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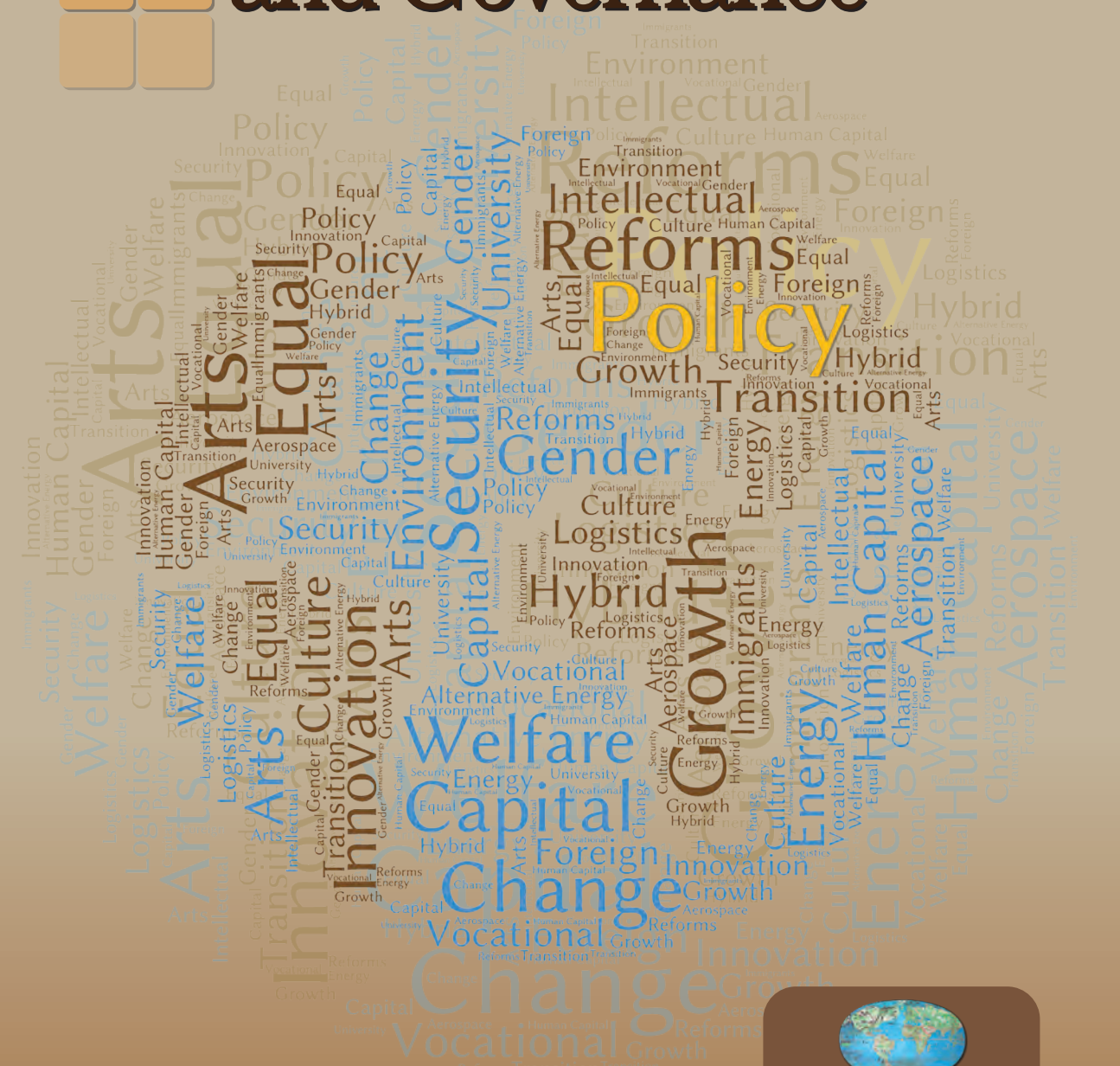

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PAPER

Economic EU Convergence of Albania and Other Balkan Countries

Ermelinda Meksi • Ermelinda Xhaja

Abstract This paper aims to assess the real economic convergence among eight Balkan countries except Slovenia, with three of them being European Union (EU) members, and among the thirteen newest member countries of the EU. The convergence is analysed in view of income convergence, in terms of beta (β) and sigma (σ) convergence to estimate the tendency of disparities on income per capita among the countries under review in the study. The methodology used employs the classical model of economic growth, referring to Solow and further researches elaborated in late 1980s and early 1990s by Barro and Sala-i-Martin. The main findings are summarized as follows: 1) the Balkan countries have converged among themselves and toward EU. The new EU member states have also experienced convergence of their income among them and with the EU; 2) the speed of convergence has been higher in those countries that have started with the lowest levels of GDP per capita. The speed of convergence has diminished in the late 2000s demonstrating the impact of the global financial and economic crisis; 3) the estimated time gap of Albania to converge with the poorest members of EU and EU itself is considerable, thus more efforts and reforms have to be dedicated to Albania to promote economic development and accelerate the speed of convergence.

Keywords Economic convergence - Economic growth - Statistics of income convergence - Economic integration

JEL Classification F15 - F43 - O47

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Introduction

Albania started negotiations for a Stabilisation and Association Agreement (SAA) in 2003, in the context of its political integration agenda with the European Union. The SAA was signed in June 2006. The process of negotiations with the EU, however, and Albania's efforts to comply with obligations required before the candidate status is granted, continue. The journey towards European integration until a country's accession in the EU is a long one, pending on the fulfilment of the so-called Copenhagen criteria[1] such as:

- stable institutions guaranteeing a functioning democracy, the rule of law, respect for human rights and protection of minorities;
- a functioning market economy and the capacity to cope with competition and market forces in the EU;
- Adopting the acquis communitaire, and the ability to take on and implement effectively the obligations of membership, including adherence to the aims of political, economic and monetary union.

In this context, integration is linked with laying the foundations to assure a sustainable growth and approach the advanced economies of the Union. The catching up or economic convergence means that a country is on the right path to integration, as it has established strong institutions and sound macro-economic and fiscal policies to support such convergence and facilitate business activity. Several empiric studies have tested the cross-sectional convergence among countries in different regions. From our preliminary research regarding convergence in Albania, Ancona (2007) has included Albania among the set of Mediterranean countries in an attempt to estimate the convergence of income per capita for the period 2000-2004. This paper concludes that, for 2000-2004, the growth rate in Balkan countries aspiring the EU accession stands higher than the EU average. They are apparently converging but the process is not coordinated. In the same paper, with this rate, Albania would need 40 years for its GDP per capita to catch up Italy's GDP per capita.

The aim of this paper is to go into deeper application and analysis of the convergence theory for Albania and the Balkan region by assessing the speed of economic growth as a precondition for the convergence of income and calculate whether it has contributed to diminishing differences in income vis-à-vis the EU.

1 Copenhagen Criteria document link http://europa.eu/rapid/press-release_DOC-93-3_en.htm?locale=en

This convergence is seen in two regional perspectives: a) among the Balkan region; and b) among the 13 last members[2] of the EU. The discussion will be based on the classical approach of economic convergence for developing countries. Data used in this paper are taken from the World Bank Data, IMF World Economic Outlook and UN Data. The indicator we use is GDP per capita in PPP (current international dollar) for the period 1995 - 2012. The data for 2013 are not yet available in the mentioned sources. The countries included in the analyses are: Albania, Bosnia-Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Macedonia, Malta, Montenegro, Poland, Romania, Slovakia, Slovenia and Serbia. The GDP per capita in PPP is converted in natural logarithm as suggested by literature for easy calculations and derivation of standard deviation. GDP per capita in PPP for Serbia for 1995-1996 and Montenegro for the 1995-1999 are proxy calculations of the authors based on the current value of GDP per capita in those years (UN Data) converting in PPP, by using the Serbian PPP conversion rate of the year 1997. Data are elaborated through SPSS 12 programme.

Theoretical framework

One of the most important models of economic growth is the Solow model (1956). The main assumption of the model, with regard to diminishing returns of the capital, supports the presentation of three important derivations, such as: a) a less developed economy (with a lower GDP per capita) tends to grow faster than a more developed one; b) the growth rate tends to diminish as the economy develops; c) if the economies share the same features, the less developed economy will tend to converge its revenue to the developed ones. The convergence model gives insights into the developing countries by implying that, if they can fulfil some preconditions in terms of political and economic stability, good governance, business climate, they can accelerate their development process and converge with the developed countries or a steady state. Although the economic theories predict convergence, empirical evidence has not always confirmed that.[3] A negative coefficient in the GDP per capita growth equation indicates that poor countries, on average grow, faster than richer ones. This, however, does not necessarily imply a shrinking of the distribution of per-capita income, because unexpected disturbances can take a country above or below its growth path.

The neoclassical production function of Cobb-Douglass provides the relation between the output and the production factor, including the level of technology:, $Y_{(i,t)}=A_i \bullet K^{\alpha}_{(i,t)} \bullet L_{(i,t)}{}^{(1-\alpha)}$ where $Y_{(i,t)}$ is economy i's aggregate output at time t, $K_{(i,t)}$and $L_{(i,t)}$ are the stock of capital and labour in that economy respectively, and A_i is the

2 Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lethonia, Malta, Poland, Slovakia, Slovenia in 2004; Bulgaria and Romania in 2007; and Croatia in 2013.

3 Barro, Sala-I-Martin (1991)

level of technology. The basic equation of Solow model that describes the drive of the economy toward the steady states is given as following:

a $\bar{k}_t = sf(k_t) - (n + x + \delta)k_t$ (1a) or $\bar{k}_t = sf(k_t) - (n + x + \delta)k_t$ (1b)

where: (1)

k - capital per unit of effective labour

$\bar{k}$ - increase of capital per effective labour unit

g_k- growth rate of capital

n - growth rate of population

x - rate of exogenous technical progress

δ - rate of capita depreciation

s - saving rate

f(k) - production function

Based on the Solow model, and Cobb Douglass production function, Barro and Sala-i-Martin (1990)[4] have approximated the transitional growth process in the neo-classical model as following:

$$(1/T)\cdot\log(y_{it}/y_{i,t-T}) = x_i^* + \log(\hat{y}/\hat{y}_{i,t-T})\cdot(1-e^{-\beta T})/T + \mu_{it} \quad (2)$$

Where, i indexes the economy, t indexes time, $y_{i,t}$ is per capita output, x* is the steady state per capita growth rate $\hat{y}_{it}$, is output per effective worker, $\hat{y}_i$* is the steady state level of output per worker, T is the length of observations interval, the coefficient β is the rate of convergence, and μ_{it} is an error term. The coefficient β indicates the rate at which $\hat{y}_{it}$ approaches to the steady state. The aim of many empirical researches in the recent years has been to evaluate the value of β through a simplified equation of rate of growth[5]:

$g_y \approx \beta(\ln y^* - \ln y_t)$ (3)

4 Barro, Robert J., and Xavier Sala-i-Martin. 1990 "Economic Growth and Convergence across the United States", Working Paper 3419;

5 Real Economic convergence in the EU accession countries – Matkowski, Zbigniew, Prochniak Mauriusz (2004)

The parameter β gives information on the speed of convergence or the distance from the steady state, covered annually. To calculate β in a cross-country analysis of empirical data the following regression equation is used:

$$\frac{1}{T}\ln\frac{y_T}{y_0} = \alpha_0 + \alpha_1 \ln y_0 \quad (4)$$

This equation allows to estimate whether there is a convergence trend or not. The dependent variable is the average annual growth rate of real GDP per capita between period T and 0, while the independent variable is GDP per capita level in period 0. If the slope of regression is negative (parameter α_1), then β convergence exists, as the GDP growth rate is negatively correlated with the initial income level. This confirms that the less developed economies in the region grew faster than the more developed economies.

Then, we can calculate the value of β from the following equation.

$$\beta = -\frac{1}{T}\ln(1+\alpha_1 T) \quad (5)$$

In addition to β coefficient for defining the concept of convergence, the classical literature presents another concept that is σ convergence. The σ convergence involves a decline over time in the cross-sectional dispersion of per capita income. Beta (β) convergence is a precondition to have σ convergence, but is not always the vice versa. [6]The concept of σ convergence can be defined as a group of economies are converging in the sense of σ, if the dispersion of their real per capita GDP levels tends to decrease over time:

$$\sigma_{t+T} < \sigma_t \quad (6)$$

Where σ_t is the time t standard deviation of $\log(y_{i,t})$ across countries i.

Income Convergence among Balkan Countries and new EU members

The convergence among Balkan countries is estimated by considering some similarities in their economic and political development in the frame of their commitment to EU integration. The initial year of the research is 1995, when Balkan countries and CEE countries started to show some positive signs of economic recovery, following the collapse of communism. Bulgaria, Croatia and Romania, already EU members, are also included in the group of countries in the Balkan region, with the aim of verifying the convergence in this region, its speed, distance of the so-called emerging economies in the Balkan countries from those that are now EU members, and how has the EU membership influenced the growth rates of these three countries.

6 Xavier Sala Martin (1995)

Bulgaria and Rumania accessed the EU in 2007 where the GDP per capita in PPP was respectively USD 12,521 and USD 13,160 consisting in 41% and 43% of the GDP per capita of the European Union in that year. In addition, for comparison, the speed of convergence is estimated in the other set of countries of the thirteen newest EU members.

- β convergence

The concept of β convergence relates to poor economies growing faster than rich ones. The higher β, the greater the responsiveness of the average growth rate to the gap between y* and $y_{(0),}$ thus the faster the convergence to the steady state. To estimate if there is β converge in this group of countries we will use the regression equation (4), where the dependent variable is the average annual growth per each country for the period 1995 – 2012, and the independent variable is the log natural of 1995 GDP per capita per each country, as described in Table

(Insert Table 1, here)

Using the dataset in the table 1 the regression results are given in the table 2, where is also calculated β through the equation (5).

(Insert Table 2, here)

The regression equation resulting is *y= 0,348 + (-0,034)x* . In the brackets under the coefficient is the standard error, while the significance of the regression test is respectively 0,001 for the constant and 0,003 for the slope of regression. The regression's results confirm the existence of β convergence given that α_1 has a negative value. Therefore, the negative relation between the growth and the initial level of income per capita is confirmed. The average annual growth for the EU countries, during this period, has been 4%, confirming again that the less developed Balkan region grew more rapidly in the period 1995-2012.

The positioning of the countries toward each other and the regression line are shown in the regression plot in Figure 1.

In

As shown in Table 1 and confirmed in the scatter plot in Figure 1 countries experiencing the highest growth are Bosnia-Herzegovina and Albania, the poorest countries with the lowest level of GDP per capita in PPP in 1995, respectively USD 1,291 and USD 2,759. The β convergence is significant to 5,3% and relatively fast compared to the general trend of 2% reported by empirical studies for bigger regions and group of countries in Barro and Sala-i-Martin (1992).[7] Referring to the 72 rule, with this speed of growth Albania would need approximately 14 years to double

7 Sala-i-Martin (1995)

its 2012 GDP per capita to reach the amount of USD 18,806.8 in PPP. However, in the last six years the average growth rate of Albania has been 2,4%, while IMF projections for the next four years are around 3,5%. At this rate of growth, the time gap for Albania would be greater than 14 years to double its GDP per capita.The same analysis for the β convergence is done for the thirteen new members of EU for

the period 1993 – 2012, to understand the pace of their convergence. Table 3 shows the data set used for calculating the regression equation for this group of countries. Table 4 shows the regression's results over the period 1995-2012 for the new members of EU, including Croatia that accessed the EU in 2013, and the regression plot is shown in Figure 2.

(Insert Table 3 and 4, here)

The regression equation is *y= 0,377 + (-0,035)x* and the results are supported by a p value of 0,000013 and 0,000056. The negative α_1 confirms the existence of β convergence equal to 5,5%. Thus the less developed economies that have started from really low GDP per capita have increased their GDP per capita faster than the developed economies (as it is mentioned above, the average annual growth for the EU is calculated at 4% for this period). Also, the speed of convergence is slightly higher than the Balkan countries of 5,3%, even though the latter have started from a lower level of GDP per capita. In a study of 2004 of Matkowski and Prochniak, the β parameter of the eight CEE countries that accessed the EU in 2004 was estimated for the period 1993-2003 at 3,4%. As it will be explained in the next section, accession to EU has accelerated the convergence speed for these countries, thanks to access to other resources, not available for other non-EU countries in the Balkan region. Figure 2 shows that Latvia, Bulgaria and Romania have started at the same approximate level of GDP per capita in 1995, the poorest in this set of countries but the β convergence is more confirmed in Latvia's case, where the average growth has been impressive. This result is confirmed also by the substantial increase of the weight of GDP per capita of Latvia in the studied period, as explained in the next section.

(Insert Figure 2, here)

Figure 2 shows a negative correlation between the average annual GDP per capita growths rate over 1995-2012 and the initial GDP per capita level. The points on the chart indicate the position of individual countries and the distance between them gives a clue on the disparities among the Balkan countries as well as among the new members of EU. Following the logic of our analysis, to see if the β convergence has affected the disparities of incomes per capita in the Balkan counties, we analyse the behaviour of the other parameter, σ convergence.

- σ convergence

Our empirical analysis confirmed the β convergence among Balkan countries as well as among the new member countries of EU. Figure 3 shows all eighteen countries under review and the EU's aggregated value of GDP per capita. The chart gives an insight on the differences in the development and the income per capita among the countries under review. Again, the negative relation among the initial level of income and the growth rate is confirmed, albeit at a lower speed (β=2,2%), given that the set of countries is more diversified in the development stage. Growth is higher for less developed countries in Europe such as Bosnia-Herzegovina and Albania. However, to estimate if their income per capita has converged with other countries in the Balkans and its situation against the EU, the σ parameter is assessed by calculating the standard deviation for the log of capita per GDP

(Insert Figure 3, here)

The calculations are done for the group of Balkan countries for the period 1995-2012. The σ convergence exists if the trend line slope of the regression of deviations of log GDP per capita and the time period has a negative coefficient, meaning that income dispersion tends to diminish. The regression results for σ are presented in Table 5 and Figure 4.

