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USE OF (HARD AND SOFT) PEGGED EXCHANGE RATE REGIMES ON THE PATH TO EUROPEAN INTEGRATIONS IN TERMS OF CRISIS

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Review

Abstract

Important aspect of ongoing discussions on the choice of exchange rate regime is its reaction to crisis as a strong and unexpected external shock; such was the case of Great Recession from 2008.-onwards. It is generally accepted that pegged exchange rate regimes are more sensitive to external shocks that might cause their long-term destabilization. Still, the soft pegged regimes (also entitled intermediate regimes) have fewer limits, with rules that allow more maneuver space for national strategy. The group of soft pegged regimes is wider, both in structure and scope, then those of hard pegged regimes. While countries with more flexible regimes might use exchange rate fluctuations as automatic stabilisator, (hard and/or soft) pegs impose some limitations. In the first place, there is stability goal that, in combination with strict regulatory rules, limits the monetary and exchange rate policy, demanding the use of other strategies, such is the internal devaluation. Secondly, these countries do not use wide scope of instruments and their crisis strategy is more rigid than those of other regimes. Finally, there are dilemmas on the optimality of exchange rate strategy during the pre-eurozone membership period, including the euro introduction strategy. These dilemmas deepen in terms of crisis.

This paper focuses on comparison of hard and soft pegged regimes (the latter also entitled intermediate regimes) in selected European union accession countries, using „de facto"classification scale developed by International Monetary Fund. Despite the crisis, there have not been dramatic turbulences in terms of exchange rate policy in observed countries, but the general economic indicators clearly show the real depth of crisis and slow recovery. The question open for further discussion is whether such regimes should be obtained or abandoned during the crisis and what is their contribution to national economy. Furthermore, there are pros and cons of possible strategies, considering the European integration process.

Keywords: *exchange rate regime, great recession, hard pegs, soft pegs (intermediate regimes)*

JEL: E42, E55, F33, F36

1. INTRODUCTION

For the post-transition and post-centrally planned economies, european integration is a process that includes a well-defined strategy and efforts in all aspects of national economy, including the exchange rate policy. On the other hand, the process is not isolated from endogenous and exogenous shocks, such was the global crisis that endangered stability of the global markets from 2008 onwards (also entitled Global Recession). The focus of this paper is on the hard and soft exchange rate pegs in chosen European countries, considering the importance of exchange rate policy in national economy.

Analyses of determinants of exchange rate regime success include its characteristics, influence on other economic variables and external factors. The period of Global Recession has been turbulent for post-transition countries such was for the rest of the world, including dilemmas on optimality of their exchange rate policies and European integration process dynamics (measured in terms of Maastricht criteria, additional criteria introduced by European Commission and national strategies). The sample observed in this paper covers post-transition countries with hard and soft pegs, as classified by IMF (IMF, 2017, pp 6-8), varying from official euroisation ("exchange arrangement with no separate legal tender" (IMF, 2017)) and currency board arrangement as hard pegs to some form of intermediate regime ("soft pegs" (IMF, 2017))with certain level of sovereign and active monetary policy. Since inflation stability (measured in terms of price levels) has been the main monetary policy goal during the observed period, analyses provided in this paper also take it into consideration. Although a heterogeneous group, observed countries participate in European integration process, but are in different phases of accomplishing a full membership in european Economic and monetary union. The sample consists of countries with pegged regimes; namely, Bosnia and Herzegovina and Kosovo are potential candidates, while Serbia, Montenegro and FYR of Macedonia are candidate countries. Three countries from the sample (Bulgaria, Croatia and Czech Republic) are full members of European Union, with an "opt-in" clause for Eurozone membership. Still, they are not participating in Exchange Rate Mechanism II. Denmark (although maintaining a conventional peg, which is a form of soft peg) was not considered as a part of this sample since it participates in Exchange Rate Mechanism II.

During the global crisis, important questions were whether the national currency is over- or undervalued, does the chosen national exchange rate regime remains a good choice in terms of crisis, and whether is able to provide sustainable instruments for crisis strategy. Exchange rate fluctuations, allowed within floating regimes and partially within the intermediates, are usually considered automatic stabilizers, while the pegged regimes are more focused on retaining the stability of exchange rate and price level, with less maneuver space. Question on whether to change the pegged regime or not, and what exit strategy should be used, remains open. For the countries in the sample exit strategy is full membership in European monetary union[1]. Still, considering the criteria of nominal and real convergence, exchange rate policy might contribute to the effectiveness of the process.

This paper, considering the reaction of chosen post-transition countries on Great Recession pressures, focuses on few questions, contributing to the wide literature on exchange rate regimes with an analyze on pegged regimes, considering both hard and soft pegs, the latter also entitled intermediate regimes. Besides the theoretical analyses, main economic indicators are observed, in order to analyze whether the stability and predefined goals (primary price stability) was endangered by strong external shock, such was the global crisis. For that purpose the paper first analyzes shares of the two observed groups within total IMF members, their characteristics and changes both in classification schemes and the strategies (regimes) used by countries.

