. Forced leave of a weaker state and the loss of its debt investors would trigger a very emotional behavior on the government bonds market of other endangered members. Those affected would then lose their ability to place their bonds on the market and that would practically lead towards their bankruptcy and forced help from multinational economic institutions (such as IMF – International Monetary Fund).

Inability of individual members to react in a similar way to united monetary policy both from government and private institutions view causes problems in fiscal policy. With the creation

of EMU, the system of "locomotive" was preferred, namely by France, instead of the "coronation" one, defended by Germany and Great Britain (more see e.g. [2, pp. 31], [15, pp. 18]) in particular. But in comparison to hurried liberalization on various markets, the membership of some unadaptive economies is like a "shock therapy" [21]. So on the one hand, there are the governments of the member states misusing deficit spending to be blamed for the today's debt crisis and that they were unable to adapt their individual economies to applied shared monetary policy. On the other hand, the mistake of investors was that they, under the impression of united monetary policy, reduced perceived risks and lowered the demanded risk bonus with these government bonds and that they were not exerting pressure to faster consolidation of national budgets across the EMU in good times.

If investment should by definition mean postponed actual expenditure in order to increase expenditure in the future, then deficit planning is defined as increase of actual expenditure at the expense of future expenditure. Many countries along with investors are being taught the hard way that improper application of Keynesian aggregate supply hand in hand with inadequate co-operation of monetary policy means future economic instability or, in better case, necessary economic recession. If Keynesian policy was applied correctly, for example in Greece, then we would read from the chart Tab. 1 that local economy is suffering from chronic deficiency of aggregate supply which has to be constantly supported.

1 Aims

Aim of this paper is, based on the historical data, to give an analysis of behavior of selected economies in the process of creation of the monetary union as a party figuring as a payee and also the reactions of the stock investors on the conditions of creation and the continuation of the monetary union. Due to the limited size of the report we have chosen the form of a fractional analysis of just a few indicators.

2 Methodology

As aforementioned, this report is focused mainly on the bond investment in some member states of EMU. Considering the topicality, countries are observed and analyzed not extensively, but from the viewpoint of interest rates of bonds issued for ten years by Germany as the biggest economy of the EMU, then some problematic states of EMU, called as group PIIGS (Portugal, Italy, Ireland, Greece and Spain) and finally some economies that are considered to have a healthy economy (Sweden), in spite of using intendentious model of a social state. Examined period consists of data from the second half on 90s, that is right before the final creation of EMU, first with cashless payments (1999) and then with cash used (2002) in single currency of EMU. Period before the creation of Eurozone offers data related to convergence programme and to necessity to fulfill Maastricht convergence criteria.

Within the research, the methods used are: analytical-synthetic method, induction and historical method.

3 Research

In the part devoted to methodology, the reasons for selecting particular economies were enlightened. This chapter will now focus on attitude of investors towards financing long-term government bonds on capital markets connected to regions mentioned.

Fundamental prerequisites for historical methods are figures. Authors are aware of imperfections that this method can bring up and are therefore determined to continue in deep analysis of capital market not only from the viewpoint of government bonds. For example

there is a space for deeper mathematical and statistical analysis, particularly correlation between variables used.

3.1 PHGS economies

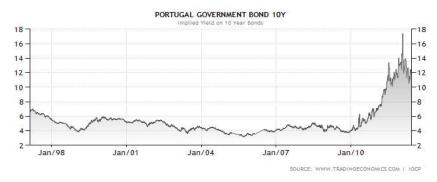
PIIGS is an acronym used for Portugal, Italy, Ireland, Greece and Spain. They were given this homely nickname for their problematic economies. Problems with financing the national debt of these economies have various causes which cannot be, due to their extent, the focus of this report. Nevertheless, they should be, if only briefly, mentioned. Ireland, until recently known as "Celtic Tiger", got into the unfavorable situation after the financial crisis and was forced to ask the IMF for help. Similarly, due to the effects of the crisis and global recession, Italy, which had not exactly been experiencing big economic growth, but had been at least relatively stable, got into trouble; the same with Portugal and Greece. Spain, besides the economic regression on markets, was also hit by unfavorable situation on the real estate market due to money being cheaper (having lower interest rates set by ECB) than the value suitable for the needs of the region as a part of EMU.