(Insert Table 5, here)

The findings are supported by the regression statistics of p=0,001 parameter α0, p=0,002 for the slope of regression and R= -0,688. The results confirm the negative relation in the regression and the existence of σ convergence. As shown in the regression plot in Figure 4, for the initial period of the study the dispersion has been enormous as the period till the decline rate of divergence, following this trend till year 2000. For the period 2000-2012, the pace of decline in standard deviation has slowed substantially. In his study for the convergence of Mediterranean economies, Ancona (2007)[8] projected the growth rates for 2010 and 2015 for the countries in the Mediterranean, including those aspiring EU accession, concluding that the income per capita will further diverge. However, the set of countries in this study is different, and the results differ. What can be derived, however, is that the convergence has been substantial until 2000, while for the rest, it has remained in a certain stagnation + 1-2 points.

(Insert Figure 4, here)

In our study, we have also calculated the ratio of GDP per capita of each Balkan country vis-à-vis EU GDP per capita for the period 1995-2012.

(Insert Table 6, here)

When considering the share of the average of Balkan GDP per capita to EU GDP per capita, we see a substantial increase for the period under review but almost

8 Ancona Giovanni (2007) "Le economie mediterranee tra convergence e divergenza" " [Mediterranean economies between convergence and divergence], Istituto Italiano di Cultura, Barcelona, 2007.

stationary for the last four years. An explanation can be the impact of the 2008 economic global crises on the Balkans , which hit the Balkans in 2009 and continues to date . The GDP growth rate for the EU for 2008-2012 was 1,3%, whereas for Albania the average growth rate of GDP per capita was 2,6% , apparently lower than the 5,3% average rate estimated by the regression of Beta convergence in the period 1995-2012.

Estimation on the convergence time gap

Hence, based on the above sections' calculations, we may project the time needed to catch up with some of the new members of EU. We will consider Bulgaria with the lowest GDP per capita in the EU area and its 2007 level of GDP per capita as the steady state to achieve.

Returning to the regression equation for Beta convergence, $\frac{1}{T}\ln\frac{y_T}{y_0} = \alpha_0 + \alpha_1 \ln y_0$ we use the results of the regression in Table 1. The GDP per capita of Bulgaria will be used, as at the moment of accession in 2007, and as the poorest country in the Union entering with the lowest GDP per capita value. The time needed for Albania in this case to catch up the GDP per capita of Bulgaria in 2007 would be seven years, considering the GDP per capita of 2012 as initial level.

But the growth rate in the last five years has differed from results of Table 1; the annual has been estimated to average 2,6% . If we consider a simplified formula $y_t = y_0(1+g)^T$ (7) for calculating the GDP per income growth, we can derive the time needed T to the desired yt with the formula $T = log_{(1+g)}(y_t/y_0)$. In this case, Albania with 2,6% speed of growth will needed 11 years to catch up the GDP per capita level of Bulgaria.

But, if we consider also the growth rate of EU using the IMF projections for the period 2013-2019 at the average rate of 1.5%, the estimation for catiching up will differ. For Albania we consider the average rate of 3.5 based on IMF projections for the same period. Based on formula (7), we adjust it as below:

$$y_{T,\,EU} = y_{2012,EU}(1+g)^T = y_{T,Alb} = y_{2012,Alb}(1+g)^T$$

As a result, Albania would need 70 years for its income per capita to converge with the EU.

Conclusions

The findings of the research confirmed the existence of Beta (β) convergence, so the less developed countries have grown faster than the developed countries for the period 1995 – 2012. However, the speed of convergence has been higher in the thirteen new members of the EU than in the Balkan countries. This conclusion can be analysed further in view of political, institutional and economic reforms that the countries accessing the EU have undertaken. In the Balkans, Bosnia-Herzegovina and Albania have experienced the highest growth rates starting from the lowest level of GDP per capita, but the most impressive is Bosnia's progress. In 2012, its income per capita converged with Albania, toward EU income per capita in 2012. The empirical results have confirmed the sigma (σ) convergence, thus the disparities in the income per capita among Balkan countries against the EU have diminished, demonstrated by the reduction of the standard deviation of GDP per capita. The speed of reduction has been higher in the early years of the period under review for most of the countries, in particular for Bosnia-Herzegovina and Albania. Since 2000 a slow pace of diminishing trend and stagnant, in certain periods, has been noted. In the meantime, after accession, in EU new member countries the disparities in the income per capita have diminished faster.

With the actual rate of growth, in order to catch up with Bulgaria's the lowest level of GDP per capita at the moment of accession, in 2007, Albania would need 14 years. To converge with EU, it would need some 70 years. It is a long period of time. Therefore, Albania needs to reflect on the set of policies and reforms to create room for further economic development. The establishment of strong and reliable institutions, political stability, and promotion of business climate are the first steps that can guide the further economic convergence and welfare of Albanian people.

References

Ancona G (2007) Le economie Mediterranee tra convergenza e divergenza [Mediterranean economies between convergence and divergence], Istituto Italiano di Cultura, Barcelona

Sala-i-Martin X (1990) Lectures Notes on Economic Growth(I): Introduction to the Literature and Neoclassical Models, Nber Working Papers Series, Working Paper No.3563

Barro RJ, Sala-i-Martin X (1990) Economic Growth and Convergence across the United States, Working Paper 3419

Barro RJ, Sala-i-Martin X (1991) Convergence across states and regions, Brookings Papers on Economic Activity

Xavier Sala-i-Martin (1995) The Classical Approach to Convergence Analysis Economics Working Paper 117

Barro RJ, Sala-i-Martin X (1992) Convergence, Journal of Political Economy, Vol. 100, No. 2, Apr,

(1992)

Barro, Robert J (2001) Economic Growth in a Cross section of Countries The Quarterly Journal of Economics, Vol. 106, No. 2. (May, 1991): 407-443

Matkowski Z, Prochniak M (2004) Real Economic convergence in the EU Accession countries International Journal of Applied Econometrics and Quantitative Studies Vol.1-3 (2004)

Financing for Development, Case of Albania (2007) Ermelinda Meksi, briefings organized by Parliamentarian for Global Action, New York, October 23-24, 2007

Economics of Development, sixth edition by Dwight H. Perkins, Steven Radelet, David l. Lindauer

Weil DN (2012) Economic Growth, 3rd edition

Mankiw G, Romer D, Weil DN (1992) A contribution to the Empirics of Economic Growth

Caselli F (2006) The Marginal Product of Capital, IMF Working Paper

IMF World Economic Outlook (2013)

Kuadri Makroekonomik Fiskal 2015- 2017, Ministria e Financave [Macroeconomic and fiscal framework 2015 - 2017, Albanian Ministry of Finance]

World Banka Data

UN Data

Table 1 Average annual growth and GDP per capita in Balkan countries 1995 – 2012

Country	Albania	Bosnia-Herzego-vina	Bulgaria	Croatia	Romania	Macedo-nia, FYR	Montene-gro	Serbia
Average annual growth	0,07	0,11	0,06	0,05	0,07	0,05	0,06	0,04
GDP per capita in PPP (1995)	2759	1291	5533	7979	4802	4764	5370	5901
Ln 1995 GDP per capita	7.92	7.16	8.62	8.98	8.48	8.47	8.59	8.68

Table 2 Regression results for β convergence

Period	α_0	α_1	$t_{\alpha 0}$	$t_{\alpha 1}$	R^2	β-conv.	Beta
1995-2012	0,348 -0,001	-0,034 -0,003	5,969	-4,876	0,779	Yes	0,053

Table 3 Average GDP per capita growth and GDP per capita in 1995

Country	Average growth of GDP per capita	GDP per capita 1995	Ln 1995 GDP per capita
Bulgaria	0,06	5532,634	8,62
Croatia	0,05	7979,095	8,98
Cyprus	0,04	15410,26	9,64
Czech Republic	0,04	13389,71	9,5
Estonia	0,08	6319,758	8,75
Hungary	0,05	8978,469	9,1
Latvia	0,08	5390,036	8,59
Lithuania	0,08	6202,273	8,73
Malta	0,04	7412,832	9,64
Poland	0,06	5370,01	8,91
Romania	0,07	13010,05	8,59
Slovak Republic	0,06	8305,502	9,02
Slovenia	0,04	15376,58	9,47

Table 4 Regression results for 13 new EU member countries

Period	α_0	α_1	$t_{\alpha 1}$	$t_{\alpha 0}$	R	β-conv.	Beta
1995-2012	0,377	-0,035					
	-0,051	-0,006	-6,326	7,462	-0,886	Yes	0,055

Table 5 Regression results for σ parameter

Period	α_0	α_1	$t_{\alpha 0}$	$t_{\alpha 0}$	R	σ-conv.
1995-2012	18,7	-0,009				
	-4,844	-0,002	3,859	-3,79	-0,688	Yes

Table 6 Ratio of GDP per capita of Balkan Countries to EU GDP per capita

Year\ Country	Albania	Bosnia-Herzego-vina	Bulgaria	Croatia	Macedonia	Montene-gro	Romania	Serbia	**average of Balkan**
1995	0,16	0,07	0,32	0,46	0,28	0,27	0,31	0,34	0,27
1996	0,17	0,14	0,26	0,5	0,27	0,19	0,32	0,33	0,27
1997	0,15	0,18	0,26	0,51	0,27	0,18	0,29	0,3	0,28
Year\ Country	Albania	Bosnia-Herzego-vina	Bulgaria	Croatia	Macedonia	Montene-gro	Romania	Serbia	**average of Balkan**
1998	0,16	0,19	0,28	0,51	0,27	0,19	0,27	0,3	0,27
1999	0,18	0,2	0,28	0,49	0,27	0,25	0,26	0,26	0,27
2000	0,18	0,2	0,29	0,5	0,27	0,3	0,26	0,26	0,28
2001	0,19	0,2	0,29	0,51	0,25	0,29	0,28	0,27	0,29
2002	0,19	0,21	0,32	0,53	0,25	0,29	0,3	0,28	0,29
2003	0,2	0,21	0,34	0,55	0,26	0,3	0,32	0,28	0,31
2004	0,21	0,22	0,35	0,56	0,27	0,31	0,35	0,3	0,32
2005	0,22	0,23	0,37	0,57	0,29	0,31	0,36	0,32	0,33
2006	0,23	0,24	0,38	0,58	0,3	0,36	0,39	0,33	0,35
2007	0,23	0,25	0,41	0,61	0,3	0,41	0,43	0,33	0,37
2008	0,26	0,27	0,44	0,63	0,33	0,43	0,49	0,36	0,4
2009	0,28	0,27	0,45	0,62	0,35	0,42	0,5	0,36	0,41
2010	0,27	0,27	0,45	0,59	0,36	0,42	0,51	0,35	0,4
2011	0,27	0,28	0,47	0,61	0,35	0,42	0,51	0,35	0,41
2012	0,28	0,27	0,47	0,61	0,35	0,42	0,53	0,35	0,41

Figure 1 GDP per capita growth rate during 1995-2013 and the Log of 1995 GDP per capita

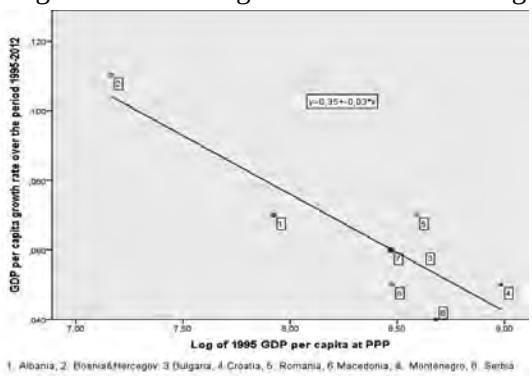


Figure 2 GDP per capita growth rate over 1995-2012 and the log GDP per capita in 1995 as the initial period of analysis

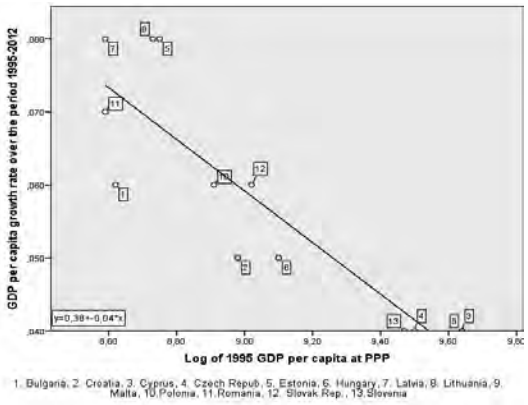
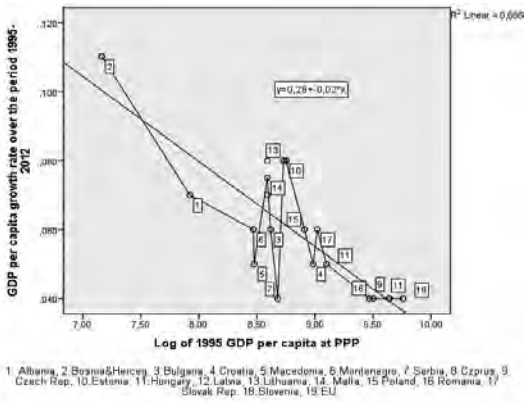


Figure 3 GDP per capita growth rate over 1995-2012 and the log of 1995 GDP



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PAPER

Looking at the Rise and Fall of the Indian Economy Through the Lenses of Economic Policy

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Abstract This paper investigates the rises and falls in the Indian economic performance in the backdrop of its belatedly launched macroeconomic economic reforms and liberalization program and changing macroeconomic policy framework. After decades of underperformance, partial and moderate reforms adopted in the first half of the 1980s had a clear growth-enhancing impact. The methodical market-oriented reforms and liberalization program that followed the 1991 balance-of-payments crisis was an important policy measure in this regard, although its implementation was tardy and inefficacious. This article demonstrates that in close relation to its reform endeavors, the growth trajectory of India changed several times.

Keywords Macroeconomic reforms - Deceleration - Growth trajectory Infrastructure

JEL Classification O1 - O4 - O5

1. Introduction

The objective of this paper is to examine the rises and falls in the Indian economic performance in the backdrop of its belatedly launched economic reform and liberalization program. This paper shows that the growth trajectory of the Indian economy

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transformed several times since the launching of the economic reform program. The angle of the growth trajectory had a bearing on the pace of implementation of reforms and other policy transformations.

Measured in terms of current dollars and exchange rates as well as purchasing power parity (PPP), India is the third largest Asian economy. With China it is widely regarded as one of the two emerging Asian giants. It is a member of James O'Neill's well-known BRIC (Brazil, Russia, India and China) categorization and the prestigious Group-of-Twenty (G-20) framework that was created to usher in an era of strong, sustainable and balanced global growth. India began to be regarded as a part of a small group of exceptional cases of catch-up. With that global economy entered a period of multi-polar growth, with a select group of large developing economies leading the way as new and dynamic growth poles (Lin and Rosenblatt, 2012). The economic trajectory of the Indian economy altered several times. After decades of severe underperformance, the Indian economy gradually picked up momentum in the 1980s and 1990s and turned in a stellar performance during the 2000s, but in 2011 its GDP growth rate slumped. It worsened in 2012 (Table 1).

1.1 Starting off on the Wrong Foot

Since its independence in 1947, the Indian economy underperformed for decades. The reasons included a socialistic growth model adopted under the tutelage of Fabian socialist Prime Minister Jawaharlal Nehru. Simplistic and poorly premised economic concepts like self-sufficiency, self-reliance, import-substitution and the cult of villages were prevalent during this era. Some of them were favourite ideas of the much-admired political leader and social reformer, Mahatma Gandhi. Indian policy makers strongly believed in Prebisch-Singer hypothesis and adopted an inward-oriented growth model. A planned, *dirigiste*, almost autarkic, inefficient, agrarian economy evolved and achieved a low-level equilibrium. Economic growth was stymied by low productivity. The country was, and continues to be, run by a huge cadre of government bureaucracy, which was and is well known for being corrupt, incompetent and self-serving. Red tape assumed Byzantine proportions. A venal and sclerotic government intervened excessively in economic life. Economic policy was essentially made by political leaders who had little knowledge, comprehension or insight into how an economy operates. These are some of the better-known facts about the economic past of India. For decades, India unabashedly perpetuated poverty.

Those with hands on the policy levers belatedly learned some economic lessons from a prolonged period of economic failure. One well-known fact about the evolution of the Indian economy is that in the early 1980s moderate and partial

macroeconomic reform measures were taken and the policy framework began to change in diminutive stages and GDP growth took off (DeLong, 2004; Rodrik and Subramanian, 2005). Preliminary or partial trade reforms were undertaken in the mid-1980s. Consequently economic performance began to gradually improve.[1] This author has analysed these changes and challenges in Indian economic growth and other related intricate issues.[2] The reforms of the 1980s were modest, piecemeal and somewhat *ad hoc* in comparison to those undertaken later in the 1990s. However, their resulting productivity gains were substantial and distinct. Apparently this was a case of moderate reforms having a large impact in an economy because the erstwhile policy environment was highly distorted.