Traditionally, earlier literature on exchange rate regimes, especially in late 1990s and early 2000s,is focused on choice between so called corner solutions (fixed vs. flexible regimes) but there is also a group of regimes that are intermediate[2], combining the characteristics of the two extremes (see more discussions on exchange rate regimes and its characteristics in, for example, Calvo and Reinhart (2002), Frankel (1999),Edwards (2001), Rogoff, et. al. (2003), Eichengreen, (2008)).Considering the IMF's classification scheme and database, these regimes (there entitled soft pegs), have the highest share in total regimes and are the most heterogeneous group, while hard pegs have the lowest, rather stable share. The sample in this paper consists of countries with hard and soft pegs, according to the IMF's de facto classification scheme, despite the (de jure) publicly announced regime. Although transition countries used different types of regimes, inflation stabilization and control of price level was the final goal for their policies. Furthermore, national authorities' efforts were oriented towards establishing the institutional framework and enhancing the monetary stability.

[1]Note that some countriesfromthesamplealready are members of European Union (Bulgaria, Croatia, CzechRepublic).

[2]In literature alsoentitledas „soft pegs", according to InternationalMonetaryFund „AnnualReport on Exchange Arrangements and Exchange Restrictions", Washington D. C., differentyears

The regimes are considered as of pre-crisis 2004 and post-crisis 2017, including the monetary policy framework. Although both regime groups observed are based on pegs, these intermediate (soft pegged) regimes allow some level of (controlled) fluctuation around the peg whether the target range is publicly announced or not. Although exit strategy for the countries from the sample is eurozone membership, at this moment they still have (a certain level of) monetary sovereignty.

The paper is organized as follows. After the introduction, there is a second chapter that covers theoretical background and brief literature overview. The influence of crisis is described in third chapter, which is followed by conclusion (fourth).

2. THEORETICAL BACKGROUND AND BRIEF LITERATURE OVERVIEW

Choice of national exchange rate regime and consequences on national economy is a widely discussed topic in monetary policy and international finance. Besides the scope of a particular discussion, it is generally accepted that exchange rate policy influence national economy on many different levels. Since the focus of the paper is on pegged regimes, there should be a distinction between characteristics and scope of hard and soft pegged regimes, although the classification includes also floating, market-determined regimes (floating and free floating) and residual (other managed arrangements). (IMF, 2017, pp. 1).

Precisely, hard pegs consist of currency board arrangement and regimes with no separate legal tender (official dollarization/euroisation). Soft pegs (in literature also entitled as intermediate regimes) are a wide group consisting of heterogeneous regimes as following: conventional pegged arrangement, stabilized arrangement, crawling peg, crawl-like arrangement and pegged exchange rate within horizontal bands. (IMF, 2017, pp. 1)

2.1. Some remarks on exchange rate policy debate issues – theoretical background

One of the important questions in discussion on exchange rate regime choice is the accuracy of the classification methodology that, among other, resulted in *de facto* classification system developed by IMF. Besides this classification scheme, a number of authors contributed to discussion developing the criteria and classification systems. That resulted in different models, while mostly used are those developed by Bubulaand Ötker-Robe (2002), Reinhart and Rogoff (2004) and Levy-Yeyati and Sturzenegger (2005, 2016). Some authors (Eichengreenand Razo-Garcia, 2011), Bleaney, Tian and Yin (2017))also contributed to the discussion on the optimality of exchange rate regime choice comparing different classification schemes and criterions used. An analysis of dilemmas in post-trasition monetary and exchange rate policies is provided in Kordić (2015),

considering influence of global crisis on selected indicators between eurozone member countries and those that are still outside the eurozone.

There have been different opinions and recommendations for exchange rate regime optimality, including those when intermediate regimes were observed as more sensitive to speculative attacks and crisis, and others focused on its impact on economic growth(a wider discussion is given in Frankel (2003)). Relation between manipulating with national currency and economic growth is a theoretical presumption, but also a cornerstone for national strategies. In his seminal paper, Rodrik (2008) has proven that undervaluation of the currency (in terms of (higher) real exchange rate) has a positive impact on economic growth. Explanation provided in the paper is twofold, including the institutional weaknesses and product-market failures. Sosvilla-Riveroand Ramos-Herrera (2014), following aforementioned Rodrik's (2008) paper, contribute to discussion on relation between exchange rate regime and economic growth. Dataset consisted of 123 (developing and developed) countries during 1970-2010. Based on the empirical research authors concluded that the best performance was in countries with intermediate regimes, while those with flexible regimes had the smallest growth rates. Further, authors divided economies based on income, according to the World Bank classification. Following this criteria, they confirmed conclusion of growth rates in countries with intermediate regimes. There are also differences in economic growth rate within different income level groups (considering the chosen regime), which does not hold for high-income countries.