Bigger economies (Italy and Spain) to some extent resisted those shocks, in spite of all the problems they encountered. Economically less potent Ireland, Portugal and Greece (smaller and thus by investors considered weaker and more vulnerable) had to ask for help from multinational institutions, such as IMF and ECB, who already intervened more than once on those markets.

Variety of effects of external shocks on EMU, particularly on states hidden under the PIIGS acronym again with current monetary policy proved inappropriateness of creation of such a monetary union (see the opening of this report).

3.1.1 Interest rates of 10Y bonds of PIIGS countries

As demonstrated in Figure 1, Portugal ten year bonds were stable in terms of income for almost all the observation period except the last two years, when Portugal was, after the global financial crisis, also fully hit by the debt crisis. Exceptions with interest rates nearing 6% are between years 2000 and 2003 when the US were hit by technological stock crisis (dot-com bubble) and again in 2000 when the Euro hits its contemporary bottom in relation to the American dollar (0.8225 USD/EUR) [20]. Positive moments for Portuguese government were right before using Euro as a cashless currency until the year 1999 and after its physical emergence in 2002. Therefore it is possible to say that there was an optimism and positive expectations back then.

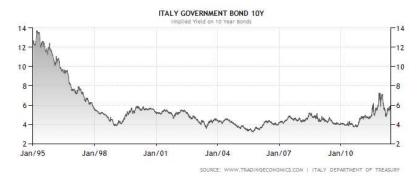


Source: [16]

Fig. 1: Portugal – Government bond 10Y (January 1997 – June 2012)

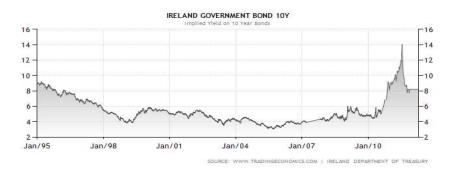
Similar development as in Portugal can be seen in Italy (Figure 2), Ireland (Figure 3) and in Spain (Figure 4). Success of new monetary union definitely lowered investors' perception of

risks. They then failed to see differences between individual economies of one monetary union.



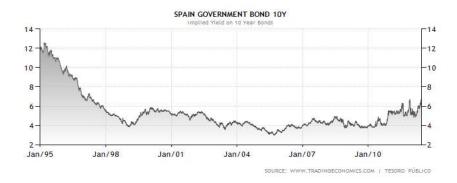
Source: [12]

Fig. 2: Italy – Government bond 10Y (January 1995 – June 2012)



Source: [10]

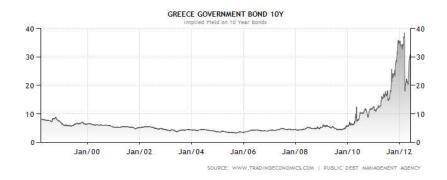
Fig. 3: Ireland – Government bond 10Y (January 1995 – June 2012)



Source: [18]

Fig. 4: Spain – Government bond 10Y (January 1995 – June 2012)

Greece on the other hand seems to be a bit different from the government bonds market analysis point of view (see Figure 5). Decrease of demanded revenue of 10Y government bonds comes with a delay. Particularly from 4th quarter of 2001 to 4th quarter of 2005 and after that, in 2006 gradual increase turns up that goes up steeply in last two years. Initial decrease can be connected to planned joining Greece EMU in 2002 when government made efforts to meet convergent criteria. Positive attitude of investors remains, in spite of lesser effort of government to lower the deficit (Tab. 1). There can be seen a kind of irrationality in the behavior of investors to whom the addressee of borrowed stocks is more and more in debt (and which is not due to positive reforms being passed) and they are still willing to give out money cheaper and cheaper.