1.2 Dividing Line: The Two Periods

In this context, a look at the long-term growth statistics is revealing. It shows an obvious dichotomy in the growth performance of India between pre- and post-1980 periods. Long-term growth statistics give an impression of two kinds of economy in India. An unmistakable increase in quinquennial and decadal GDP and per capita GDP growth rates occurred during the latter period. During the Fifth Five Year Plan (FYP) (1974–79) average annual per capital income increase was 2.7 per cent. It jumped to 3.2 per cent in the Sixth FYP (1980–85) and 3.6 per cent in the Seventh FYP (1985–90).

Long-term averages confirm the same two-economy trend. The pre-1980 long-term average annual GDP growth was 3.5 per cent, with a standard deviation of 3.5 per cent. During this period per capita income increased at an average of 1.2 per cent per annum. In contrast, the 1980–2004 average GDP growth was 5.7 per cent, with standard deviation down to 1.9 per cent. During this phase, average per capital income increased at a rate of 4.0 per cent per annum (Kelkar, 2004; Ahmed and Varshney, 2008). Growth was broad-based in the latter phase; all three sectors, agriculture, industry and services, performed better. This was a clear and conspicuous transformation in the growth trajectory of the Indian economy from a low to somewhat higher GDP growth.

The declining standard deviation during the second period implied that the Indian economy was becoming less volatile and more resilient to shocks. For instance, the oil shocks of 1973 and 1979 had adversely affected Indian growth in the past, but in the post-1980 period this kind of vulnerability was obviously reduced

1 Many knowledgeable writings are available on India's growth story. Several analysts have drawn attention to the gradually improving economic performance of India from its initial low level. For academically oriented writings see Acharya, 2006; Bestley and Burgess, 2004; DeLong, 2004; Ghani, 2010; Kochhar et al., 2006; Kumar and Subramanian, 2011; Panagariya, 2008; Rodrik and Subramanian, 2005; Subramanian, 2008; WB, 2006.

2 See for instance Das, 1992, 2009a, 2009b, 2010a, 2010b, 2011.

and the Indian economy withstood external shocks relatively more successfully. Freeing up of prices or price flexibility is one important reason behind the reduced volatility in economic growth. The severe economic and balance of payments crisis of 1991, when foreign exchange reserves were reduced to around $1 billion, which was two weeks of current account payments. India was on the brink of defaulting on its loans. This dire situation called for a more methodical and comprehensive set of reforms than those of early 1980s. Much awaited economic restructuring and liberalization measures were instituted at this time. Price flexibility in Indian markets rose markedly since the 1991 reforms in areas like interest rates and the prices of steel, cement, etc. The ability to adjust prices improved the capacity of the economy to adjust to external shocks.

No doubt there were sub-period variations in the growth performance. For instance, during the pre-reform era, the weak GDP growth rate of the pre-1980 period plunged really low in the decade of the 1970s to 3 per cent per annum. Conversely, after adoption of the macroeconomic reforms began in the decades of the 1980s and 1990s, GDP growth rates picked up to 5.8 per cent and 5.7 per cent, respectively. Furthermore, owing to a benign global economic environment for a good part of the decade of 2000s and the cumulative effect of the post-1991 reforms, the 2000s proved to be even better for the Indian economy. The average annual GDP growth for the 2000–10 period was 7.46 per cent (Table 1). Per capita income during this period increased at the rate of 6.1 per cent. The 2000s also saw declines in the poverty rate and fertility rate as well as the average number of children per woman. Hopes that India would be able to emulate China's ebullient performance and achievements began to rise. However, on the negative side, one serious blemish that afflicted the economy after 2007 was high rates of inflation due to the erroneous, expansive and populist policies of the Federal government. They included subsidizing farmers by offering high procurement prices for food crops and even cash subsidies to those living below the poverty line. Wholesale prices of food suffered the worst inflationary trend. The retail food prices grew even faster.

(Insert Table 1, here)

1.3 A Dream Economy or an Aberration?

The decade of 2000s was noteworthy. Following the dot-com recession in 2001, the Indian economy picked up growth in 2003 (Table 1). This was the beginning of a dream decade and India turned into one of the fastest-growing emerging-market economies (EMEs). It enhanced the rate of growth of per capita income, domestic demand as well as integration with the regional and global economies. A high growth period from 2005 to 2007 followed. The economy posted 9+ per cent GDP growth for three consecutive years. This was an impressive performance by any

measure.

At this juncture, it appeared that India was ready for a period of turbo-charged growth and the economy was ready to move up to yet another new growth trajectory. It was not irrational to believe that on the back of high productivity growth, there had been a structural increase in India's potential growth rate after 2003. Goldman Sachs published projections making India's GDP (in $ terms) higher than that of the US well before 2050. According to these projections, India was to become the second largest global economy (Poddar and Yi, 2007; O'Neill and Poddar, 2008). A striking fact was that the post-2003 acceleration in the GDP growth had occurred without a large surge in domestic capital accumulation or large foreign direct investment (FDI) inflows. In 2010, the Indian economy seemed to be doing a convincingly good job of catching up with the high-performers like China and advanced economies. Its per capita GDP at PPP increased from 7 per cent of the OECD average in 2000 to 10 per cent in 2010. Concomitantly, the Indian share of world GDP increased to over 6 per cent in PPP terms and the share in world trade more than doubled (OECD, 2011).

However, doubts were raised in some quarters regarding sustainability of 9+ per cent GDP growth and it was regarded as an aberration rather than a newly evolving trend (Das, 2010b). The Great Recession (2007–09) did not affect the Indian economy very much. It was able to withstand the first round of direct adverse effects because the banking sector was not exposed to the so-called toxic assets. Only one large private sector bank, the ICICI, was slightly exposed to them. However, the ICICI, like the other Indian banks, had a strong balance sheet. With timely help from the government, the Indian financial sector was able to see the global financial crisis (2007-09) period through without any serious problems.

Conversely, the second round effects did have an impact on the real economy. The Indian economy could not remain immune to the liquidity crunch in the global market. Foreign institutional investors began fast withdrawals from India and there was a large outflow of capital. Business firms shifted to the domestic banking sector to make up for the gap. Merchandise and services exports suffered serious declines during 2008 and 2009. In general, however, the economy remained resilient and was able to put up with the global slump of 2009 well. This was the global financial crisis year, when the advanced economies had contracted by 3.4 per cent and the global economy by 0.5 percent. This crisis was the severest in seven decades. That the Indian economy turned in a stellar performance (8.40 per cent) in 2009 can be justly regarded as an outstanding performance.

Growing at 5.1 per cent, the global economy recovered strongly in 2010. The advanced industrial economies grew at a rate of 3.0 per cent (IMF, 2012a). As India was not affected much by the Great Recession, there was little concern regarding recovery. Until this juncture the economy was being run relatively well. India was

still being seen as another possible global powerhouse economy like China. In some quarters there were even hopes of India overtaking China (*The Economist*, 2010).

1.4 Upgrading Economy and Rising Global Standing

During the 2000s India established itself as the second fastest growing economy after China. In 2011, India's GDP in nominal terms was in the vicinity of $2 trillion (Table 2). Slow but steady improvements in India's growth performance enhanced its international status. It became a founding member of the Group-of-Twenty (G-20). Good economic performance also attracted a great deal of scholarly attention. It was seen as another rising global powerhouse EME (Lin and Rosenblatt, 2012). One line of thought was that China with a strong and competitive manufacturing sector and India with a strong and competitive services sector would develop into the newest contributors to global growth. Terminology like 'emerging economic giants' was coined to refer to China and India and comparisons of different facets of their economies became frequent in academic research (Das, 2006; Chatterjee, 2009; Huang and Tan, 2012).

(Insert Table 2, here)

Over two decades between 1990 and 2011, Indian GDP increased almost six-fold, per capita gross national income (GNI) in terms of PPP increased over four-fold and GNI in current dollars increased over three-and-a-half times (World Bank, 2012). Remarkable increases in the size of the GDP and the GNI in a period of two decades pulled millions out of poverty and directly affected consumption and employment in a favourable manner. India now has a middle-class population—a driver of economic growth—of significant size. Rapid rise in income also increased revenue collection of the government, which financed large increases in social spending, infrastructure development and poverty alleviation programmes.

Measured by nominal GDP, India's global ranking was upgraded from 50th in 1980 to 9th in 2011. In 2010 it overtook Spain and in 2011 both the Russian Federation and Canada. In terms of GDP, measured in PPP, India became the third largest economy in 2011, after the United States (US) and China. Japan (4th) and Germany (5th) followed (World Bank, 2012). According to the 2011 statistical data India accounted for 5 per cent of the world GDP in PPP terms and 18 per cent of the world population.

As the economy has been liberalizing, its increasing openness and outward orientation began turning India into an important regional and global economy. As a result the interest and attraction of foreign investors also began to rise. Although impressive, these remarkable improvements are not comparable to those of China

over the same period. According to the 2011 statistics, nominal per capital income in India is still the lowest among its BRIC cohort (Table 3). China's nominal per capita income is four times higher than that in India. In 2011, the size of the Chinese GDP in nominal terms was also four times larger than that of India. It was $7.29 trillion in comparison to $1.85 trillion for India (World Bank, 2012). If long-term (1979–2009) averages are compared, China's per capita income grew almost twice as rapidly as that of India.

(Insert Table 3, here)

2. Macroeconomic Reforms and Restructuring

Notwithstanding the moderate and partial reforms undertaken in the 1980s, the Indian economy continued to remain highly distorted and over-regulated. Methodical and comprehensively designed systemic reforms were launched in mid-1991. They were premised on 'a wider play of market forces, gradual liberalization of the financial sector, and opening of the economy to world trade and capital flows' (Ahluwalia, 2011: 88). The Indian economy turned away from its age-old dedication to socialism, near autarky and agriculture and endeavoured to integrate both regionally and globally. At this juncture, Indian policy mandarins attempted to adopt pro-market and pro-free trade policies.

The inward-oriented policy mindset of India's policy-makers was gradually turning to outward orientation. For the first time there was appreciation of the achievements and rapid growth of the 'miracle' economies of Asia and the phenomenal rise of China. There also was a desire to learn from their success and adopt an outward-oriented growth strategy. An overly protected Indian industrial sector had become cost-inefficient, technologically obsolete and exceedingly uncompetitive. Unpromising results of three decades of inward-oriented protectionist policies necessitated a change in the policy framework of growth. The anti-export bias of the pre-1980s era was abandoned. Attempts were also made to address the long-standing problem of twin-deficit, budget and current accounts. The other economies that are being persistently plagued by twin deficits include Greece, Ireland, the US and the UK. The policy shift towards an outward-oriented market-based policy framework was evident in the July 1991 budget. The macroeconomic policy framework and economic structure began transforming conspicuously after 1991. In general, the macroeconomic reform program was wide-ranging and long overdue and went some way in ameliorating the distortions. In particular, the external sector was significantly and systematically liberalized. A large part of draconian import licensing policy structure was dismantled and tariffs were reduced by gradually compressing the top tariff rates.

Despite the trade reform measures of the 1980s and more during the 1990s, the

Indian economy was still a highly protected economy. In 1991 the highest tariffs stood at 355 per cent. They were reduced to 85 per cent in 1993, and to 50 per cent in 1995. According to the World Bank (2012) indicators, applied tariff rates (simple mean) declined from 82 per cent in 1990 to 32 per cent in 1999 and 12 per cent in 2009. Tariff rates on manufactured products declined from 83 per cent (simple mean) in 1990 to 33 per cent in 1999 and 10 per cent in 2009. Tariff rates on all products declined from 54 per cent (weighted mean) in 1990 to 29 per cent in 1999 and 8 per cent in 2009 (World Bank, 2012). These statistics show a considerable liberalization of the external sector. Also, non-tariff barriers (NTBs) began to decline, reducing irrationally high protection for the manufacturing sector. Export controls were lifted and so was stringent foreign exchange control. Quantitative restrictions (QRs) over imports of capital and intermediate goods were removed. Trade expanded rapidly, particularly in the services sector.

Implementation of the 1991 reform program was far from swift, effective, well-organized and meticulous. Criticisms over implementation progressing in a slow, hesitant manner and in fits and starts were frequent and just. Instead of a gradual pick up in the pace of reforms and liberalization they slackened after 1995. The environment during the ninth FYP (1997–2002) was distinctly different. Progress in reform implementation slowed and so did growth momentum (Das, 2009b, 2011). GDP growth for the ninth FYP declined to 5.5 per cent. Numerous other domestic and external factors affected the economy adversely during this period. To name the principal factors: large public pay increases were instrumental in the relapse into the old malaise of fiscal deficits, the agriculture sector performed poorly due to poor monsoons and a variety of other reasons and the industrial sector output also went into a decline. India suffered two major droughts in 2000 and 2002. The regional and global economic environment increasingly became a drag. During 1997–98, the Asian financial crisis broke out, oil prices spiked and the global economy suffered from the dot-com recession in 2001. One positive factor for the Indian economy was the inexplicably robust growth performance – 8.2 per cent – of the services sector during the ninth FYP period. It contributed to GDP growth in a significant manner.

Tardiness in the implementation of macroeconomic reforms and liberalization was in stark contrast to that of China. There were frequent periods of stagnation and retreats in reform implementation. There have been cases where after announcing growth-enhancing reforms the government made a U-turn. One perennial problem was that reforms and their pressing need were poorly understood by both Indian politicians and people in general. Consequently, there was/is no broad constituency for reforms in India.

2.1 The Tangible Outcome

The policy measures that were taken for the first time to deregulate an over-regulated economy had a discernible impact on trade, industry and financial sectors. Due to liberalization of the external sector, export growth rate jumped to 20 per cent per year for a short period in the early and mid-1990s. It was lent a hand by sharp currency depreciation. In 1991, the rupee was devalued by 22.8 per cent relative to a basket of currencies. The real effective exchange rate (REER) of the rupee had declined by 16.3 per cent.

Even the incomplete liberalization and poorly implemented reforms and deregulation managed to show notable beneficial results in the erstwhile over-regulated Indian economy (Table 2). They had a welfare enhancing impact over the economy and GDP growth rate surged to 6.7 per cent in the eighth FYP period (1992–97) and per capita income by 4.6 per cent. Both were discernibly higher than during the seventh FYP period (1985–90), 5.8 per cent and 3.6 per cent, respectively. This acceleration in growth occurred across the board; it was reflected in the agricultural, industry and services sectors. One essential shift that the tardy reform process caused was making the economy more market-oriented. It reduced the ubiquitous interference of the government and stifling bureaucracy.

3. Acute Deceleration in the Economy in 2011

The general expectation was that India would efficaciously complete its market-oriented reforms by 2010 and then enter an era of sustained development (Bajpai and Sachs, 2011). As noted, India turned in a healthy economic performance during the 2000s, particularly since 2003 (section 1.2). However, India not only did not complete its market-oriented reforms by 2010 but also began growth deceleration in 2011. Incongruously, Indian GDP had grown well before and after the global financial crisis (2007–09). After performing well during a challenging period for the global economy, the Indian economy faced onerous domestic political and economic predicaments. Consequently the angle of India's economic trajectory dropped. Prolonged political disarray, policy paralysis in the government, spate of large corruption scandals, stalled reforms and mired implementation and serious macroeconomic mismanagement were not the only sources of deceleration. The sovereign debt crisis in the Eurozone, the largest (20.5 per cent in 2011) buyer of Indian exports, and sluggish recovery in Japan and the US, also took their toll.

It is easy to answer the question regarding what should be blamed for the plight of the Indian economy. The answer is squarely based on the fact that like the successful trading economies of Asia, the Indian economy is not excessively dependent

on the external demand, thanks to its significant domestic market and early emphasis on inward-oriented growth. Therefore it is domestic factors that contributed far more to the slowdown of the Indian economy.

GDP growth slumped in 2011 to 6.88 per cent (Table 1). Soon the economic situation worsened and gloom deepened during the first quarter of 2012, when India recorded a GDP growth of 5.3 per cent, the slowest for nine years. It was essentially the industrial sector that was responsible for the slump in GDP growth, not agriculture or services. At this juncture the budget deficit of the government also overshot the target of 4.6 per cent of GDP and was much higher at 5.9 per cent. Government debt was estimated at 67.6 per cent of GDP, compared to 22 per cent for China. Once again the Indian economy was considerably underperforming relative to its potential. In its July 2012 update of the *World Economic Outlook* the IMF lowered India's growth forecast by 0.7 per cent for 2012, to 6.1 per cent, the steepest cut for any nation. Projections for 2013 were also reduced to 6.5 per cent (IMF, 2012b). In early 2013 IMF further reduced GDP growth rate for 2013 to 5.9 percent (IMF, 2013). It is not inappropriate to regard this as yet another shift in India's growth trajectory, this time downwards.

The other accompanying syndromes were rapid drying up of investment activity both in public and private sectors and by domestic and foreign companies. This process began in fiscal year 2010.[3] Investment was one of the main drivers of Indian growth before the global financial crisis. However since 2010 it lost momentum. Corporate investment (or fixed capital formation) growth was 14 per cent before the crisis. It declined to 10 per cent in 2010 and further declined and went into the negative quadrant in 2011. High frequency data of the International Monetary Fund (IMF) indicated further decline in investment in 2012 (IMF, 2012c; Tokuoka, 2012). The causal factors behind contraction in investment were high inflation, tight monetary policy and an adverse macroeconomic environment. Also, exports began falling and consumer demand and spending weakened. Furthermore, the chronic current account deficit persisted. It widened to $53.7 billion, or 4 per cent of GDP, at the end of 2011. At the end of 2010 it was $39.6 billion, or 3.3 per cent of GDP. At the end of the first quarter of 2012 the current account deficit deteriorated further to 4.5 per cent of GDP.