It is generally considered that hard pegged regimes are better in providing more disciplined policy, while in later stages they might be widened, allowing exchange rate to fluctuate. Exchange rate policy determines the potential level of adjustment to internal and external shocks and, consequently, the susceptibility of crisis. Chiu, et. al. (2012) analyze the distinction between hard and soft pegs in providing discipline in monetary and fiscal policy. Their work also contributed to the literature by fulfilling the gap in theory, since the focus is usually on fixed and floating regimes influence on economic indicators, with less attention on relation between hard and soft pegs. Using dataset consisted of 31 emerging markets and 32 developing countries during 1990-2003 they confirmed that hard pegs have stronger discipline impact on stabilizing money growth and inflation. On the other hand, influence of exchange rate regime on fiscal discipline was not confirmed. Combes, Mineaand Sow (2016) used a panel of 90 developed and developing countries during 1980-2009 in order to analyze the relation between crisis and exchange rate regime used. They have taken into consideration different types of crisis: banking, currency and debt, testing the "bipolar view" hypothesis. In order to prevent the crisis, countries should focus more on macroeconomic policies, and less on exchange rate regime choice. Such policies that are oriented towards prevention of crisis should include limits on credit growth, avoiding debt monetization with sound fiscal policies and controlling the public debt.

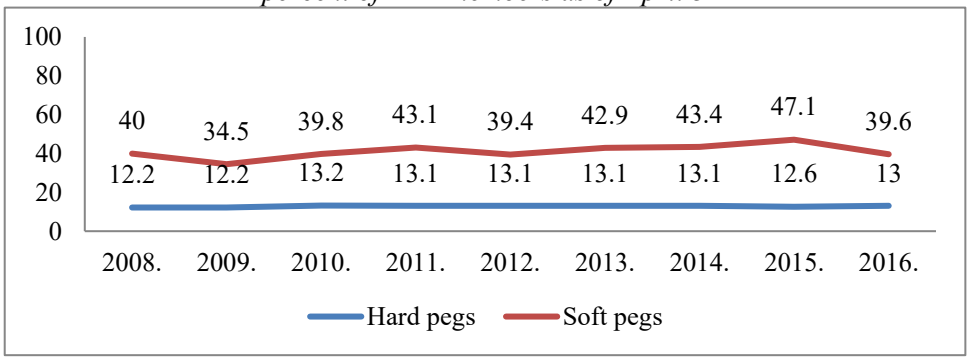
2.2. Practical use of (hard and soft) pegged regimes in practice of International Monetary Fund member countries

The theoretical background for this analysis, besides the data presenting their share within IMF member countries, also includes the discussion on different (de facto) classification systems and influence of crisis on a particular regime. Although there have been developed numerous classification schemes (especially during late 1990sand early 2000s, as explained in the previous chapter), those developed and maintained by the IMF is used in this paper.

As stated before, soft pegged regimes have larger share than hard pegs but that might be explained also with the wider scope of the group. The data on share of hard and soft pegged regimes (the latter also entitled intermediate) in IMF classification scheme are presented in Figure 1 for the 2008-2016.

Figure 1. Hard and soft pegged exchange rate regimes, IMF classification scheme, 2008-2016

percent of IMF members as of April 3

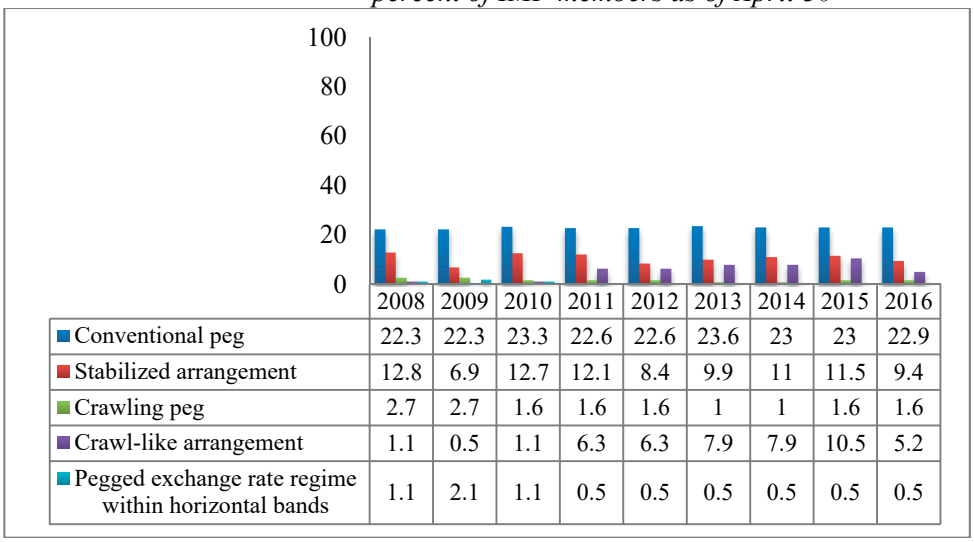


Source: International Monetary Fund, „Annual Report on Exchange Arrangements and Exchange Restrictions“, Washington, D. C., 2016, pp 8.