Source: [8]

Fig. 5: Greece – Government bond 10Y (January 1998 – June 2012)

Tab. 1: PIIGS Annual Government Budgets (1996 – June 2012) in % GDP

	Portugal	Ireland	Italy	Greece	Spain
1996	-5	-2.1	-7.4	-9.1	-6.5
1997	-4.5	-0.1	- 7	-6.7	-4 .8
1998	-3.5	1.1	-2.7	-6	-3.4
1999	-3.4	2.4	-2.8	-3.9	-3.2
2000	-2.8	2.7	-1.7	-3.2	-1.4
2001	-2.9	4.8	-0.8	-3.7	-1
2002	-4.3	0.9	-3.1	-4.5	-0.6
2003	-2.8	-0.3	-2.9	-4.8	-0.5
2004	-2.9	0.4	-3.5	-5.6	-0.2
2005	-3.4	1.4	-3.5	-7.5	-0.3
2006	-6.1	1.6	-4.3	-5.2	1
2007	-4.1	2.9	-3.4	-5.7	2
2008	-3.1	0.1	-1.5	-6.5	1.9
2009	-3.6	- 7.3	-2.7	- 9.8	- 4.5
2010	-10.2	-14	-5.4	-15.6	-11.2
2011	-9.8	-31.2	-4.6	-10.3	-9.3
2012	- 4.2	-13.1	-3.9	- 9.1	-8.5

Source: Own based on [9], [11], [13], [17], [19] and [3]

In general it seems that investors were focused mainly on monetary angle of economy and gave lesser priority to fiscal quality of a country, with exception of Spain and Ireland. Rating agencies also played an important role when, e.g. in the case of Greece, reacted with delay. But then from 2009 they let the rating fall free [7] and let the pessimism spread out onto the other capital markets.

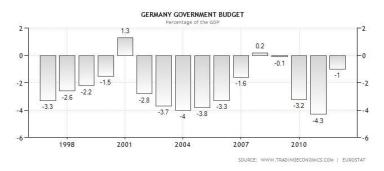
3.2 Other selected economies – Germany, Sweden

The next part of this paper is focused on economies with positive development during the current debt crisis, particularly from the national budget deficit point of view but also from the viewpoint of profitability of 10Y bonds — Germany and Sweden. Specific for these countries is that Germany for its economic performance is considered to be the engine of the whole EU; Sweden is then an example of a typical state with working social securities and thanks to the negative results of public referendums still stands outside the EMU, even though it has no authorized exception as in the case of Denmark and Great Britain.

3.2.1 Interest rates of 10Y bonds of Germany and Sweden

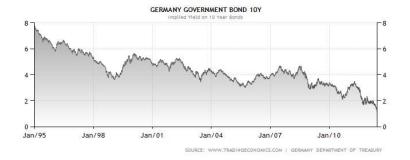
In the narrow sense, the authors focus only on the development of 10Y bonds in connection with historical events with help of development of national deficits, the attention of historical method focuses on economies of Germany and Sweden.

Germany, before entering into cashless EMU (that is since 1999) and till the physical start of Euro on government market bonds with 10Y bonds, copies the tendency of rates that aforementioned PIIGS states had, as you could see in figure 7. Although Germany could not meet balanced budgets during the observed period (see Figure 6), it retained its investors' faith with help of reforms on the employment market known as Hartz I–IV, long-term redundancy on commercial bills and announced promises to aid the public funds that were kept. Important stand of Germany in EMU hand in hand with the fact that applied monetary policy fits Germany means that the country profits with positive interest rates on its 10Y bonds under the 2 % (see Figure 7).



Source: [6]

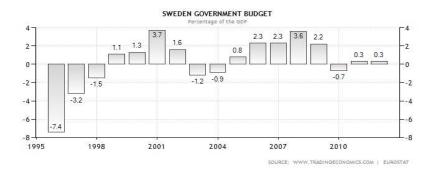
Fig. 6: Germany – Annual Government budget (January 1996 – June 2012)



Source: [5]

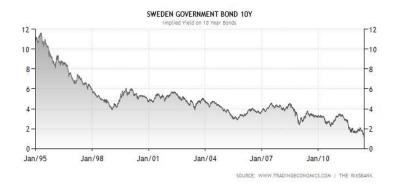
Fig. 7: Germany – Government bond 10Y (January 1995 – June 2012)

The last analyzed country is Sweden. It can be seen in Figure 8 that this country can hold on to balanced public funds for a long time (approximately since 1998), which means lowering the national debt athwart the GDP. Sweden, being one of the original fifteen states of EU has no authorized exception for the admission of Euro and is therefore obliged to accept it. But Sweden is, mainly thanks to public referendums, avoiding the subject and thus preserves its autonomy in both fiscal and monetary policy. Particularly due to balanced economy and functioning social policies, Sweden is, similar to Germany (and also Finland), in favor of government bonds investors with benefit from 10Y bonds under the 2%, as seen in Figure 9.