Usually surplus in services trade and remittances are supportive of the current account. However, during this phase lower exports and higher imports resulted in higher current account deficit. India's high reliance on imported oil was a large drain on forex earnings. Decline in the inflows of portfolio capital had caused an overall decline in external capital inflows in comparison to the previous year. Therefore forex reserves had to be drawn down. The increasing current account deficit resulted in downward pressure on the currency and worsened the macroeconomic

3 See Government of India, 2012: Chapter 1.

environment. The REER depreciated by 9 per cent in 2011, reflecting the nominal depreciation of the rupee by 13 per cent. In 2011, the rupee depreciated the most among the Asian currencies as well as the EMEs. In early May 2012 it was 57.32 to the dollar, a record low.

In the second quarter of 2012, global credit rating agencies like Fitch and Standard and Poor's (S&P) downgraded India's sovereign credit rating from 'stable' to 'negative'. The factors they cited included a worsening twin-deficit, the large debt load of the government, policy inertia and political indecision and an impasse in much-needed reforms. Of these the two ratings agencies were particularly concerned about the worsening twin-deficit and a complete freeze in reform program. There has been an imperious need for eliminating the large subsidies particularly on fuel and fertilizers, introducing a nationwide goods and services tax (GST) and easing restrictions on foreign investment in retail, aviation, banking and insurance. India has not had its sovereign debt rating downgraded since 2001. This downgrade will adversely impact the ability of Indian banks to borrow in the international capital markets and make it more expensive. The ratings agencies put India on a credit-watch. The government was also warned that there was a one-in-three possibility of a downgrade in India's debt rating from the lowest possible 'investment grade' rating to 'junk grade'.

4. Summary and Conclusions

India is an important economy, the third largest in Asia and one of the two emerging Asian giants. The objective of this paper is to examine the rises and falls in the Indian economic performance in the backdrop of its belatedly launched economic reform and liberalization program as well as changing macroeconomic policy framework. Indian economy has had a long history of underperformance. After independence in 1947, Indian policy makers strongly believed in Prebisch-Singer hypothesis and adopted an inward-oriented growth model. Policy makers belatedly learned economic lessons from a prolonged period of low growth and economic failure. Indian economy is that in the early 1980s moderate and partial macroeconomic reform measures were taken and the policy framework began to change in diminutive stages, but the GDP growth took off. Preliminary or partial trade reforms were undertaken in the mid-1980s. Consequently economic performance began to improve. A clear two-economy trend can be seen in India's economic growth performance. The two periods are the pre- and post-1980s. In the latter period growth was broad-based and all the three sectors of the economy performed relatively better. Indian economy also became less volatile during the latter period.

A severe economic and balance of payments crisis struck in 1991, which called

for a more methodical and comprehensive set of market-oriented reforms than those of the early and mid-1980s. A comprehensive package of thoughtful macroeconomic reforms and liberalization was adopted in 1991, a first for the Indian economy. Although its implementation was tardy and slipshod, there was a discernible impact on economic growth. Economic performance during the 2000s was noteworthy. The GDP growth picked up in 2003. During the 2000s India established itself as the second fastest growing EME after China. A high growth period followed and the economy posted 9+ percent GDP growth for three consecutive years. At this juncture, India seemed ready to move up to a new China-like growth trajectory. However doubts were raised about the sustainability of 9+ percent GDP growth rate. The Great Recession did not affect the Indian economy very much, although second round effect did impact the real economy adversely.

Implementation of reform and liberalization measures was always deficient, inadequate, inefficient and tardy. However, even the incomplete liberalization and poorly implemented reforms and deregulation managed to show notable beneficial results in the erstwhile over-regulated Indian economy. They had a welfare enhancing impact over the economy and GDP growth rate. Indian economy had not completed its market-oriented reforms by 2010. Indian GDP had grown well before and after the global financial crisis (2007–09). After performing well during a challenging period for the global economy, the Indian economy faced onerous domestic political and economic predicaments. Marked GDP deceleration began in 2011 and the angle of India's economic trajectory dropped. Situation worsened and gloom deepened in 2012. Investment dried up in both public and private sectors. The causal factors behind contraction in investment were high inflation, tight monetary policy and an adverse macroeconomic environment. Global credit rating agencies downgraded India's sovereign credit rating from 'stable' to 'negative'. The government was warned by them that there was a one-in-three possibility of a downgrade in India's debt rating from the lowest possible 'investment grade' rating to 'junk grade'. The IMF slashed India's 2013 GDP growth projections. Indian economy returned from stellar growth to underperformance.

References

Acharya S (2006) Essays on Macroeconomic Policy and Growth in India. New Delhi: Oxford University Press.

Ahmed S, Varshney A (2008) Battle Half Won: The Political Economy of India's Growth'. Washington, DC: The Commission on Growth and Development

Asian Development Bank (ADB. (2012) Asian Development Outlook (2012) Manila, The Philippines. April

Bajpai, N, Sachs JD (2011) India's Decade of Development. Working Paper Series No. 3. July. New

York: Columbia Global Center, Columbia University

Bestley T, Burgess R (2004) Can Regulation Hinder Economic Performance? Evidence from India. Quarterly Journal of Economics, Vol. 119, No. 1, pp. 91–134

Chatterjee S (2009) Anatomy of Growth and Transformation of the Economies of China and India', in S. Ghatak and P. Levine (eds.), Development Macroeconomics. London and New York: Routledge: 26–48

Das DK (1992) Indian Economic Liberalization Loses Steam', The Asian Wall Street Journal, Hong Kong, 20 January, p. 9

Das DK (2006) China and India: A Tale of Two Economies. London and New York: Routledge.

Das DK (2009a) Dynamic Growth of the Indian Economy: Is the Spurt Sustainable?' Journal of Indian Business Research, Vol. 10, No. 2: 119–35

Das DK (2009b) Short- and Long-Term Prospects of Indian Economic Growth: A Dispassionate Analysis'. International Journal of Trade and Global Markets, Vol. 20, No. 2: 194–210

Das DK (2010a) Indian Economy and the Global Financial Crisis'. Harvard Asia Pacific Economic Review, Vol. 11, No. 1: 43–50

Das DK (2010b) Indian Economy: Stellar Growth Performance and Skepticism Regarding Sustainability. International Journal of Economic Issues, Vol. 3, No. 1: 15–32

Das DK (2011) Indian Economy: Prospects of Transitioning the Growth Trajectory. Journal of Asia-Pacific Business, Vol. 12, No. 2: pp. 171–93

DeLong JB (2004) India Since Independence: An Analytic Growth Narrative, in Dani Rodrik (ed.), In Search of Prosperity: Analytic Narratives on Economic Growth. Princeton: Princeton University Press: 130–56

The Economist (2010) How India's Growth will Outpace China's. October 2: 10

The Economist (2012) India's Infrastructure: Blackout Nation'. August 4: 10-11

Ghani E (ed.) (2010) The Service Revolution in India. New Delhi: Oxford University Press

Global Competetiveness Report 2011–2012 Geneva, Switzerland: World Economic Forum

Government of India (GOI) (2012) The Economic Survey 2011–12. March. New Delhi: The Ministry of Finance and Oxford University Press

Huang, X, A. C. Tan, (2012) China, India and the End of Development Models. Basingstoke: Palgrave Macmillan.

International Monetary Fund (IMF) (2013) World Economic Outlook Update. 23 January. Washington, DC.

International Monetary Fund (IMF) (2012a) World Economic Outlook. October. Washington, DC

International Monetary Fund (IMF) (2012b) World Economic Outlook Update. 16 July. Washington, DC.

International Monetary Fund (IMF) (2012c) India: Staff Report for the 2012 Article IV Consultation. April. Washington, DC

Kelkar VL (2004) India: On the Growth Turnpike. R. K. Narayanan Memorial Lecture. Canberra: Australian National University, 27 April. Available at http://rspas.anu.edu.au/asarc/narayanan_speaker.php?searchterm=(2004) Accessed 16 July (2012)

Kochhar K, Kumar U, Rajan R, Subramanian A, Tokatlidis I (2006) India's Pattern of Development: What Happened, What Follows. Journal of Monetary Economics, Vol. 35, No. 5: 981–1019

Kumar U, Subramanian A (2011) India's Growth in the 2000s: Four Facts'. Working Paper Series. No. 11-17. November. Washington, DC: Peterson Institute for International Economics

Lin JY, Rosenblatt D (2012) Shifting Patterns of Economic Growth and Rethinking Development. Journal of Economic Policy Reforms. Vol. 15. No. 3: 171-194

O'Neill J, Poddar T (2008) Ten Things for India to Achieve its 2050 Potential. Global Economic Paper No. 169. 16 June. New York: Goldman Sachs

Panagariya A (2008) India: The Emerging Giant. New York: Oxford University Press

Rodrik D, Subramanian A (2005) From Hindu Growth to Productivity Surge: The Mystery of the Indian Growth Transition'. IMF Staff Papers, Vol. 52, No. 2: pp. 193–228

Subramanian A (2008) India's Turn: Understanding the Economic Transformation. New Delhi: Oxford University Press

UNCTAD (2012) World Investment Report 2012: Towards a New Generation of Investment Policies. July. Geneva and New York: United Nations Conference on Trade and Development

World Bank (WB) (2006) Inclusive Growth and Service Delivery: Building on India's Success. New Delhi: Macmillan Press

World Bank (WB) (2012) World Development Indicators Data Base. Washington, DC.

World Trade Organization (WTO) (2012) World Trade 2011, Prospects for 2012. April 12. Press/658. Geneva, Switzerland

Table 1 Indian Economy: Real GDP Growth Rate at Factor Cost (2000–2012)

Year	GDP Growth Rate
2000	4.35
2001	5.81
Year	GDP Growth Rate
2002	3.84
2003	8.52
2004	7.60
2005	9.49
2006	9.62
2007	9.30
2008	6.70
2009	8.40
2010	8.39
2011	6.88
2012	5.0 (e)

Source: Government of India, Central Statistical Organization, New Delhi, India, March 2013.

Note: The fiscal year (FY) in India runs from 1 April to 31 March of the following year. The year here represents a fiscal year, that is, 2000 stands for 2000–2001. e stand for estimates.

Table 2 Indian Economy: GDP and GNI Growth (1990–2011)

Year	GDP in billions of $ (current $)	GNI per capita (PPP/current international $)	GNI per capita (current $)
1990	317.46	860	390
1995	356.29	1,130	370
2000	460.18	1,510	450
2005	834.04	2,190	730
2010	1,727.11	3,340	1,260
2011	1,846.98	3,620	1,410

Source: World Bank, 2012.

Table 3 2011 Per Capita Income of BRICs Economies in Nominal Dollars

Brazil	$12,594
Russian Federation	$13,089
India	$1,489
China	$5,430

Source: World Bank, 2012.

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PAPER

Public Spending Effect and Components on GDP in Israel and in Bulgaria

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Abstract The main purpose of economic policy in new EU member states, including Bulgaria, is to realize high growth and to reach the average GDP per capita for EU. The way to aim at this permanent purpose is the usage of the experience of all over the world. Israel is a country with similar population and territory like Bulgaria and an appropriate example to be taken as the positive experience for all new member states in EU.

Keywords Public spending - Economic growth - Econometric modeling

JEL Classification H5 - E6 - O1 - O4 - C1 - C5

Israel and Bulgaria are countries with similar population and territory. The Gross domestic product (GDP) of Israel is much higher than in Bulgaria. The main purpose of economic policy in new EU member states, including Bulgaria, is to realize high growth and to reach average GDP per capita for EU. The way to achieve this permanent purpose is the usage of the experience of all over the world. Israel is a country with similar priority resources and appropriate examples to be taken as the positive experience for Bulgaria.

The main goal of economic policy in Bulgaria – higher economic growth - requires finding all instruments to influence on the aggregate supply. As it is known, this purpose could be realized with monetary and fiscal instruments.

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The current research investigates only the impact of fiscal policy on stimulating economic growth. This policy influences the aggregate demand through taxes and public expenses. The research estimates the impact of public spending and its multiple effects on economic activities and on the GDP.

1. Limitations of the Research

- Because of the different ways of data compilation adopted by National statistics – with or not accumulation, monthly, quarterly or annually – the different variables are recalculated to be mathematically compatible
- For the research the quarterly data for public spending in Israel and Bulgaria is used, without accumulation for the period 2006 – 2013. Because the project is in the early stages and will be developed, the time series of data are not enough long.
- For Israel civil public spending, excluding defense public expenditure is tested[1].
- The public spending is distinguished by the criteria " impact on the GDP " – if it creates or consumes a part of GDP.
- It is very difficult to take into account many variables and thus the research observes – only common for the two countries – public spending total, capital expenditure, for wages paid and social security, for purchases, especially for Bulgaria – public spending, financed with EF, because it strongly influences GDP [2],[3] and takes enough share in the Bulgarian public expenditure. In the research the data for public spending paid is used, not the amount in EU budget, because only the projects successfully carried out have multiple effects on the GDP.
- The efficiency is measured through the degree of impact of public spending on the GDP.
- It is very difficult to distinguish the change of GDP due to the impact of public spending or result from automatic stabilization. Therefore, the research suggests as a reason for changes only the impact of fiscal policy.

1 Mazar, Yaval,"The effect of fiscal policy and its components on GDP in Israel", Israel Economic Review, Vol.9, N 1, 2011

2 Assenova Kamelia, "Public spending and their impact on the economic growth in Bulgaria", Annual Scientific Paper of Russe university, Russe, 2013

3 Assenova Kamelia, Effectiveness of public spending, financed with European funds in Central and Eastern Europe, Journal of Contemporary Management, Vol. 4, No 1, January 2015

- Because the budgets in the two countries are annual, macroeconomic changes during the budget year are limited (Yaval Mazar – already cited).

2. Model

2.1. Model for public spending for two countries

The research of public expenditure and its impact on the GDP is not a new topic for macroeconomic theory. A similar research was made for Spain by De Castro Fernandes and Hernandes de Cos[4] and they found strong relations between public spending for wages paid and direct consumption on GDP. Perotti[5] examines the model for Australia, United Kingdom, Germany and Canada and found the response of GDP to the changes of public spending in these countries is weaker than in the US. Giordano, Momigliano, Neri and Perotti[6] tested the effects of public purchases on business activities in Italy and found a positive correlation. A numbers of researches are made for the US. Caldara and Kamps[7] found positive impact of public consumption on GDP during the period 1995 – 2006 in US.

The model is based on that of Carvalho, Eusepi and Grisse[8] for testing the influence of monetary and fiscal policy on GDP and expected inflation. It is adjusted to specific conditions in the two countries. The research compares the effectiveness of public spending for the two countries and looks for a reason for stronger and higher multiple effects of public spending in Israel and this experience to be applicable by specific conditions in Bulgaria.

The testing of public spending refers to the period 2006 – 2013. The period is different with such for public spending, financed with EF in Bulgaria, because of a lack of projects and of data for EF before 2008. The model first was tested for the public spending total.

$$GDP_t = a_0 + a_1 PS\ total_t + a_2 PS\ total_{t-1} + \varepsilon, \quad (1)$$

4 De Castro Fernandes, P. Hernandes de Cos, " The Economic Effects of Exogenous Fiscal Shocks in Spain: A SVAR Approach" ,ECB, Working paper N 647, 2006

5 Perotti, R, " Estimating the Effects of Fiscal policy in OECD Countries", CEPR, Discussion paper 4842, 2005

6 Giordano, R., S.Momigliano, S. Neri and R. Perotti, " The effect of Fiscal policy in Italy: Evidence from VAR Model", Banca de Italiana, Working paper 656, 2005

7 Caldara, D. and C. Kamps, " What are the effects of Fiscal Policy Shocks? A VAR based Comparative Analysis", ECB, Working paper 877, 2008

8 Carvalho, Carlos, Stefano Eusepi and Christian Grisse, " Policy Initiatives in the Global Recession: What Did Forecasters Expert?", Federal Reserve Bank of New York, Current issues in Economics and Finance, Volume 18, N 2, 2012

where

GDP_{t-} Gross domestic product for the current quarter
$PS\ total_{t}$ - total public expenditure for the current quarter
$PS\ total_{t-1}$ - total public expenditure for the previous period

$$GDP_t = b_0 + b_1 PCS_t + b_2 PCS_{t-1} + \varepsilon, \quad (2)$$

where

GDP_{t-} Gross domestic product for the current quarter

PCS_t - public capital expenditure for the current quarter

PCS_{t-1} - public capital expenditure for the previous period

$$GDP_t = c_0 + c_1 PSS_t + c_2 PSS_{t-1} + \varepsilon, \quad (3)$$

where

GDP_{t-} Gross domestic product for the current quarter

PSS_t - public expenditure for wages and social insurance for the current quarter

PSS_{t-1} - public expenditure for wages and social insurance for the previous period

$$GDP_t = d_0 + d_1 PMS_t + d_2 PMS_{t-1} + \varepsilon, \quad (4)$$

where

GDP_{t-} Gross domestic product for the current quarter

PMS_t - public expenditure for purchases for the current quarter

PMS_{t-1} - public expenditure for purchases for the previous period.