Besides the high share in total regimes, soft pegs had rather strong oscillations (in total and within an individual subgroup) during the period observed. As mentioned in previous discussion, this category is heterogeneous and wide, as can be observed from the data presented in Figure 2.

Within this group, conventional pegs prevailed during the observed period (with share of more than 22%), followed by stabilized arrangement, whose share varied significantly. Shares of crawling pegs and pegged exchange rate regimes within horizontal bands have been rather stable, while share of crawl-like arrangements increased significantly (especially after 2010), but also with sharp fluctuations.

Figure 2. Soft pegged regimes by category, IMF classification scheme, 2008-2016
percent of IMF members as of April 30

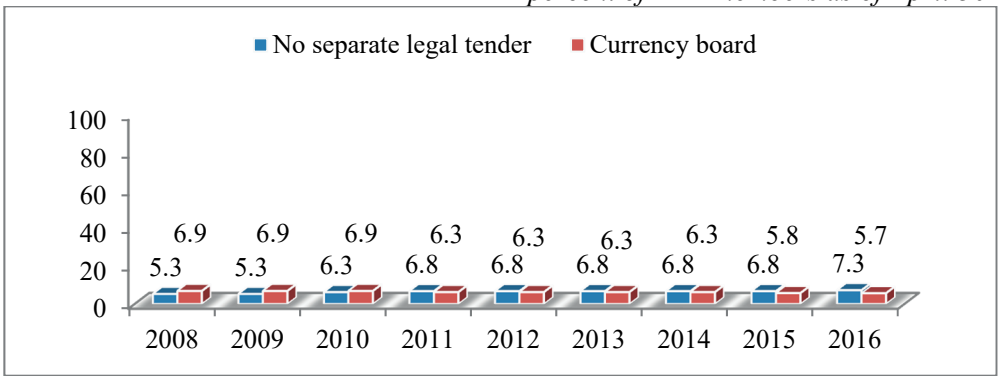


	2008	2009	2010	2011	2012	2013	2014	2015	2016
Conventional peg	22.3	22.3	23.3	22.6	22.6	23.6	23	23	22.9
Stabilized arrangement	12.8	6.9	12.7	12.1	8.4	9.9	11	11.5	9.4
Crawling peg	2.7	2.7	1.6	1.6	1.6	1	1	1.6	1.6
Crawl-like arrangement	1.1	0.5	1.1	6.3	6.3	7.9	7.9	10.5	5.2
Pegged exchange rate regime within horizontal bands	1.1	2.1	1.1	0.5	0.5	0.5	0.5	0.5	0.5

Source: International Monetary Fund „Annual Report on Exchange Arrangements and Exchange Restrictions“, Washington, D. C., 2016, pp. 8.

Group of hard peggers consists of only two regimes: currency board arrangement and no separate legal tender, so their share in total regimes is smaller. (IMF, 2016).

Figure 3. Hard pegged regimes by category, IMF classification scheme, 2008-2016
percent of IMF members as of April 30



Source: International Monetary Fund „Annual Report on Exchange Arrangements and Exchange Restrictions“, Washington, D. C., 2016, pp. 8.

Practical use of intermediate regimes has widened after early 1970s and abandoning fixed regimes based on dollar/gold parity, including the debate on the optimality of exchange rate regime choice and developed de facto policy classification. Still, this debate is ongoing process with limited unique answers.

3. INFLUENCE OF CRISIS ON PEGGED REGIMES – WAS THERE A DIFFERENCE BETWEEN HARD AND SOFT PEGS

Analyses in this paper are focused on influence of external shock (global financial crisis) on hard and soft pegged regimes in European post-transition countries. It is common opinion that the fixed regimes (hard pegs) are more prone to external shock, since they lack the appropriate defending mechanism. On the other side, being allowed to fluctuate, intermediate regimes (soft pegs) are able to use more active policy that should protect them from this type of shocks.

Exchange rate regimes and monetary policy frameworks in 2004 and 2017[3] according to the IMF current classification scheme are presented in Table 1. In making a decision on exchange rate policy, transition countries had some conflicting objectives (Szapáry, 2001) such were maintaining exchange rate stability in terms of volatile capital flows, controlling exchange rate appreciation respecting Balassa-Samuelson effect and achieving Maastricht criteria (especially in terms of inflation).