Source: [23]

Fig. 8: Sweden – Annual Government budget (January 1995 – June 2012)



Source: [22]

Fig. 9: Sweden – Government bond 10Y (January 1995 – June 2012)

To end this chapter we can mention that balanced national debts have positive effect on deficit planning of a country, especially if they are sustainable during the crisis. Financial and the following debt crisis increased the awareness of the fact that individual countries of EMU are not coordinated and have a long way to go to be an optimum currency area, which will be reflected in new difficult tasks for ECB and also for individual countries of EMU.

Conclusion

Analysis and applied historical research method on attitudes of investors towards financing national deficits is valuable for countries, for common corporate activities throughout the capital market and in the end for the investors themselves. Speaking of effects of economies on the amount of enumeration (interest rates or profits) it is obvious that where there is effort to make the national budget balanced, hand in hand with economical robustness, there is a positive effect on interest rates. Analysis also implies that government bond investors have problems to detect quality of public funds of each country, especially more when the countries are parts of newly created monetary union. Rating agencies can also reduce the awareness by placing the countries on a rating scale and thus playing a negative role.

From graphical analysis (Figures 1–5) it is obvious that capital is cyclic and behaves sentimentally based on the logic of risk seen in demanded interest rate. That means, during the crisis or recession, when there is a need for external funds for the state apparatus (thus not by means of taxes, that are also devalued, and other kinds of fees and charges), the willingness to lend is lowered and price of lending is, on the other hand, higher. This characteristic of capital thus hurts the financing of national debt even more. On the contrary, during the growth times (also called boom) it is rational from the investors that they demand lower interest rates for their loans. On the other hand, in this phase of the cycle the willingness of the states to lower their deficits is little, in spite of greater government incomes, due to lower interest rates. From

viewpoint of stabilization of national budgets it would help if the investors were still demanding government bonds with higher interest rates even after the recession for time needed to stabilize the public funds and project the lowered risk of such country e. g. into the corporate bonds.

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Literature

- [1] AIZENMAN, J.: The euro and the global crises: Finding the balance between short-term stabilisation and forward-looking reforms [online]. London: Centre for Economic Policy Research, VoxEU.org, [accessed 2012-06-06]. Available from WWW: http://www.voxeu.org/index.php?q=node/8064>.
- [2] DĚDEK, O.: *Historie evropské měnové integrace: od národních měn k euru*. Praha: C. H. Beck, 2008. ISBN: 978-80-7400-076-8.
- [3] Euro area and EU27 government deficit at 4.1% and 4.5% of GDP respectively [online]. Luxembourg: Eurostat, [accessed 2012-06-06]. 16 p. (PDF). Available from WWW: http://epp.eurostat.ec.europa.eu/cache/ITY_PUBLIC/2-23042012-AP/EN/2-23042012-AP-EN.PDF.
- [4] FRANKEL, J. A.: *No single currency regime is right for all countries or at all times* [online]. Cambridge (MA): NBER, 1999-09 [cit. 2012-06-06]. NBER Working Paper No. 7338, 49 pages. (PDF). Available from WWW: http://www.nber.org/papers/w7338.pdf?new_window=1.
- [5] Germany Government bond 10Y [online]. New York City/Lisboa: Trading Economics, 2012 [accessed 2012–06-04]. Available from WWW: http://www.tradingeconomics.com/germany/government-bond-yield.
- [6] Germany Government budget [online]. New York City/Lisboa: Trading Economics, 2012 [accessed 2012–06-04]. Available from WWW: http://www.tradingeconomics.com/germany/government-budget>.
- [7] GLOVER, J.: *Greece's Credit Ratings Freefall Is 30 Times Average Rate, Evolution Says.* [online]. Bloomberg, 2012-06-02 [accessed 2012-06-04]. Available from WWW: http://www.bloomberg.com/news/2011-06-02/greece-s-credit-ratings-freefall-is-30-times-average-rate-evolution-says.html.
- [8] *Greece Government bond 10Y* [online]. New York City/Lisboa: Trading Economics, 2012 [accessed 2012–06-04]. Available from WWW: http://www.tradingeconomics.com/greece/government-bond-yield>.
- [9] Greece Government budget [online]. New York City/Lisboa: Trading Economics, 2012 [accessed 2012–06-04]. Available from WWW: http://www.tradingeconomics.com/greece/government-budget>.
- [10] *Ireland Government bond 10Y* [online]. New York City/Lisboa: Trading Economics, 2012 [accessed 2012–06-04]. Available from WWW: http://www.tradingeconomics.com/ireland/government-bond-yield.