2.2 Specific public spending for two countries

2.2.1 Model for public spending with European funds for Bulgaria

A similar model was developed to test the impact of public expenditure paid by EU funds on the GDP. The study was carried out for the period 2008 – 2013, as well as

it is tested the impact of public spending, financed with EF during different quarters on annual GDP due to significant differences in the using of EF during the years of period – from very small amounts in the first years to around full amount by the EU budget for Bulgaria during last years of period.(see you the Graph below – part 3).

$$GDP_t = a_0 + a_1 EF_t + a_2 EF_{t-1} + \varepsilon, \quad (1)$$

where

GDP_t - Gross domestic product for the current quarter
EF_t – European funds paid for the current quarter
EF_{t-1} - European funds paid for the previous quarter

$$GDP_{year} = b_0 + b_1 EF_t + \varepsilon \quad (2)$$

$$GDP_{year} = b_0 + b_2 EF_{t-1} + \varepsilon \quad (3)$$

$$GDP_{year} = b_0 + b_3 EF_{t-2} + \varepsilon \quad (4)$$

$$GDP_{year} = b_0 + b_4 EF_{t-3} + \varepsilon, \quad (5)$$

where

GDP_t - GDP for the current year
EF_t - European funds paid for the current year in the fourth quarter
EF_{t-1} - European funds paid for the current year in the third quarter
EF_{t-2} - European funds paid for the current year for the second quarter
EF_{t-3} - European funds paid for the current year for the first quarter

The model tests the impact of public spending, financed with EF in previous periods, because EU programs have character design and this means they have more long- than short-term effect on the level of GDP. Furthermore, there is a time lag between the realization of public expenditure paid by EF and their influence on the aggregate supply.

The variables used in the model are:

• GDP – quarterly, the data used for its measurement on the components of final using. This indicator of GDP fully correspondents to public spending as a component

of the aggregate demand including consumption, investments, public spending and net export.

- Public spending - quarterly, total, capital expenditure, for wages and social insurance, for public purchases for the period 2006 – 2013.

- For Israel – public spending – civil consumption, quarterly.

- For Bulgaria - public spending financed with European funds – quarterly, paid, total and by different programs in national currency for the period 2008 -2013. Because the statistic data is with accumulation, they are revaluated quarterly to be compatible to other data.

3. Graph Presentation of Data

Because limited space of paper, main data is presented in graph form below.

3.1 Data for Public Spending in Israel

Below is presented the dynamics of public spending – civil consumption – during the period 2006 – 2013.

(Insert Figure 1-2-3-4, here)

3.2 Data for Public Spending in Bulgaria

Data for public spending, financed with national funds in Bulgaria.

Below the dynamics of public spending, financed with national funds by consolidated state budget in Bulgaria during the period 2006 – 2013 is presented.

(Insert Figure 5-6-7-8, here)

Data for public spending, financed with European funds.

Below the dynamics of public spending, financed with European funds total in Bulgaria is shown. The data is for the period 2008 – 2013, because after the accession of Bulgaria to EU, for one and half year the country was not ready to use European funds to stimulate the domestic economic growth and to convergence to other countries in the Union.

(Insert Figure 9, here)

4. Results

4.1 Results for Public Spending in Israel

$$GDP_t = (1.00) - 0.802PStotal_t + 1.020PStotal_{t-1} + \varepsilon \quad (1)$$

The statistical analysis shows all correlation coefficients are significant. The

coefficient of determination between public spending and GDP is high enough, suggesting a stable relationship between the dependent and independent variables. The economic analysis notes a stronger impact of the total civil public expenditure on the aggregate supply in the previous quarter. The total expenses include such with a direct effect on the aggregate supply as capital spending and others whose effect is achieved indirectly through the consumer spending. For Israel the public spending influences on the aggregate demand and therefore on the aggregate demand in long period of time (Yaval Mazar – already cited). This long term impact is very important, because due to the "stabilization plan" there and its implementation after 1986. The public spending has reduced looking for more effectiveness as well as in all countries in the world.

$$GDP_t = (1.00) + 2.084PCS_t - 1.903PCS_{t-1} + \varepsilon \quad (2)$$

The statistical analysis shows the coefficient of determination for capital spending is more significant than such for the total cost. On this base, the economic analysis confirms that the capital expenditure has a direct and an additional multiple effect on the aggregate demand and the GDP. The impact in the current quarter is strongest, indicating these costs immediately produce a high demand for goods and services. As known from the theory, as a result - income increases and employment reduces not only in sectors, where the public capital expenditures made, but also in others. It leads to an increase of aggregate demand, not only through the public spending (G), but also indirectly through the consumer spending (C). The correlation coefficient for the previous quarter is negative. Nevertheless, because of the long duration of their turnover, the impact on GDP loss for short period of time.

$$GDP_t = (1.00) - 0.365PSS_t + 0.570\ PSS_{t-1} + \varepsilon \quad (3)$$

The statistical analysis shows that the coefficient of determination for wages publicly paid for Israel is not so high. It confirms the view of other studies for Israel that a more significant impact on the aggregate demand and therefore on the GDP has the investment spending (it is different from the Bulgarian case due to different levels of income there). For the current quarter, this coefficient shows a negative influence of the cost of wages on the aggregate demand. It is needed time lag to be delivered a multiple effect in other sectors outside publicly funded. Contrary to the Bulgarian case, it confirms for Israel the smaller elasticity of consumption on an income and such marginal propensity to consume in the country. The earned income transforms into consumer spending in a long period of time or into savings and with time lag increases the aggregate demand. This thesis is proved by the second correlation coefficient in this equation, which is positive with a great value compared to such for the previous quarters by other types of expenditure.

$$GDP_t = (1.00) - 0.292PMS_t + 0.528PMS_{t-1} + \varepsilon \quad (4)$$

The type of expenditure - immediately transforms into goods and services and increases the aggregate demand - is not exactly to note in the case of Israel. The original thesis suggests that the cost for purchases from the previous quarter will not affect the economic activity in the current one. This is not confirmed by the statistical analysis. It shows that they have multiple effects too.

In conclusion, statistically the coefficients are significant and prove the strong dependence of GDP from public spending. The high correlation coefficients between such expenses (especially capital public civil spending) and GDP mean for stimulating of the economic activities and the increasing of the aggregate demand depend on the absorption of public spending.

4.2 Results for Public Spending in Bulgaria

Results for public spending with NF

$$GDP_t = (1.00) + 0.562PStotal_t - 0.548PStotal_{t-1} + \varepsilon \quad (1)$$

The statistical analysis shows that the correlation coefficients are absolutely meaningful (Sig = 0.001 for a_1, Sig = 0.001 for a_2). The coefficient of determination is close to 0.5, which is an evidence of a stable relationship between the dependent and independent variables. The economic analysis notes strongest impact of the total public expenditure by the consolidated state budget on the aggregate supply in the current quarter. In total expenses include such with a direct effect on the aggregate demand as capital spending and others whose effect is achieved indirectly through the consumer spending. The calculated correlation coefficient between GDP and the total public expenditure of the previous quarter in developed countries is positive. This coefficient, calculated for Bulgaria is negative and probably shows following:

- fluctuation of the total public expenditure by the consolidated state budget on the quarterly basis, confirmed by the data (each year in the fourth quarter is observed higher amount of these expenditure compared with other quarters);

- more of the public spending immediately heads to the consumption. It confirms the characteristic of countries like Bulgaria - with high elasticity of consumer spending on an income. By the overall costs a significant part is the income in different forms and the impact of public expenditure on the aggregate demand and therefore on the GDP loses in the short term ;

- short time horizon of economic agents in the country.

$$GDP_t = (1.00) + 0.538PCS_t - 0.379PCS_{t-1} + \varepsilon \quad (2)$$

The statistical analysis shows the coefficient of determination for capital spending is more significant than such for the total cost by consolidated state budget. On this base, the economic analysis confirms the capital expenditure has a direct and an additional multiple effect on the aggregate demand and the GDP. The impact in the current quarter is stronger, indicating these costs immediately produce a high demand for goods and services. As a result income increases and employment reduces not only in sectors, where the public capital expenditures are made, but also in others. It leads to an increase of aggregate demand, not only through the public spending (G), but also indirectly through the consumer spending (C). The correlation coefficient for the previous quarter is negative, but with less value compared with such in the equation for the total spending. By the capital expenditure, because of the long duration of each stage of their turnover, retains the impact on the aggregate demand and therefore on the GDP for long period of time.

$$GDP_t = (1.00) + 0.889PSS_t - 0.778\ PSS_{t-1} + \varepsilon \quad (3)$$

By the statistical analysis is found the coefficient of determination for wages publicly paid is the greatest in the comparison with such for other types of expenditure. It confirms the view of other studies of the author, that for Bulgaria the consumer spending has a more significant impact on the aggregate demand and therefore on the GDP. For the current quarter, the correlation coefficient shows a very strong impact of the cost for wages on the aggregate demand. It notes also a multiple effect in other sectors outside the publicly funded. It confirms the high elasticity of consumption on an income and high marginal propensity to consume in the country. The earned income transforms into consumer spending in a short period of time and without time lag increases the aggregate demand. This thesis is proved by the second correlation coefficient in this equation, which is negative with a great value compared to such for the previous quarters by other types of expenditure. The impact of income received from public funds, loses in a very short period of time and reaffirms very short time horizon of economic agents in the country like Bulgaria.

$$GDP_t = (1.00) + 0.306PMS_t - 0.479PMS_{t-1} + \varepsilon \quad (4)$$

By public purchases, due to the type of expenditure, they immediately transform into goods and services and increase aggregate demand. The economic analysis notes in this case the expenditure has no significant effect on the aggregate demand in the country. As in the cases above, it confirms the economic agents without time lag transform earned income in various forms in the purchase of goods and services and realize the impact on the GDP in the same quarter.

Results for Public Spending with EF

$$GDP_t = (1.00) + 0.424EF_t - 0.338EF_{t-1} + \varepsilon \quad (1)$$

The statistical analysis finds all correlation coefficients between GDP and PS with EF are significant. The economic analysis shows that the public expenditure with EF paid has a stronger impact on the GDP in the current quarter compared with the previous one. It means that in spite of the nature of the EF projects the multiple effects on the GDP immediately realize. Moreover through the global economic crisis is realized "crowding out" effect, successfully implemented to be substituted reduced private investment with public ones, which is very important in the countries like Bulgaria with small disposal local resources. The second coefficient in the regression equation is negative. The economic relationship between the independent variable - EF, and the dependent variable - GDP is a positive. Measured like such, it shows following:

- strong seasonal fluctuations of using of EF (confirmed by the data - in the first quarter the amount paid is less compared within others for each year of the period. Nevertheless , as will be seen from coming analysis - it has a strong influence on the value of annual GDP) ;

- unequal using of European funds year by year – from small amount in first years of period to strong increase in last years.

The testing of public spending financed with EF and its impact on annual GDP quarterly begins with the data for the first quarter.

$$GDP_{year} = (1.00) + 0.896\ EF_{t-3} + \varepsilon \quad (2)$$

$$GDP_{year} = (1.00) + 0.370EF_{t-2} + \varepsilon \quad (3)$$

$$GDP_{year} = (1.00) + 0.995EF_{t-1} + \varepsilon \quad (4)$$

$$GDP_{year} = (1.00) + 0.895EF_t + \varepsilon \quad (5)$$

The coefficients of determination between PE and GDP for the first, third and fourth quarter show a strong dependence of the GDP on the using of EF. By the economic analysis EF paid during the first quarter has a strong impact on annual GDP and most probably due to the time lag between making of the spending and its multiple effects on the value of aggregate supply. The amount of EF paid during the first quarter in each of the years studied in this paper is least, reducing the maximum possible impact on the aggregate supply. The public spending, financed with EF in

the second quarter has a relatively low impact on annual GDP. This is probably due to the seasonality in some priority sectors of the Bulgarian economy and the result appears on GDP in the third quarter. The public expenditure in third quarter with these funds has strongest influence on annual GDP. From the data it was noted, that during the third quarter of years of the period the largest amounts of funds are paid. The results of analysis on a quarterly basis and their impact on annual amount of GDP corresponds to the data obtained by the analysis in paragraph 1 of this section, examining the impact of public expenditure paid by EF on GDP for the whole period - 2008 - 2013. In the fourth quarter, the public spending, financed with EF has a strong impact on annual GDP. This analysis fully corresponds with the analysis in paragraph 1 of this section, proving public expenses during the current quarter strongly influence on the amount of annual GDP in the Bulgarian economy. It explains the short time horizon of economic agents as part of the realized income in the same period allots for consumption, thereby increasing the aggregate demand and hence the aggregate supply in the economy.

In conclusion, statistically for all quarters of year (except the second) the coefficients of determination show the strong dependence of GDP on public spending, financed with European funds. The high correlation coefficients between public expenditure and GDP, means the stimulating of economic activities in countries like Bulgaria and the increasing of the aggregate demand depend on the absorption of public spending.

4.3. Comparative Analysis for the two Countries

The public spending in Israel has longer and stronger impact on GDP. But coefficients of determination between GDP and PS in Bulgaria are more meaningful which depends on the competitiveness of Bulgarian economy. The correlation coefficients are significant, noting the important role of public spending as an instrument to be stimulated economic activities in two countries.

The stronger effect in Israel comparing with Bulgaria possibly due to:

- different horizon of economic agents in two countries –longer in Israel, shorter in Bulgaria;

- expectations of economic agents. According to the theory of rational expectations, because uncertain situation and economic agents are not sure about future, they have short horizon. The economic activities do not increase, productivities stays on same level, the aggregate demand and after it aggregate supply not raise;

- elasticity of consumer expenditure on an income and marginal propensity to consume are higher in the countries with not enough level of income. Therefore the main part of income goes to consumer spending in the current period paid and

immediately influences on the aggregate demand. It loses long term multiple effects on GDP. Due to it the impact of public spending timely in the two countries is different - in Bulgaria – strong effect in current period, in Israel – in previous period and longer. In the second case it will be able to realize max potential effect.

A strong determination between public spending and GDP in Bulgaria possibly due to:

- structure of Bulgarian economy strongly depends on common European market;

- low competitiveness of Bulgarian products on the same European market. Nevertheless that for years using very actively public spending, financed with European funds, the tendency is positive.

- new very important for country infrastructure projects, financed with EF, stimulate the aggregate demand and after it the aggregate supply

For capital public spending in two countries, the statistical analysis shows the coefficient of determination between GDP and PS is more significant than such for the total cost. On this base, the economic analysis confirms the capital expenditure has a direct and an additional multiple effect on the aggregate demand and the GDP. The impact in the current quarter is strongest, indicating these costs immediately produce a high demand for goods and services. As known from the theory, as a result - income increases and employment reduces not only in sectors, where the public capital expenditures made, but in others. It leads to an increase of aggregate demand, not only through the public spending (G), but also indirectly through the consumer spending (C).

In conclusion, the high correlation coefficients between public expenditure and GDP, means to be stimulated the economic activities in two countries and the increasing of the aggregate demand depends on the absorption of public spending.

Conclusions

Israel and Bulgaria are countries with similar population and territory. The Gross domestic product (GDP) of Israel is much higher than in Bulgaria.
The main purpose of economic policy in new EU member states, including Bulgaria, is to realize high growth and to reach the average GDP per capita for EU. The way to aim at this permanent purpose is the usage of the experience of all over the world. Israel is a country with similar priority resources and appropriate examples to be taken as the positive experience for Bulgaria.

The original model was developed to test the impact of public expenditure on the GDP. The model is based on that of Carvalho, Eusepi and Grisse for testing

the impact of monetary and fiscal policy on GDP and expected inflation (already cited). The model is adjusted to specific conditions in the two countries. The testing starts with public spending total, capital expenditure, for wages paid and public purchases. The research compares the effectiveness of public spending for two countries and looks for a reason for stronger and higher multiple effects of public spending in Israel and to be applicable by specific conditions in Bulgaria.

The public spending in Israel has longer and stronger impact on GDP. But coefficients of determination between GDP and PS in Bulgaria are stronger. The correlation coefficients are significant, noting the important role of public spending as an instrument for stimulating of economic activities in two countries.