Countries observed in this paper are post-transition countries with hard and soft pegs: Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Kosovo, FYR of Macedonia, Serbia and Montenegro during the time scale 2004-2017. The de facto regimes and monetary policy anchors as in 2004 and 2017[4] for countries in the sample are presented in Table 1, considering that the IMF classification scheme changed during the period observed (in 2009). Consequently, the classification of regimes varied, while for the purpose of this paper the status in 2017 has been used as a criterion. The heterogeneity of the sample (while the countries are classified in the same group) reminds that there is no unique solution, but the individual approach is required.

Table 1. De facto exchange rate regimes for selected European countries, IMF classification, 2004-2017 comparison

Country	2004.		2017	
	Exchange Rate Regime	Monetary Policy Framework	Exchange Rate Regime	Monetary Policy Framework
Bosnia and Herzegovina	Currency board*	Exchange rate anchor	Currency board	Exchange rate anchor (euro)
Bulgaria	Currency board	Exchange rate anchor	Currency board	Exchange rate anchor (euro)
Kosovo**	Managed floating with no pre-	IMF supported or other	No separate legal tender	Exchange rate anchor (euro)

[3]Note thatIMF'sclassification scheme, originatedin 1999. was redefined in 2009 that resulted indifferences in categorisation.
[4]Thelatestyearavailablein IMF statistics.

	determined path for the exchange rate	monetary program, but the euro was the most widely used currency		
Montenegro**	Managed floating with no pre-determined path for the exchange rate	IMF supported or other monetary program, but the euro was the legal tender	No separate legal tender	Exchange rate anchor (euro)
Croatia	Managed floating with no pre-determined path for the exchange rate	IMF supported or other monetary program	Stabilized arrangement	Exchange rate anchor (euro)
Czech Republic	Managed floating with no pre-determined path for the exchange rate	Inflation targeting framework	Stabilized arrangement	Inflation-targeting framework (de facto exchange rate anchor to the euro)
FYR Macedonia	Other conventional fixed peg arrangements (against a single currency)	Exchange rate anchor	Stabilized arrangement	Exchange rate anchor (euro)
Serbia**	Managed floating with no pre-determined path for the exchange rate	IMF supported or other monetary program, but the euro was the most widely used currency	Stabilized arrangement	Inflation targeting framework (de facto exchange rate anchor to the euro)

Notes: *in the RepublikaSrpska, the Serbian dinar circulates; **in 2004.the country was Serbia and Montenegro, while Kosovo was UN-administered province.

Source: International Monetary Fund „Annual Report on Exchange Arrangements and Exchange Restrictions 2017“, Washington, D. C., 2017., pp. 6-8, (accessed October 17 2018.)and International Monetary Fund, “Classification of Exchange Rate Arrangements and Monetary Policy Frameworks”, available at https://www.imf.org/external/np/mfd/er/2004/eng/0604.htm (accessed 4May, 2018.)

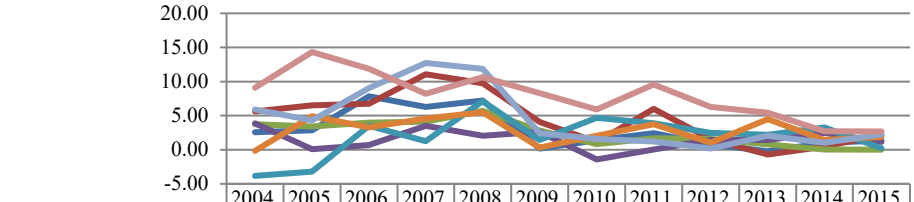
Comparing the two years (2004 and 2017) there is a change in regimes from "managed floating with no-predetermined path for the exchange rate" to hard pegged regimes in two cases –first, Kosovo and Montenegro switched to "no separate legal tender", using euro as exchange rate anchor and being officially euroised. This was followed by political changes, since in 2004 Montenegro was not an independent country, while Kosovo was UN-administered province. In the second case (Croatia and Czech Republic) these regimes switched to stabilized arrangement. Currency board arrangements, based on euro as exchange rate anchor, remained unchanged (Bosnia and Herzegovina and Bulgaria), while Serbia switched to inflation targeting regime, with "stabilized arrangement" as a de facto exchange rate regime. Still, within the soft peggers, there is also a different level of exchange rate activities and monetary policy that includes both exchange rate anchors to euro (but still outside the ERM II) and formal inflation targeting (noting that there is a de facto exchange rate peg, even within inflation targeting as monetary policy framework).

Influence of crisis might be detected in fluctuation and derogation of main economic indicators, since the crisis was a strong external shock for national economies. One possible solution, usually recommended in crisis, is to devaluate national currency, in order to stimulate national economy. But, in terms of hard peg such external devaluation is not an option considering the rules of arrangement. Alternative stabilizing mechanism is to use internal devaluation, that should protect the regime but on the high cost for national economy.