- [11] *Ireland Government budget* [online]. New York City/Lisboa: Trading Economics, 2012 [accessed 2012–06-04]. Available from WWW: http://www.tradingeconomics.com/ireland/government-budget>.
- [12] *Italy Government bond 10Y* [online]. New York City/Lisboa: Trading Economics, 2012 [accessed 2012–06-04]. Available from WWW: http://www.tradingeconomics.com/italy/government-bond-yield.
- [13] *Italy Government budget* [online]. New York City/Lisboa: Trading Economics, 2012 [accessed 2012–06-04]. Available from WWW: http://www.tradingeconomics.com/italy/government-budget.
- [14] MUNDELL, R. A.: A Theory of Optimum Currency Area. *American Economic Review*. 1961, Vol. 51, Iss. 4, pp. 657–665. ISSN 0002-8282. Available also from WWW: http://www.sonoma.edu/users/e/eyler/426/mundell1.pdf>.
- [15] PEČINKOVÁ, I. (ed.): *Euro versus koruna. Rizika a přínosy jednotné evropské měny pro ČR*. Brno: Centrum pro studium demokracie a kultury, 2007. ISBN: 978-80-7325-120-8.
- [16] Portugal Government bond 10Y [online]. New York City/Lisboa: Trading Economics 2012 [accessed 2012–06-04]. Available from WWW: http://www.tradingeconomics.com/portugal/government-bond-yield.
- [17] Portugal Government budget [online]. New York City/Lisboa: Trading Economics, 2012 [accessed 2012–06-04]. Available from WWW: http://www.tradingeconomics.com/portugal/government-budget>.
- [18] Spain Government bond 10Y [online]. New York City/Lisboa: Trading Economics, 2012 [accessed 2012–06-04]. Available from WWW: http://www.tradingeconomics.com/spain/government-bond-yield>.
- [19] Spain Government budget [online]. New York City/Lisboa: Trading Economics, 2012 [accessed 2012–06-04]. Available from WWW: http://www.tradingeconomics.com/spain/government-budget.
- [20] *Společná měna euro* [online]. Praha: Evropská komise. Zastoupení v České republice, 2012 [accessed 2012-06-04]. Available from WWW: http://ec.europa.eu/ceskarepublika/abc/euro/index_cs.htm.
- [21] STIGLITZ, J. E.: *Jiná cesta k trhu. Hledání alternativy k současné podobě globalizace*. Přel. Jan Placht. PROSTOR, 2003. ISBN 80-7260-095-8.
- [22] Sweden Government bond 10Y [online]. New York City/Lisboa: Trading Economics, 2012 [accessed 2012–06-04]. Available from WWW: http://www.tradingeconomics.com/sweden/government-bond-yield.
- [23] Sweden Government budget [online]. New York City/Lisboa: Trading Economics, 2012 [accessed 2012–06-04]. Available from WWW: http://www.tradingeconomics.com/sweden/government-budget.
- [24] YUCEOL, H. M.: Why European Union is not an Optimal Currency Area: The Limits of Integration. Ege Academic Review. 2006, Vol. 6, Iss. 2, pp. 59-72. ISSN 1303-099X. Available also from WWW: http://eab.ege.edu.tr/pdf/6 2/C6-S2-M6.pdf>.