References

www.minfin.bg, www.minfin.bg, Bulgaria and EU, Management of public spending, financed with EU funds, Structural and Cohesion funds – financial implementation

www.minfin.bg – Statistics – Consolidated fiscal program – Data for Consolidated fiscal program (quarterly)

www.cbs.gov.il - Time Series Data Bank – National Accounts – General Government Consumption Expenditure – At Constant and Current Prices

http://www.boi.org.il/en/Pages/Default.aspx - GDP and its components – current prices

Assenova K (2013) Public spending and their impact on the economic growth in Bulgaria, Annual Scientific Conference of Russe university, Russe, 2013, 153-157

Assenova K (2015) Effectiveness of Public Spending, Financed with European Funds in Central and Eastern Europe, Journal of Contemporary Management,Vol. 4 (1) 1: 46-56

Andersen A, Jordan J (1968) Monetary and Fiscal Action: A Test of their Relative Importance in Economic Stabilization, Review, FRS of St. Louis, 11-24

Barro RJ (1984). Rational Expectations Macroeconomics in 1984, American Economic Review, Paper and Proceeding, 74(2):179-182

Batiz LA, Sy AN (2000) Currency Boards, Credibility and Macroeconomic Behaviour, IMF, Working Paper 97

Bernanke B, Gertler M, Gilchrist S (1998) The Financial Accelerator in a Quantitative Business Cycle Framework, NBER, Working paper No.6465

Caldara D, Kamps C (2008) What are the effects of Fiscal Policy Shocks? A VAR based Comparative Analysis, ECB, Working paper 877

Carvalho C, Eusepi S, Grisse C (2012) Policy Initiatives in the Global Recession: What Did Forecasters Expert? Federal Reserve Bank of New York, Current Issues in Economics and Finance, 18 (2): 1-20

De Castro F, Hernandes de Cos P (2006) The Economic Effects of Exogenous Fiscal Shocks in Spain: A SVAR Approach ,ECB, Working paper N 647

Hollmayr J (2013) Fiscal Policy in Euro Area analyzed with a New – Keynesian Multi – Country Model, Deutsche Bundesbank, Frankfurt of Main

Giordano R, Momigliano S, Neri S, Perotti R (2005) The effect of Fiscal policy in Italy: Evidence from VAR Model, Banca de Italiana, Working paper 656

King RG (1993) Will the New Keynesian Macroeconomics Resurrect the IS-LM Model, Journal of Economic Perspectives, 7(1):67-82

Kirchgässner G, Savioz M (2001) Monetary Policy and Forecast for GDP Growth: An Empirical Investigation for the Federal Republic of Germany, German Economic Review, 2(4): 339-365

Mazar Y (2011)The effect of fiscal policy and its components on GDP in Israel, Israel Economic Review, Vol.9, N 1

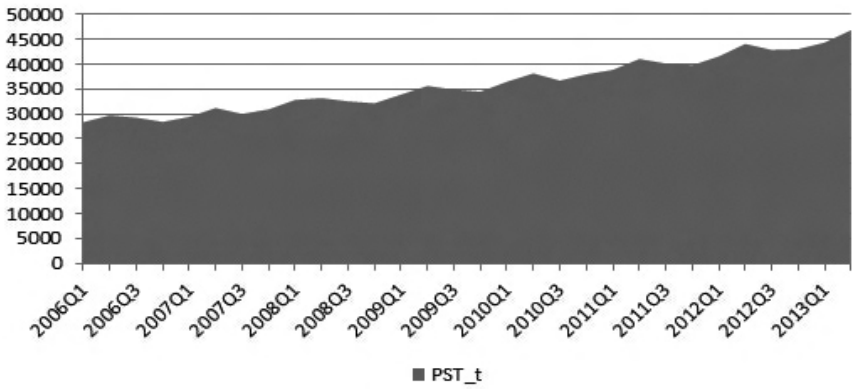
McMallum BT, Nelson E (1997) An optimizing IS- LM Specification for Monetary Policy and Business Cycle Analysis, NBER, Working paper No.5875

Perotti R (2005) Estimating the Effects of Fiscal policy in OECD Countries, CEPR, Discussion paper 4842

Romer D (1999) Short-run Fluctuations, University of California, Berkeley [Online] Available at http://eml.berkeley.edu/~dromer/papers/ISMP%20Text%20Graphs%202013.pdf

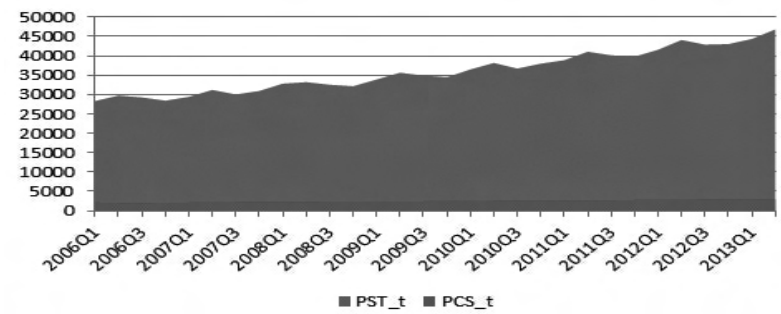
Romer D (2000) Keynesian macroeconomics without the LM – curve, NBER, Working paper No.7461

Figure 1 Public spending total - civil consumption in Israel (million NIS)



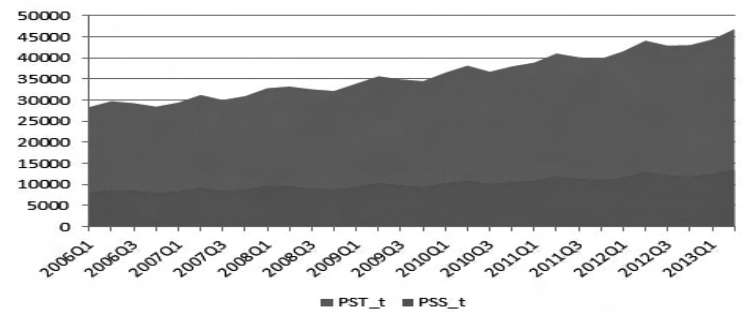
Source:www.cbs.gov.il - Time Series Data Bank – National Accounts – General Government Consumption Expenditure – At Constant and Current Prices

Figure 2 Public spending total and capital public spending - civil consumption in Israel (million NIS)



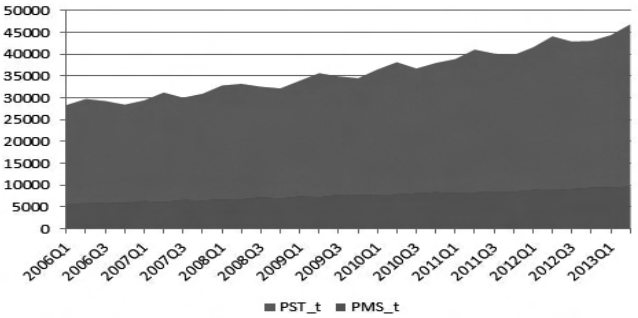
Source: www.cbs.gov.il - Time Series Data Bank – National Accounts – General Government Consumption Expenditure – At Constant and Current Prices

Figure 3 Public spending total and for wages - civil consumption in Israel (million NIS)



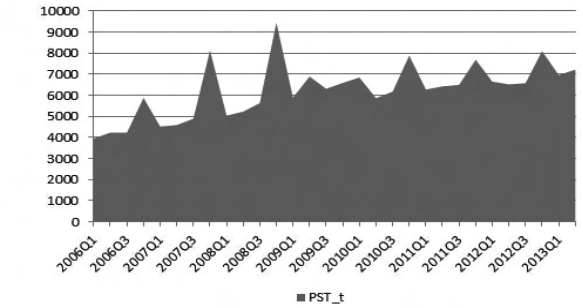
Source: www.cbs.gov.il - Time Series Data Bank – National Accounts – General Government Consumption Expenditure – At Constant and Current Prices

Figure 4 Public spending total and purchases - civil consumption in Israel (million NIS)



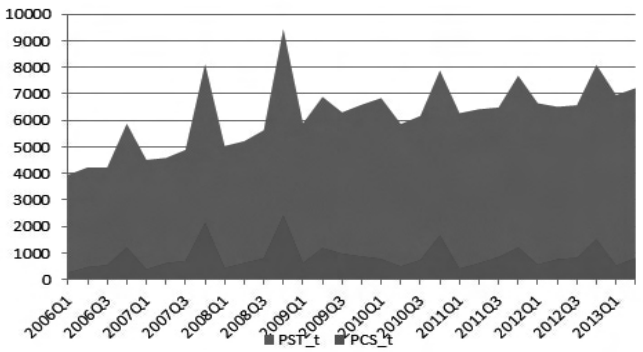
Source:www.cbs.gov.il - Time Series Data Bank – National Accounts – General Government Consumption Expenditure – At Constant and Current Prices

Figure 5 Public spending total, financed with national funds in Bulgaria (million BGN)



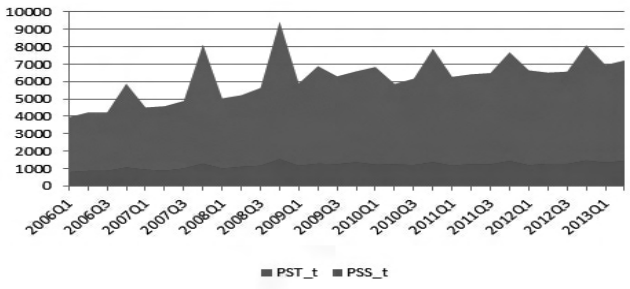
Source: www.minfin.bg – Statistics – Consolidated fiscal program – Data for Consolidated fiscal program (quarterly)

Figure 6 Public spending total and capital public spending, financed with national funds in Bulgaria (million BGN)



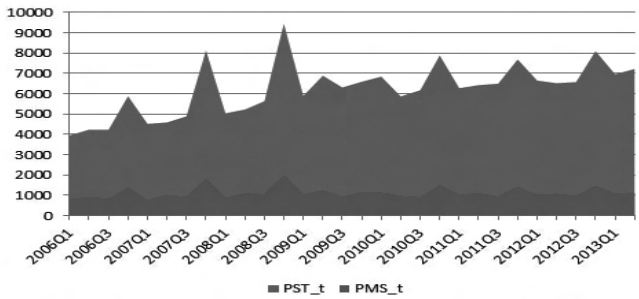
Source: www.minfin.bg – Statistics – Consolidated fiscal program – Data for Consolidated fiscal program (quarterly)

Figure 7 Public spending total and for wages, financed with national funds in Bulgaria (million BGN)



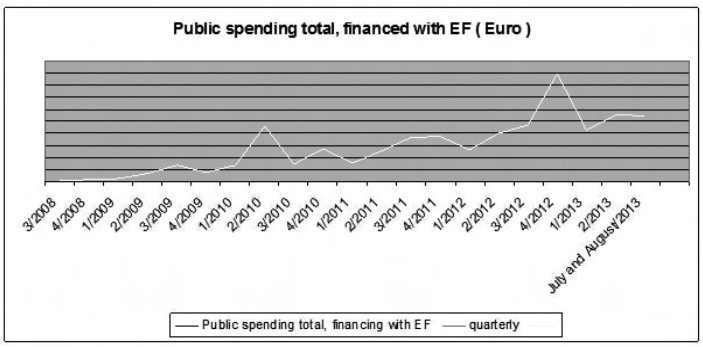
Source: www.minfin.bg – Statistics – Consolidated fiscal program – Data for Consolidated fiscal program (quarterly)

Figure 8 Public spending total and purchases, financed with national funds in Bulgaria (million BGN)



Source: www.minfin.bg – Statistics – Consolidated fiscal program – Data for Consolidated fiscal program (quarterly)

Figure 9 Public spending total, financed with EF (Euro)



Source:www.minfin.bg , Bulgaria and EU, Management of public spending, financed with EU funds, Structural and Cohesion funds – financial implementation

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PAPER

The Bruegel Debate and Risk –Sharing Mechanisms. A New Proposal in the Context of Secular Stagnation

Antimo Verde

Abstract The starting point for this paper is given by the disintegration risk of EMU. Europe faces more than a Greek tragedy. The author of this paper believes that the euro could still be saved but the Union should assume daring choices. In turn these choices need a dose of imagination. Such as the proposal in this paper. It suggests a new risk-sharing mechanism, which rests on two assumptions: the flaws (or what the author deems to be) of the Macroeconomic Imbalances Procedure (MIP) and on the implications surfacing from the Summers's thesis of an ongoing Secular Stagnation (SSH). The proposed new mechanism has two objectives: to provide an effective engine to face external imbalances in EMU and make it safer to do so. The analysis develops in a linear way, dividing the paper into parts. The first is devoted to the Bruegel (BC) Debate, i.e to the BC's contributions concerning the nature of Monetary Union as well as types, purposes and limits of risk-sharing mechanisms elaborated in the economic literature. The second starts with the important consequence of SSH – a deep and lasting economic slowdown - which are relevant for the future of EMU. After, the author reflects on the MIP's four flaws before suggesting a radical reform to make it an effective instrument to face macroeconomic imbalances. Finally the core of the proposed new mechanism is provided by a Stabilisation Fund, funded by the (structural) surplus countries and designed to help member states in deficit which suffer structural high unemployment. The proposal presents an important byproduct. Indeed the Eurozone is continuously and dramatically exposed to the International cycle; more than its strength would leave to suppose. Had the suggested instrument be timely and generously applied, it could be, thanks to the automatic recycling of national demands, an effective device to endogenously create a self-sufficient internal demand of the Eurozone as a whole.

Keywords European Fiscal Policy - Monetary and currency unions - European Monetary Union Financial Crisis - Fiscal Rules

JEL Classification E61 - F360 - F550 20 - B260 - H6

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1. Introduction

From 2010 on, the European Union (EU) was shattered by a dramatic crisis; its survival is now seriously at risk, especially after the turmoil faced by Greece. The possibility of 'Greexit' (Greece exiting the Union) has made the risk of the disintegration of Economic and Monetary Union (EMU) real. The Bruegel Center (BC) has thus published several papers linked to the most dramatic problems in the attempt to help the European policymakers to identify the possible ways to take the Union out from this standstill. Talking about BC debate I refers to these papers about the EMU problems.

It first focuses on the very nature of EMU. In the Nineties economists questioned whether the ongoing EMU would have been an Optimum Currency Area (OCA). Clear-cut negative answers came out from many empirical works. The merit of BC's contributions has been in updating those results, trying to verify if anything has changed and how the financial crises have affected the character of EMU. Indeed, the incomplete and asymmetrical nature of the Union has been confirmed, amplified by financial crises. As a result, the probability of asymmetric shocks continues to be high, or even higher, and are typically given by macroeconomic cyclical imbalances among Member States (MS). This aspect puts the survival of EMU at risk. Thus, the issue of insurance mechanisms which could cushion those imbalances is important, or even, crucial. On the topic of risk-sharing mechanisms, the think-tank based in Brussels, has opened an interesting debate.

Almost all the recent contributions from Bruegel focus on budgetary union as well as the stabilisation mechanisms against unemployment and movements within the Union. I have taken a cue from this debate to propose a new insurance mechanism, which this paper refers to. In it, I suggest a new insurance mechanism able, in my opinion, to face external imbalances or asymmetrical cyclical developments among MS. It aims at pursuing a public good objective, given by the EMU stability, as well. At this juncture, it is important to underline a significant further point. The geopolitics of EMU has deeply changed since its beginnings. The retreat of the UK and the withdrawal of France have left Germany as the hegemonic country in the political economy of the EU. This implies, as in the past for Britain and the US, a particular interest in the stability of the "system" (i.e EMU) as a whole. The same explained the success of the Gold Standard and of the Bretton Woods systems. Today, Germany is persistently reluctant to assume the leadership of EMU. Yet, it is time that Germany's leaders become aware of their historical role taking into account the stability of EMU as a whole and neglecting, if useful, German taxpayers' political interests. Without this change, the euro's fate may well be sealed.

The starting points of the proposal are twofold: the first is Larry Summers's thesis about a deep secular stagnation (SSH), which is involving, or will involve, the US, Japan and Europe. It is highly probable that this SSH, if real, will significantly

affect EMU policy choices. The second originates in a detailed analysis of the Macroeconomic Imbalances Procedure (MIP) implemented in 2011 by the European Commission with the purpose of cushioning asymmetric shocks or macroeconomic imbalances within the Union. The core of the proposal is represented by a drastically new MIP and a new Stabilization Fund. The Stabilization Fund, funded by the (structural) current account (CA) surplus MS, should enable MS to cope with macroeconomic imbalances and unemployment. The paper also re-defines, from another point of view, a couple of delicate subjects, such as "solidarity" and "distributional income neutrality condition which the BC have long dwelt on.

The paper is structured as follows. The next section is about the nature of EMU, starting from the traditional Optimum Currency Union (OCA) theory and the empirical works published in the Nineties. More recent papers are also considered. It then focuses on the main insurance mechanisms, represented by a "federal" budget of adequate dimensions, as well as by other risk sharing tools having more defined stabilization goals and different reference cyclical variables.

The second section starts with a hypothesis that is currently gaining ground, on secular stagnation as advanced by Larry Summers in 2013. It seems an economic scenario able to affect EMU's policies. In this paper the SSH adds a further rationale for the proposal discussed below. The section then addresses the Macroeconomic Imbalances Procedure (MIP), its flaws and ways of making it more effective. It is followed by the core of the paper in which the proposal of a new risk-sharing mechanism is presented.

a. Is EMU an Optimum Currency Area? An Updating of the Nineties Debate

The theoretical basis of an insurance mechanism is given by the nature, incomplete or asymmetrical, of a monetary union. To discuss it we must go back to the traditional OCA theory. According to this, two or more countries can form or join a monetary union only if some conditions are met[1]. The conditions, or criteria, are: a) high factor mobility; b) high economic syncronisation; c) fiscal integrations or fiscal federalism; d) financial integration. If these conditions are met, asymmetric shocks (the principal problem of monetary union) can be cushioned or made less probable (point b).

The OCA four criteria can be associated with leading economists and the following seminal works. High labour mobility and high sync have their roots in Mundell I [1961]; fiscal integration in Kenen [1969] and in

1 It is usual to use the two terms "monetary union" or "currency union" with the same meaning to exploit the traditional theory on the argument of the Sixties. However this terminological equivalence is not correct.

Jenkins-MacDougall [1977]; financial integration in Mundell II [1973][23].

According to Mundell I, two or more countries can create a currency union if high labour mobility exists among them. If the union is hit by an asymmetric shock, then labour can move from the countries hit towards the others, cushioning the effect of the shock. If the economies of the currency union are characterised by high cyclical syncronisation, i.e. they have economic cycles which are highly correlated, then the probability of asymmetric shocks is very low. Then, the union is an optimum currency area or OCA. According to Kenen [1969], and still more to the Jenkins-MacDougall Report [1977], a currency or monetary union is optimal, if a "federal" or centralised budget of adequate dimension exists and it allows large transfers among MS to cushion asymmetric shocks. Beside this public insurance mechanism, based on a federal budget, the traditional OCA theory includes a private risk-sharing mechanism based on financial markets which are highly integrated. It works mainly through consumption smoothing, providing a buffer against idiosyncratic shocks. The effects are different if markets are complete or not.