General data for countries observed are presented in Figures 4 and 5, covering inflation rate and GDP growth (both annual percentage change, using GDP deflator for inflation).

Inflation rates (Figure 4), especially considering the fact that price stability is the main goal for the monetary policy in observed countries has been rather unstable and, in some periods, higher than projected. However, despite the crisis, hard pegs were not abandoned nor replaced with more flexible regimes.

Figure 4. Inflation, GDP deflator, (annual, %) for selected countries, 2004-2015



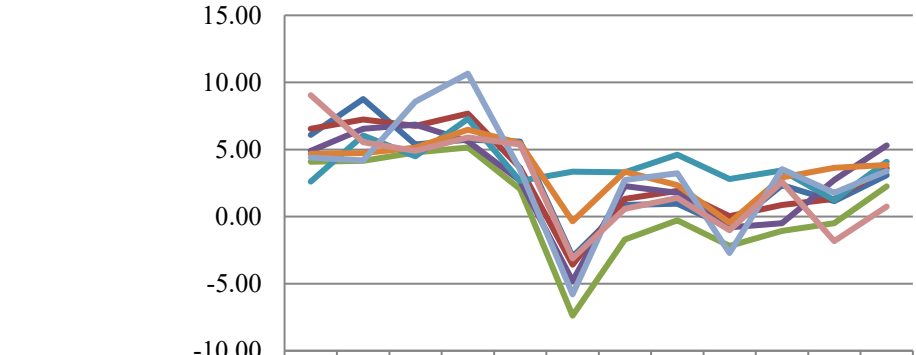
	2004.	2005.	2006.	2007.	2008.	2009.	2010.	2011.	2012.	2013.	2014.	2015.
Bosnia and Herzegovina	2.57	2.83	7.83	6.29	7.21	0.17	1.40	2.44	0.80	-0.23	1.00	1.37
Bulgaria	5.63	6.50	6.74	11.07	9.74	4.05	1.11	5.98	1.56	-0.70	0.45	2.21
Croatia	3.72	3.40	4.00	4.11	5.70	2.78	0.83	1.67	1.58	0.80	0.05	0.01
Czech Republic	3.87	0.07	0.69	3.52	2.05	2.60	-1.43	0.02	1.46	1.43	2.48	1.17
Kosovo	-3.84	-3.21	3.53	1.26	7.12	1.42	4.69	3.88	2.45	2.20	3.26	0.22
Macedonia, FYR	-0.17	4.90	3.25	4.59	5.49	0.30	2.04	3.72	1.00	4.48	1.45	1.89
Montenegro	5.92	4.32	9.06	12.72	11.87	2.41	1.60	1.20	0.18	2.07	1.04	2.22
Serbia	9.09	14.33	11.86	8.22	10.62	8.30	5.88	9.56	6.26	5.44	2.71	2.68

Source: World Bank, 2018. http://databank.worldbank.org/data/reports.aspx?Code=FP.CPI.TOTL.ZG&id=1ff4a498&report_name=Popular-Indicators&populartype=series&ispopular=y# (accessed 24 April 2018)

Volatility of inflation included the phases of rather high rates and those with indicators of deflation. Following the deflationary trends, the rates decreased after 2012, reaching even negative values, followed by a slight recovery.

As can be observed from Figure 5, GDP annual change (%) was negative during the period of crisis, with a sharp decrease in 2009 in both observed groups.