ZNOVUNALEZENÁ OBEZŘETNOST NA KAPITÁLOVÉM TRHU SE STÁTNÍMI OBLIGACEMI VYBRANÝCH ČLENŮ EMU

Nedostatky EMU, na které už při svém vzniku upozorňovaly některé studie zabývající se optimálními měnovými oblastmi (OCA), se naplno projevily v souvislosti s finanční krizí propuknuvší ve Spojených státech amerických a následnou krizí dluhovou. Tento příspěvek se soustředí na vybrané státy EMU, jejich politiku financování státních rozpočtů v prostředí jednotné měnové oblasti se společnou monetární politikou prostřednictvím dluhopisů na straně jedné a na přístup investorů vkládajících své volné finanční fondy do těchto nástrojů kapitálového trhu na straně druhé. Jelikož se měnové oblasti nepochybně v budoucnosti budou vyvíjet – zanikat, ale i vznikat – považují autoři tohoto příspěvku za přínosné analyzovat a popsat určité aspekty v přístupu států, ale i investorů k financování svých ekonomických záměrů právě v souvislostech se vznikem a trváním těchto oblastí, konkrétně EMU.

WIEDERGEFUNDENE UMSICHT AUF DEM KAPITALMARKT MIT STAATLICHEN OBLIGATIONEN AUSGEWÄHLTER MITGLIEDER DER EUROPÄISCHEN WÄHRUNGSUNION

Die Mangelerscheinungen der EWU, auf welche bereits bei deren Entstehung einige sich mit optimalen Währungsgebieten befassenden Studien aufmerksam machten, zeigten sich voll in Zusammenhang mit der Finanzkrise, welche in den Vereinigten Staaten ausgebrochen war, und der darauf folgenden Schuldenkrise. Dieser Beitrag konzentriert sich auf ausgewählte Staaten der der EWU sowie deren Politik der Finanzierung der Staatsbudgets im Umfeld des einheitlichen Währungsgebiets mit einer gemeinsamen monetären Politik mittels Schuldverschreibungen auf der einen und auf den Ansatz der Investoren, die ihre freien Finanzfonds in diesen Instrumenten des Kapitalmarktes anlegen, auf der anderen Seite. Da sich die Währungsgebiete zweifellos in Zukunft entwickeln werden – Altes vergeht und Neues entsteht –, halten es die Autoren dieses Artikels für einen Beitrag, gewisse Aspekte im Ansatz der Staaten, aber auch der Investoren zur Finanzierung ihrer ökonomischen Absichten besonders in Zusammenhang mit der Entstehung und der Fortdauer dieser Gebiete, besonders der EWU, zu beschreiben und zu analysieren.

Nowo pojawiająca się przezorność inwestorów na rynku kapitałowym dotycząca obligacji skarbowych wybranych członków EMU

Niedoskonałości EMU, na które już w czasie jej powstania wskazywały niektóre opracowania poświęcone optymalnym obszarom walutowym (OCA), dały się w pełni odczuć w związku z kryzysem finansowym zainicjowanym w Stanach Zjednoczonych Ameryki i późniejszym kryzysem zadłużeniowym. W niniejszym artykule skoncentrowano się na wybranych krajach EMU, ich polityce finansowania budżetów państwa w środowisku jednolitego obszaru walutowego ze wspólną polityką monetarną za pośrednictwem obligacji z jednej strony oraz na podejściu inwestorów inwestujących swoje wolne środki finansowe w te instrumenty rynku kapitałowego z drugiej strony. Jako że obszary walutowe będą się z pewnością w przyszłości rozwijać – zanikać, jak również powstawać – autorzy niniejszego artykułu uważają za wskazane przeanalizowanie i opisanie pewnych aspektów pojawiających się w podejściu państw, jak również inwestorów do finansowania swoich przedsięwzięć gospodarczych właśnie w związku z powstawaniem i funkcjonowaniem tych obszarów, w szczególności EMU.