When talking about financial integration or market-criterion, has become usual, in the literature, to make reference to Mundell II. It is interesting to understand why. First of all, the OCA concept is typically Keynesian, as it excludes price and wages flexibility while assuming nominal rigidities. Mundell [1961] maintains that in the Keynesian context two or more countries can join a monetary union if there exists high factor mobility. In this seminal work, Mundell is pessimistic about monetary unions and skeptical about the success of the EEC, because he judges the loss of the exchange rate to be too important (as this is the most efficient policy instrument to face asymmetric shocks). However, in his paper written in 1970 (but published in 1973), Mundell changed his mind. He argues, in line with the monetarist thesis, that the (fixed) exchange rate is a "problem" for policy-makers because of speculative attacks so it would be convenient to get rid of it by creating or joining a monetary union. On the other hand, monetary union could be useful in providing adequate financial resources against possible attacks, because the country under attack could draw official reserves from another MS's central bank, to the MS' s official reserves pooling. If *one* of these criteria is met, the union is optimal.

Yet, the *optimality of a currency area* has two different meanings in the literature. 'Optimal' means that MS are able to achieve the traditional policy objectives: full employment, satisfactory monetary stability and balance of payments in equilibrium,

2 Usually, talking about the OCA criteria, also the McKinnon [1963] criterion- openess- is included. Indeed the openness criterion allows MS to reduce the cost of the participation to a monetary union. It is not a condition to join it. In the same time, very often Peter Kenen's linked to another criterion: the production diversification. A high production diversification allows a country to join a monetary union. The opposite happens if a production specialisation is the case. (Verde [2008])

3 On Mundell I and Mundell II I will return later. The term Mundel II is due to McKinnon [2004]. (Verde [2008])

using the traditional policy instruments (McKinnon [1963]) According to the other definition of 'optimal', a monetary union is optimal if benefits exceed costs for MS when joining the union.

The mentioned criteria have a positive characteristic of being measureable and therefore empirically verified.

Thus, starting from the first years of Nineties and the aftermath of the Maastricht Treaty signature in 1992, several papers came out in an attempt to verify the traditional criteria that would have been met in the future EMU. These papers were based on a comparison between the US and the ongoing EMU on the basis of the criteria mentioned above. This comparison was inherently wrong, as the US was for long time a real federation while the Eurozone was not. Despite this "starting flaw" many economists did not hesitate to use the comparison US-EMU to guess the answer to the very appealing question: *Is the EMU an optimum currency area?*

The answers were all negative. Blanchard and Katz [1992],Eichengreen [1993] maintained that in the euro-zone *labour mobility* was not a real shock absorber, while in the US it was[4]. Obstfeld and Peri [1998] reached the same conclusion. As regards the *sync criterion*, Bayoumi and Eichengreen [1993] showed that the autocorrelation among economic shocks in EMU was significantly lower than the in the US. As concerns the criterion of *fiscal federalism*, Sachs and Sala-i-Martin [1992]'s results pointed out that in the US a fall of GDP of 1 dollar was cushioned by the federal budget in a measure between 35 and 45 cents (Pisani Ferry et al. [1993]) In EMU this value was found to go down to 0.5%. Krugman [1993] was sure that in the EMU in the future *production specialisation* would have prevailed and with it asymmetric shocks[5]. Thus also for Paul Krugman the perspective on EMU was negative. No empirical works surfaced with reference to *integrated financial markets* because at that point there were none in Europe.

In conclusion: the answers to the question 'Is EMU an OCA?' in these first empirical studies were completely negative. This meant that in the case of EMU the above mentioned criteria for an OCA were not met. Or, in other words that for the EU's MS, or rather for some of them, costs would have exceeded the benefits of joining the union. From another point of view, the no-optimality of EMU should have meant that there was little hope for it to survive shocks and crises. In this vein, a paper by Frankel and Rose [1998] published in the last part of the Nineties, advanced the impressive thesis of the *endogeneity* of the OCA criteria. With this term, the authors maintained that even if *ex-ante* (before the launch of the Union) those criteria were not met, they could be *ex post*. (after the launch).

4 Moreover they show it is possible to identify on the reactivity to shocks criterion, a centre- formed by Germany, Austria, France, Denmark, Belgium, Netherlands, Luxembourg- and a periphery formed by Italy, Spain, Portugal, Ireland, Greece and United Kingdom.

5 Cfr footnote 2

It would have been through the constitution of the monetary union, or endogenously that those conditions or pre-requisites would have been met. Highly dubious estimates presented by Frankel and Rose in their paper to support their thesis did not help to avoid the widespread belief that their hypothesis was completely wrong.

On the eve of the introduction of the European single currency, some papers clearly reversed the conclusions achieved in the Nineties. This reversal was driven by a changed theoretical climate[6]. Mundell II [2000, pag. 391] deemed EMU to have 'satisfied the basic requirements of an optimal currency area'. Alesina and Barro [2002], Alesina, Barro e Tenreyo [2002], completely changed direction. They distinguished between large and small economies, the latter were better candidates for a monetary union in their attempts to achieve credibility[7]. However, to a certain extent these papers blurred the first and more convincing results about the ongoing EMU's inability to meet the OCA criteria. Also for these reasons we can overlook them.

Anyway, the conclusions reached by the OCA empirical literature of the Nineties were completely overlooked by the countries which signed the Maastricht Treaty in 1992. The Treaty instead provided quite different criteria, according to a different approach, that of New Classical Macroeconomics, whose economists deemed that monetary stability and fiscal consolidations were sufficient to make the EMU vital and sustainable. But, problems debated in the Nineties have again emerged, since a couple of years after the introduction of the euro. Problems have become dramatic during the awful period 2007-2013 dominated by the global and the sovereign crises. Thus the attempt made by *Van Beers N. et al.* [2015] to update the results of the previous papers, to verify if the EMU flaws signaled many years ago still threat its survival is particularly significant. In particular, several papers published by the BC come back on the problems empirically analysed twenty years ago, in this way confirming that those problems have always been on agenda.

Summing up: EMU is not an optimal monetary union, because it does not meet the required conditions of high factor mobility, high economic synchronisation, adequate fiscal federalism and adequate financial integration. The empirical studies of the Nineties already mentioned in this paper provide convincing proof of that. Despite new contributions from studies since the launch of the Euro, this conclusion has not changed.

3. Risk-Sharing and Insurance Mechanisms: The Bruegel Debate

We have then, demonstrated that the asymmetrical nature of EMU gives a rational basis to insurance mechanisms designed

6 The New Classic Macroeconomics came out in the Eighties followed by the real business cycle and New Keynesian Theory.

7 The credibility is of New Classic Macroeconomics.

to cushion asymmetric shocks or macroeconomic imbalances[8]. Indeed, as noted by De Grauwe 'the surprising thing is that so many have been living under the illusion that the eurozone would work without such an insurance mechanism. The official view was that the Eurozone did not need an insurance mechanism and certainly not a budgetary union.' (De Grauwe P. [2010], p.345). Still more, 'the euro has been a disaster. No other word will do' (Martin Wolf [2014,p.289]).

Yet, this is only partially true. And it is so because of the lack of effective policy choices and institutions designed to turn an incomplete monetary union into a sustainable project. The chance of reaching this objective depends on the capacity to deal with asymmetrical shocks.

The BC, as already mentioned, has published several studies in the last few years dealing with fiscal union, banking union, risk-sharing and insurance mechanisms, euro area governance. The approaches to international risk-sharing are two. The first (fiscal union) stems just from the traditional OCA literature (Mundell, Kenen) and regards international transfers as an instrument aiming at economic stabilisation of output and employment within states. The other has to do with those economists who regard international risk-sharing as a special case of consumption smoothing (Asdrubali et al. [1996], Atkson and Bayoumi [1993]). In the first case, we have a public risk-sharing mechanism, in the other it is 'private' or market-driven.

However, we may have temporary or permanent mechanisms; automatic or discretionary ones. Let us start with Kenen's definition of a fiscal union stated that 'it is a chief function of fiscal policy, using both sides of the budget, to offset or compensate for regional differences, whether in earned income or in unemployment rates. The large-scale transfer payments built into fiscal systems are interregional, not just interpersonal' (Kenen [1969, pg. 47)]. If this is the case, then monetary union is provided with *automatic* stabilisers across regions or Member States, that is, large public transfers (e.g. unemployment insurance programmes, federal income and social security taxes) capable of cushioning asymmetric shocks. To make the Union into an OCA, an optimum federal budget must be of adequate dimensions. According to the Jenkins-MacDougal Report [1977] the budget of the future EMU should have had to count on resources equivalent to 5-7% of the union's GDP, as found in the USA. The current share in EMU is instead only about 1%.

Marzinotto and Sapir [2011] raise the question: 'what kind of fiscal union?'. They start with the consideration that the core reason of the EMU failures is the lack of a fiscal union and propose the creation of a euro-area finance ministry, with a minister with veto rights over national budgets that could threaten the sustainability of the Union. However, their proposal implies a significant transfer of sovereignty from national to federal level and a change of the Treaty.

8 The idea of an insurance mechanism was put forward in the Jenkins- MacDougall Report [1977] of a "conjunctural convergence facilty" and in Majocchi and Rey [1993]

This aspect makes the proposal unattractive.

The paper by Guntram B. Wolff [2012] is interesting because it addresses a traditional form of fiscal union characterised by a federal budget. This is designed to work as an insurance mechanism through transfers of financial resources from a federal budget of adequate dimensions, towards MS in trouble. According to Wolff a common currency-area budget aims at reaching the following three objectives:

a. to provide an adequate transfer of financial resources to a MS hit by a large regional or asymmetric shock;

b. to cope with severe recessions or asymmetrical cyclical evolutions within the union;

c. to ensure financial stability.

The main mechanisms with which to pursue these objectives are (G. Wolff [2012]):

1) an unemployment insurance mechanism;

2) payments to MS in case of deviations of current output from their potential;

3) payments designed to narrow large interest spread;

4) discretionary intervention from the Union.

To these risk-sharing tools we can add:

5) a stabilisation fund designed to realise temporary transfers between MS according to the cyclical phases. (French Eecon [2015])

More details regarding these cross-country risk sharing mechanisms are also crucial for a comprehensive evaluation of our proposal discussed in later in this paper. For this reason it is useful to concentrate on them for a moment.
Let us start with unemployment insurance.

1) An important instrument of automatic stabilisation is *unemployment insurance*. In this case insurance payments and payments to the unemployed work *automatically* and rapidly. Thus this policy tool works like a traditional automatic fiscal stabiliser. In the aftermath of the last two major crises in the advanced world, a widespread opinion suggests that in Europe things would have gone better if the Union had been endowed with a European system of insurance against unemployment. The first one is based on automatic transfer among Member States according to the evolution of unemployment rates. This form of intervention is the most intuitive way to intervene at “federal” level. It seems in sufficient condition to immediately spur domestic demand. However this mechanism meets some important criticisms: it could favour moral hazards

by the recipient States; it does not ensure neutrality in income distribution[9]. Indeed, in the euro area the principle of distributional neutrality should hold. With this term we mean two things. First: distributional neutrality could be defined as no net transfers over a given period. That is: a MS hit by a negative shock receives net positive transfers from the federal budget over a number of years, but after some years those transfers should be offset. The second case is closer to our analysis: it sees the federal budget as a kind of insurance mechanism. So the contributions to the federal budget will depend on the likelihood of a shock. In case a shock occurs, the insurance would be triggered and a net transfer of resources would take place.

2) The second mechanism is linked to the *output gap*. It would trigger when the output gap reaches significant values. That is, when actual GDP is sensibly below the potential one. In this case, the problem is given by the estimate of potential GDP. Indeed there exist at least two ways to estimate potential GDP: the production function and the Hodry-Prescott filter (HPF). This aspect clearly reduces the advantage of this second stabilisation mechanism, even if it has positive implications in terms of the neutrality of distribution and its clear meaning. (Pisani- Ferry J. et. al.[2013]).
3) Another stabilisation mechanism is slightly complex in the sense that a Member State in trouble can issue public bonds, the yield of which is linked to the GDP evolution. The main flaw of this financial instrument is given by the fact that the recipient State might be discouraged to introduce structural reforms.
4) An intuitive mechanism of cyclical stabilisation is given by discretionary temporary transfers to countries in trouble established on the basis of a political decision by the Union. Theoretically it is the best road to a stabilisation policy, but the decision should be timely and it should require progress towards a political union which, at the moment, is not a reasonable option.
5) Finally, it is worth mentioning a French proposal concerning a Stabilisation Fund designed to carry out temporary transfers among the Member States according to cyclical phases. This scheme is funded with a European social contribution drawn on wages and not on the pre-existing national contributions; the insurance is limited to cyclical or temporary unemployment.

BC and other economists (for all: M. Wolf [2014]) show a great interest in other policies designed to reduce, if not resolve, the EMU's problems which stem from its nature. For instance:

The Banking Union (Pisany-Ferry et al. [2012], Obstfeld [2013]).

The traditional OCA theory completely neglects financial aspects and in particular

9 On the income distributional condition see section 6

those having to do with banking and stability problems. Instead, the banking union is currently deemed crucial because the EMU crisis has unveiled the inability of weak MS to provide backstops for their banks. In the Union, banking rests on four pillars (Pisani-Fery et al. [2012]: a) central regulation and supervision of financial institutions; b) deposit insurance; c) resolution of failing banks or systemic banking crises; d) a common fiscal backstop. The Eurozone made some steps to meet these pre-conditions[10], but the MS need another condition to ensure the banking union works effectively: an adequate supply of *safe* assets in order to break the '*doom- loop'* which links the solvency of banks with that of sovereigns. Relying on the debt of a few countries for this is certainly inadequate. For this reason there is a need for a supply of Eurobonds, i.e. an asset for which the Eurozone as a whole is liable.

The Eurobonds

A Eurobond market of adequate dimensions would give banks a safe asset and therefore give the ECB the ideal collateral for its operations. It would make public debt restructuring easier.

After having listed the main stabilisation mechanisms, a couple of questions arise: a) should the mechanism be temporary or permanent? And b) should it be automatic or discretionary? Hammond and von Hagen (1995) help with their definition of the optimal risk sharing mechanism. It should have, among others, the following characteristics:[11]

i) *simple:* in order to obtain a more widespread knowledge among citizens,
ii) *automatic*: in this way strategic behaviours are reduced and then the effectiveness is increased;
iii) *temporary*: in order to meet the distributional neutrality;
iv) *important:* in order to cushion a large part of the shock.

4. A Caveat: The Secular Stagnation Hypothesis (Ssh)

The hypothesis of Secular Stagnation (SSH) - i.e. a sharp fall in growth rates lasting a very long time, which has recently been advanced by former US Treasury Secretary Larry Summers, is gaining a growing consensus[12]. Indeed this thesis is spurring much debate, enlarged now with the intervention by Ben

10 See the Agreement on the Banking Union of March 2014

11 These characteristics are to some extent similar to those identified for the European fiscal rules (Von Hagen [1998], Verde [2003])

12 Against Summers' thesis, Ben Bernanke, former FED President, sees in the current sluggish growth the excess of savings over investment. (W. Munchau (FT April 13 2015) However, as we will see, Summers also put emphasis on the excess of saving.

Bernanke who opposes to Summers' thesis of the 'saving glut' advanced in 2005[13]. The term 'Secular Stagnation' was first used in 1939 by Alvin Hansen (the American Keynes) in his Presidential Speech[14]. This hypothesis is important for us, since from a general point of view, the outcome of a policy measure, such as that suggested in this paper, also depends on the cyclical phase the country is, or will be, going through. This is especially the case if, from a structural point of view, the economic context changes dramatically, or is expected to do so. In this case, the tenets of the dominant economic theories would make little sense and policy recipes would suddenly become ineffective or unsuitable. This is particularly true today as regards the problems of EMU.

The two dramatic financial crises have left their marks on the European economies. We are experiencing a phase of lasting and Great Stagnation, after having lived through the Great Moderation. We do not know if this stagnation will really be 'secular', but it is very probable that the recessionary phase will last a long time. This is very relevant for about the topic of this paper.

To understand the ties between the SSH and the proposal of a new policy mechanism let us dwell on three points:

a) the main aspects of the SSH;

b) the consequences of SSH;

c) the policy implications stemming from SSH.

As concerns a), in short we can say that Summers takes cue from: the persistent fall of potential output, the persistent gap between saving and investment, lasting low inflation, if not deflation, and consequently a persistent glut of capital and low or negative interest rates. b) The consequences of SSH are very interesting according to Summers. Let us divide them in theoretical and in economic ones.

On a *theoretical level*, according to the still dominant economic theory[15], a major role is assigned to potential output levels, not to current ones. That means the long-run perspective prevails with respect to the short-term.Now, instead, according to the thesis of SSH, this aspect is completely reversed. Indeed, in this respect, Summers [2014 p.1] writes: 'what happens in the short run has

13 The Bernanke's thesis on the saving glut was advanced in a speech of 2005 regarding the external imbalance between the US and China. On the external imbalances, models and historical experiences see Verde [2015]

14 Hansen held his talk after an era of unprecedented expansion of the US economy, both in terms of population and the land available. The end of this period and the experience of the Great Depression led Hansen to wonder whether there would be sufficient investment demand to sustain future economic growth. Other economists sharing the idea of SSH' are Paul Krugman, Blanchard, Eichengreen.

15 With the term –the still dominant economic theory, we mean the New Classical Macroeconomics (NCM), the Real Business Cycle (RBC), the New Keynesian Theory (NK).

a profound impact on the long run. To reverse Keynes a bit, if you die in the short run, there is no long run'. This is Keynes' first vindication of the re-valuation of short termism in macroeconomics and in economic policy (point c)[16]. Excessive fluctuations in output and employment give rise to detrimental impacts on long run growth: a conclusion in clear-cut conflict with NCM's (Lucas R. [2003]). Moreover, demand-management policies (monetary and fiscal) now are again prevailing, because they are effective, as in the Old Keynesian scheme. To be more precise, fiscal policies are now more effective as macroeconomic stabilisation instruments than monetary ones. In fact, fiscal policy is more effective in a context of zero-to-low-bound interest rates (ZLB) because in this case its multipliers assume higher values.