Figure 5. GDP growth (annual, %) for selected countries, 2004-2015



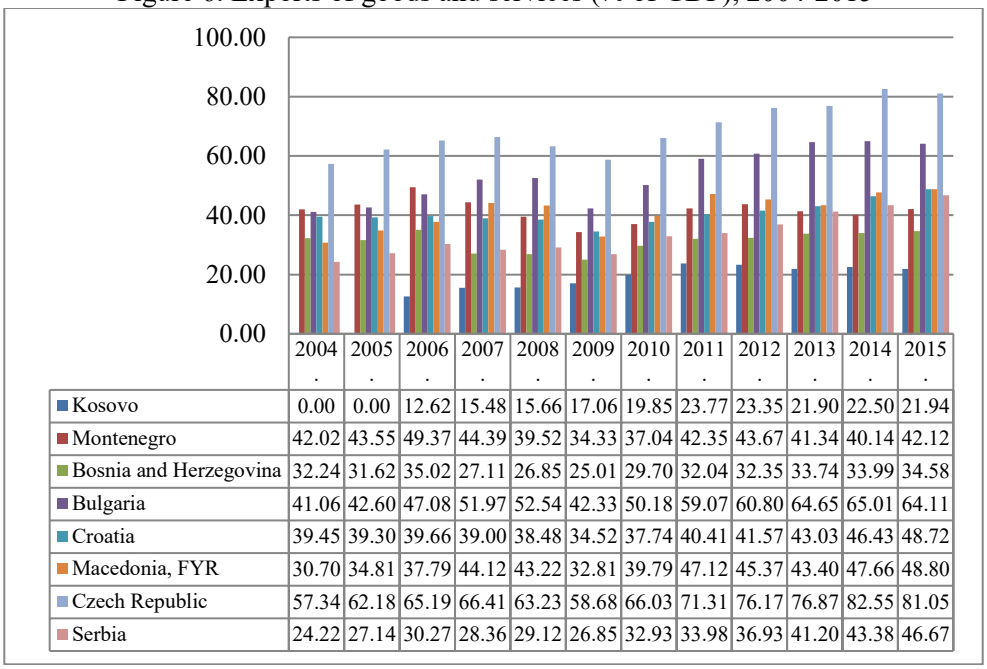
	2004.	2005.	2006.	2007.	2008.	2009.	2010.	2011.	2012.	2013.	2014.	2015.
Bosnia and Herzegovina	6.10	8.76	5.38	5.73	5.58	-2.99	0.87	0.96	-0.82	2.35	1.15	3.07
Bulgaria	6.56	7.24	6.75	7.68	3.64	-3.59	1.32	1.92	0.03	0.86	1.33	3.62
Croatia	4.08	4.16	4.79	5.15	2.05	-7.38	-1.70	-0.28	-2.19	-1.06	-0.49	2.25
Czech Republic	4.91	6.53	6.85	5.60	2.68	-4.80	2.27	1.78	-0.80	-0.48	2.72	5.31
Kosovo	2.61	6.03	4.50	7.29	2.64	3.34	3.31	4.62	2.81	3.44	1.22	4.08
Macedonia, FYR	4.67	4.72	5.14	6.47	5.47	-0.36	3.36	2.34	-0.46	2.93	3.63	3.84
Montenegro	4.40	4.19	8.57	10.66	3.49	-5.80	2.73	3.23	-2.72	3.55	1.78	3.39
Serbia	9.05	5.54	4.90	5.89	5.37	-3.12	0.58	1.40	-1.02	2.57	-1.83	0.76

Source: World Bank, 2018. http://databank.worldbank.org/data/reports.aspx?Code=NY.GDP.MKTP.KD.ZG&id=1ff4a498&report_name=Popular-Indicators&populartype=series&ispopular=y#(accessed 24 April 2018)

Although there is a slight recovery after the 2009, sample countries still did not reach the pre-crisis levels. According to this criterion, both observed groups followed the same trends. Still, in their study Belhocine, et. al. (2016, pp 14.) describe the different growth patterns between countries depending on the exchange rate regime choice. European countries with harder regimes (lower flexibility) recorded a boom until 2007/08crisis, followed by a recession, while the recovery in 2011-2013 was somewhat stronger than in those with more flexible regimes. But, after the mid-2013, the latter group of countries had faster growth than the other. Furthermore, their research confirmed higher growth volatility for countries with low exchange rate volatility (especially the Baltics).

Hereafter, it is interesting to observe the dynamics of exports (Figure 6) and imports (Figure 7) of goods and services (as a % of GDP).

Figure 6. Exports of goods and services (% of GDP), 2004-2015



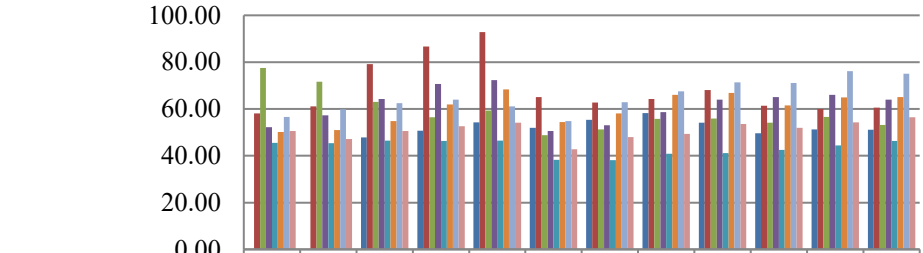
	2004.	2005.	2006.	2007.	2008.	2009.	2010.	2011.	2012.	2013.	2014.	2015.
Kosovo	0.00	0.00	12.62	15.48	15.66	17.06	19.85	23.77	23.35	21.90	22.50	21.94
Montenegro	42.02	43.55	49.37	44.39	39.52	34.33	37.04	42.35	43.67	41.34	40.14	42.12
Bosnia and Herzegovina	32.24	31.62	35.02	27.11	26.85	25.01	29.70	32.04	32.35	33.74	33.99	34.58
Bulgaria	41.06	42.60	47.08	51.97	52.54	42.33	50.18	59.07	60.80	64.65	65.01	64.11
Croatia	39.45	39.30	39.66	39.00	38.48	34.52	37.74	40.41	41.57	43.03	46.43	48.72
Macedonia, FYR	30.70	34.81	37.79	44.12	43.22	32.81	39.79	47.12	45.37	43.40	47.66	48.80
Czech Republic	57.34	62.18	65.19	66.41	63.23	58.68	66.03	71.31	76.17	76.87	82.55	81.05
Serbia	24.22	27.14	30.27	28.36	29.12	26.85	32.93	33.98	36.93	41.20	43.38	46.67

Notes: the data for Kosovo are not available for 2004 and 2005

Source: World Bank, 2018. http://databank.worldbank.org/data/reports.aspx?Code=FP.CPI.TOTL.ZG&id=1ff4a498&report_name=Popular-Indicators&populartype=series&ispopular=y# (accessed 24 April 2018)

Both the data for exports and imports are following the trends observed in GDP growth, confirming the strong influence of crisis and slight recovery after 2010. Still, despite the fact that observed countries belong to (hard or soft) pegged regimes, structural differences and general level of economic development are visible following the results in this category, and need to be taken into consideration when interpreting the results for a particular country.

Figure 7. Imports of goods and services (% of GDP), 2004.-2015.



	2004.	2005.	2006.	2007.	2008.	2009.	2010.	2011.	2012.	2013.	2014.	2015.
Kosovo	0.00	0.00	47.82	50.66	54.25	51.93	55.41	58.29	54.12	49.60	51.22	51.16
Montenegro	58.09	61.08	79.10	86.70	92.82	65.09	62.74	64.31	68.09	61.43	59.98	60.57
Bosnia and Herzegovina	77.50	71.62	63.01	56.46	59.31	48.74	51.27	55.80	55.85	54.13	56.57	53.23
Bulgaria	52.23	57.28	64.21	70.65	72.30	50.61	53.03	58.69	63.97	65.06	65.96	63.96
Croatia	45.47	45.43	46.40	46.27	46.52	38.24	38.16	40.87	41.10	42.57	44.42	46.33
Macedonia, FYR	50.17	51.03	54.76	61.98	68.35	54.37	58.09	66.07	66.84	61.46	64.88	65.03
Czech Republic	56.53	59.83	62.45	63.96	61.06	54.81	62.94	67.48	71.37	71.11	76.18	75.05
Serbia	50.63	47.14	50.60	52.66	54.14	42.74	47.92	49.37	53.60	51.91	54.22	56.43

Notes: the data for Kosovo are not available for 2004 and 2005

Source: World Bank, 2018. http://databank.worldbank.org/data/reports.aspx?Code=FP.CPI.TOTL.ZG&id=1ff4a498&report_name=Popular-Indicators&populartype=series&ispopular=y# (accessed 24 April 2018)

Since the pegged exchange rates were not abandoned and considering the fact that these regimes have less opportunities for adjustment, there is a stronger pressure on wages and employment. This is usually considered to be a part of internal devaluation strategy, opposite from adjustment using exchange rate policy (external devaluation). This is also a way to retain the peg (considering possible exchange rate fluctuations within the intermediate regimes) but on the cost in other areas.

4. CONCLUSION

The main goal of the paper is to analyze the functioning of hard and soft pegged exchange rate regimes (the latter also entitled intermediate), on a sample of post-transition countries. The sample covers the two groups of pegged regimes, hard and soft (intermediate) pegs. It has been formed using the IMF's exchange rate regimes classification scheme and dataset (IMF, 2017). Share of hard pegged regimes in total is lower than those of soft pegs, considering also that the scope of soft pegs is wider, consisting of a broader, more heterogeneous group of regimes. Two out of eight countries in the sample are officially euroised, other two have a currency board arrangement (the four of them forming a subgroup of hard pegged regimes),

while other four belong to the group of soft peggers (as presented in particular in Table 1).

The 2017 IMF's classification has been used as a criterion for creating a sample which is compared with regimes used in pre-crisis2004 in terms of exchange rate regime and monetary policy framework, although both the classification scheme and the status of a particular country varied over time. The data presented included changes in main economic indicators (GDP growth rate, inflation and exports and imports of goods and service (both in % of GDP)), covering the 2004-2015 period in these selected European economies.

This topic is interesting on few levels. Apart from the on-going discussion on the optimality of exchange rate regime choice and exchange rate classification, observed countries are participating in different stages of European integration processes and exchange rate policy might contribute to the success of the process. On the other hand, global crisis as an external shock endangered the economic and exchange rate stability and questioned the optimality of chosen regime, potentially leading to change of policies, goals and exchange rate strategies.

The change of a regime when a crisis shock occurs would be a risky strategy that might further deepen it. Although the exit strategy for European countries includes stronger involvement in European integration process (full membership in the monetary union as a final stage) the countries either did not fulfill the formal and/or convergence criteria or individually postponed the date of full membership.

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