However, according to Summers, fiscal policy may also need a rethink. Fiscal policy should essentially be a higher quality; able to avoid systematic S-I imbalances; capable of raising long-run growth potential. This could be possible if public expenditures aimed at improving the education system, increasing infrastructures, removing barriers for labour mobility between firms and so on.

On *economic grounds* the more important consequences of SSH partially coincide with its aspects (point a). In particular, the excess of savings is a telling *prius* feature of the SSH. This excess brings with it very low or negative interest rates, a very dangerous perspective for growth. Why? Basically for two reasons. In first place, if ZLB is the case, reaching full employment could require even negative interest rates [17] and this means financial instability and monetary policy ineffectiveness[18]. Nowadays, low or negative interest rates and ZLB rates absolutely prevail in the advanced economies and look likely to continue to do so.

Above all, the main economic consequence is a generalised lack of an adequate level of internal demand, in Europe in particular. This aspect has now been formally recognised. In a context of SSH the economic situation of the European Monetary Union is doomed to worsen.

c) The policy implications of SSH are of crucial importance. Let us distinguish the general case from that of EMU.

16 Alvin Hansen put the SSH in the following terms: if long term long-term structural mechanisms, such as growth of both labor stock and land, is slowing down, will the increase of the investment demand be sufficient to sustain long term economic development? Put in these term, the problem clearly assumes a Keynesian vision of macroeconomics, not only as concerns the causes of persistent stagnation, but also as regards consequences and cures.

17 Linked to the definition of secular stagnation is the inevitability of negative real interest rates are needed to equate saving and investment with full employment.

18 Or better according to Summers: "I explain why a decline in the full employment real interest rate (FERIR), coupled with low inflation, could indefinitely prevent the attainment of full employment. I argue that even if it were possible for the FERIR to be attained, this might involve substantial financial instability."

First the situation of sluggish growth is doomed to last.

Second, following New Classical Macroeconomics and Real Business Cycle Theory, government and policymakers have seen *fiscal austerity,* as the way, for government and policymakers to acquire credibility and make the achievement of their policy objectives more likely.

Now, within the SSH context, this is no more the case. On the contrary, *austerity* restrains further internal demand, forces countries to internal devaluation policies, increases poverty and inequality, reduces domestic demand and then worsens macroeconomic policy outcomes[19]. Instead, priority must be given to policies designed to spur consumption and to boost investment rather than to structural reforms. These policies are designed to alter the perspective for future years.

Third, symmetrical adjustment is essential, especially in a monetary union such as EMU. On the contrary, 'the present system places the onus of adjustment on borrowing countries, while the world now requires a symmetric system, with pressure also placed on "surplus" countries' (Summers [2015]).

c1) SSH and policy choices for EMU

Three points are particularly important in our the case of EMU:

1) Under EMU economic growth is dangerously sluggish. This situation is likely to continue for a long time. The main policy problem is how to guarantee an adequate level of internal demand of the union as a whole, in order to prevent the fall in output and employment. This objective could be hit, pushing those MS with high current account surpluses to spur their domestic absorption and avoiding vulnerable MS being compelled to restrain their demand.

2) Obviously fiscal discipline cannot be put aside. Absolutely not. It is essential to avoid a dramatic fall of credibility, free riding problems, and opportunistic behavior; in sum, to avoid the disintegration of EMU. However fiscal discipline should not be the reason for Gold-Standard type adjustment for weaker countries engaged in attempting meet the European fiscal constraints;

3) Fiscal discipline must assume a second-tier plan with respect to demand policy, as the main policy aim today should be to reverse the current situation of a generalised lack of national demand. To do so, monetary policies (including

19 Some recent research have shown an evident and strict link between inequality and fiscal austerity or fiscal consolidations (Furceri [2013]) Also from this point of view fiscal austerity can contribute to the secular stagnation because inequality in income distribution negatively affects private consumption and the economic growth. Linked to the definition of secular stagnation is the inevitability of negative real interest rates are needed to equate saving and investment with full employment.

quantitative easing too) are insufficient: in a ZLB context it will lose effectiveness. Fiscal policies would gain effectiveness, increasing the value of fiscal multipliers.

4) Demand policies should prevail also with respect to structural reforms.

5) Last but not least, symmetrical adjustment should prevail in EMU to successfully cope with external imbalances and idiosyncratic cyclical evolutions among MS and to increase the demand of EMU as a whole. In particular, surplus countries should be penalised in case of having a persistent and relevant current account surplus, as they tend to develop levels of domestic demand which are systematically lower than their potential.

5. The Macroeconomic Imbalances Procedure (Mip)

The five previous points represent, together, the starting point of the new proposal. The second addresses the MIP and its serious flaws.

It is important to warn that when we discuss the MIP we basically take in account what its Regulation says, not the occasional and new attitudes of the EC on particular aspects of the Procedure. For instance, even if this year the first step of the MIP has been applied to Germany, it does not imply the correction of the widespread and well-founded impression that MIP *de facto* favoured Berlin.

No single correcting step can reverse a general evaluation of the current MIP. That is: 'if one wants to understand how far the folly goes, one must study the European Commission's work on its "macroeconomic imbalances procedures' (M.Wolf [2014] p.303). This is an illuminating sentence that encapsulates my own thoughts for a long time since the MIP was published. That said, it should be interesting to remember when and why the MIP was born.

In the aftermath of the two financial crises serious external imbalances came out in EMU. Germany, Netherland, Finland were showing persistent current account (CA) surpluses while Greece, Italy, Spain and Portugal were recording CA deficits (fig.2)[20].

In the attempt to prevent them, the Commission suggested in September 2010 a new instrument: the Macroeconomic Imbalances Procedure or MIP, designed to cope with these imbalances.[21]

On that occasion, significant hopes were expressed: 'On 29 September, the

20 For a deep analysis of external imbalances and related models and historical experiences, see A. Verde [2015]

21 See, Scoreboard for the surveillance of macroeconomic imbalances – European Economy Occasional Papers 92/2012

European Commission adopted a comprehensive set of proposals to reform and to broaden EU economic governance. The reform package is the most recent step in a much broader effort to incorporate the lessons of the crisis in the EU policy framework, to prevent economic instabilities and, ultimately, to protect workers and taxpayers' (Buti M.and Larch M. [2010]). Instead, in 2012-13 the Union has been involved in the worst crisis of its life; in 2014-15 the Union's very existence is at serious risk. Shall we blame bad luck? No! We should blame the lack of proper policy choices to protect the EMU, such as an effective insurance mechanism.

(Insert Figure 1, here)

Box 3

The MIP macro-indicators and related thresholds are:
current account/GDP: thresholds . -4% +6% moving average of 3 years
net foreign investment position/GDP : thr. -35%
change export share in value: tr -6% in 5 years
unit labor cost .tr. 9% in 3 years
real exchange rates change (with respect to 35 countries): tr. -5 + 5%in 3 years
private credit flow/GDP : tr. 15%
public private debt/GDP :tr 160%
change real estate prices (Eurostat) : tr. 6%
public debt/GDP: tr. 60%
unemployment rate: tr. 10%moving average of 3 years

From the juridical point of view, the MIP is an EU Regulation (n.1176/2011) adopted by the Council on November 16 2011. The MIP is a Procedure based on a list of macroeconomic indicators (the so-called *scoreboard*) containing valuable information about the emergence of economic risks. The scoreboard is formed by eleven indicators and related thresholds: acting as a signaling device for imbalances. A subsequent in-depth review (IDR) would verify the existence of such imbalances and their severity.

Some of these indicators are moving averages over three years; in some cases, they are expressed as percentage of GDP. The overtaking of thresholds may warrant an IDR that the Commission carries out to verify the existence of an outstanding macroeconomic imbalance. When the macroeconomic imbalances are identified and in case they are considered excessive, the Commission requires the MS to take decisive policy actions. Only in case these actions are considered insufficient the country enters the *corrective* arm of the MIP and a specific Procedure may triggered, called Excessive Imbalances Procedure (EIP), similar to the Excessive Deficit Procedure (EDP).

Then the involved country is recommended to plan measures aiming at removing/reducing the imbalances in a Corrective Action Plan. That is, the MIP's goal is: 'to prevent excessive macroeconomic imbalances and to help the Member States affected to establish corrective plans before divergences become entrenched' (art.6). To discuss the MIP from the point of view assumed in this paper, it is preferable to reverse the reasoning, pointing first on its flaws (or the aspects we believe to be) and then linking them the MIP's articles or principles.
Let us start with those we deem the MIP's flaws. That is:

a) uselessness;
b) elusiveness;
c) danger for EMU stability and for MS with macroeconomic imbalances;
d) partisan spirit

a) The MIP is useless

The scoreboard is formed by a relatively high number of economic indicators: eleven. (box 1). Therefore, uncertainty is inevitably doomed to rise about the existence of a macroeconomic imbalance: some indicators could signal no imbalance, while others could indicate the opposite. In this sense the new Procedure can be seen as a 'download gun' (Spaventa and Giavazzi), i.e. a useless policy tool. The counter-argument that the Commission does not make a mechanic evaluation of the indicators' evolution does not affect this situation. On the contrary, it makes it worse. The MIP thus is either useless or gives the EC the chance to act with discretion. It makes the MIP an opaque and unpredictable policy instrument.
This problem, confirmed by the uncertain behavior of the European Commission, is destined to become more serious, if rumours about an enlargement of the scoreboard to include other indicators are confirmed.

b) The MIP is elusive

In this case we move on the same ground. Indeed according to art.14, 'the crossing of one or more indicators thresholds need not necessarily imply that macroeconomic imbalances are emerging conclusions should not be drawn from an automatic reading of the scoreboard (the conclusions) are part of a comprehensive analysis.' In fact, the MIP has not been applied by the Commission, although the number of thresholds breached is usually particularly high, as noticed under point a).

Moreover, art.15 states that 'in the event of unexpected significant economic developments that require urgent analysis for the purpose of this Regulation the Commission should identify the Member States to be subject to an in-depth review.' Yet according to art.16 'The in-depth review should be discussed within the Council and within the Eurogroup.'

Finally according to art. 10/4, 'Where it considers that the Member State has not taken the recommended corrective action, the Council, on a recommendation

from the Commission shall adopt a decision establish non-compliance, together with a recommendation setting new deadlines for taking corrective action. The Commission's recommendation on establishing non-compliance shall be deemed to be adopted by the Council unless it decides, by qualified majority, to reject the recommendation within 10 days. The member State concerned may request that a meeting of the Council be convened within that period to take a vote on the decision'.

Thus the MIP could continue to be in action for a long time. However this is not without consequence for the involved MS, in particular the more vulnerable ones: rather, for them it acts as a sword of Damocles while larger MS benefit from it. Thus it is not surprising that Germany can continue to record current account surpluses, breaching its threshold. All in all, the MIP is elusive, that is, *its objectives tend to disappear*[22], since even after the Procedure is opened against a MS and even if then it does not meet the Commission's recommendation to undertake corrective policy measures, the risk that nothing will happen is very high[23]. It allows the Commission to assume larger decision powers than established by the EU Regulation. This inevitably makes the MIP an opaque and unpredictable policy instrument.

c) The MIP is dangerous for the EMU stability

Art 23 states 'A member State subject to the excessive imbalance procedure should establish a corrective action plan setting out details of its policies designed to implement the Council recommendations.' This means: when a MS is hit by a macroconomic imbalance, it is their responsibility to remove it. Usually the involved MS is a vulnerable one, which means that, because of the policy's corrective action, its macroeconomic problems are doomed to worsen. It is a fact that usually in this action MS are forced to carry out pro-cyclical actions, with negative impact on the macroeconomic scenario.

Such a scenario is a normal outcome for Southern MS: they are usually in trouble because of a lack or loss of competitiveness and even when they suffer from fiscal policy problems, usually, these have their roots in the current account balance of payments. But today these countries cannot devalue and there are no mechanisms of risk-sharing, as we know. The only option is to resort to 'internal devaluation' carried out with real wages and public spending, eventually squeezing internal demand and increasing unemployment. (cfr. fig.3a). Such an outcome is the opposite of what the MS and the Union need.

Moreover, the outcome described above is a sure way for fuelling political and social distress in countries where anti-euro parties are dangerously gaining ground. This aspect cannot overlooked from now on.

22 Oxford Advanced Learner's Dictionary

23 We can mention some cases such as Slovenia and Italy's have been in the MIP's corrective arm for a couple of years.

d) The MIP shows partisan spirit

This point is closely linked with the danger of MIP outlined above. As we notice from box 3, the thresholds fixed by the MIP for the current account are asymmetric: + 6 per cent of GDP for surplus MS and -4% for deficit ones.

This asymmetry for current accounts is not easily understandable, but is explained by the ECOFIN thesis, according to which, 'unlike current account deficits, large and sustained current account surpluses do not raise concerns… the risks of negative spill-overs for current account surpluses are therefore less pressing than for current account deficits.[24]

And still, art 17 insists, 'when assessing macroeconomic imbalances account should be taken of their severity and their potential negative economic and financial spill-over ... Given vulnerabilities and the magnitude of the adjustment required the need for policy action is particularly pressing in Member States showing persistently large current account deficits and competitiveness losses. This does not agree with reality, because, 'the most important contributor to the Eurozone's internal imbalances is Germany. It needs to find a way to reduce its current account surplus' (M.Wolf [2014, p.310]). In its second part, art 17 partially rectifies its approach. Yet it is undeniable the MIP favours German[25] making adjustments in EMU dramatically asymmetric. As we have already noticed, in EMU weak countries are forced into dangerous policies because of Germany's unwillingness to accept higher inflation, cross border transfers, the absorption of its persistent and breaching MIP rules current account surplus spurring its internal demand.

On this point, MIP should take particular notice. In the next section, a new risk-sharing might suggest how.

5.1 New Proposal to Address the Current EMU crisis

Now we are in a condition to get together all the previous considerations, to put them in the most suitable way to expound a new risk-sharing proposal[26].

24 Economic and Financial Affair Council meeting Brussels February 12 2013

25 It takes a current account deficit of 4 per cent of GDP as a sign of imbalances. Yet, for surpluses, the criterion is 6 per cent. It can hardly be an accident that this happens to be Germany's surplus. Above all, and amazingly, no account is taken of a country's size in assessing its contribution to imbalances. In this way Germany's role is brushed out. Yet its surplus savings crate huge difficulties when interest rates are close to zero. The omission of German makes the Commission's analysis of 'imbalances' indefensible. Imbalances are a systemic issue, not a country-specific one. What matters is the scale of the imbalances relative to the Eurozone economy. In the broader context, Germany's surpluses are crucial. (M. Wolf [2014], pag.303). It must be said however that in 2014 for the first time Germany has been put in the In-Deep- Procedure.

26 A similar proposal has been suggested in a preliminary form in 2013 and in 2014 by Verde [2013, 2014]

The new proposal has its starting point in two of the previously listed flaws of the MIP.

1. First of all, the MIP is **useless,** because it refers to too many (eleven) indicators; that makes the Procedure a 'download gun', according to a just-right definition. Thus the reduction of these indicators is the first step of the new proposal. Only two macroeconomic indicators, **the current account balance** and the **unemployment rate,** are considered. Both are given by a moving average of the previous **two years**. For both of them, specific thresholds are provided: +10 per cent of labour force for the unemployment rate and +4 and -4 per cent of GDP for the CA. When these thresholds are breached, CA and unemployment imbalances are defined **excessive** and the Procedure for excessive imbalances is open. With respect to the current MIP, the suggested thresholds of CA are now symmetric. Surpluses and deficits exceeding 4 percent point of GDP are both considered imbalances. But with a crucial difference, as we will see under the next point.
2. The other serious flaw in MIP is its **partisan-spirit** favouring Germany[27] and the surplus MS (SMS). In order to remove, or mitigate it, the European Commission (EC) should 'divide' MS with imbalances into two groups. The first is formed by the SMS, those with CA surpluses higher 4 per cent of GDP. The other group includes all MS with excessive unemployment rates (Unemployment Member States, UMS), i.e. exceeding the 10 per cent of labor force or UMS. In opening the Macroeconomic Imbalances Procedure, the EC *should* 'invite' the SMS to spur their internal demand through higher public spending and/ or favouring more generous wage policies. Thus the internal demand change should reduce the CA surplus, as well as unemployment in the UMS. This should be the desired result of the EC's policy move. But it is very improbable that this objective can be hit. Indeed, it is probable that domestic spending of SMS will be directed towards *all markets also outside the Union*, not only towards the MS with unemployment problems. The impact on them of the higher private and public spending of the SMS on the UMS could be negligible[28]. This risk should certainly be avoided. The EC should be sure that the help from the surplus countries will benefit the UMS, with high unemployment rates. *Improvements may come if new demand from the surplus countries is truly directed toward the excessive unemployment in other MS.*

27 This conclusion cannot change, as we have noticed, after the IDP has been applied to Berlin.
28 This element has given also new basis to the EC's claim that expansive policies by Germany would have not significantly boosted internal demands of other MS.

3. **A Stabilisation Fund.** To reach this target, a Stabilisation Fund could be the most immediate solution, which would "gather and distribute" a short term [29] support programme implemented on the basis of EMU macroeconomic data concerning all the Member States from the past two years: those with current account surplus higher than the threshold of 4% of GDP (SMS) and those with unemployment rates more than 10 per cent of labour forces (UMS). This data allows the Commission to determine the amount given by the difference between the excessive current account surpluses, recorded by the SMS, and the respective thresholds (corresponding to 4% of GDP). This amount is divided among SMS on the basis of the respective "excessive" surpluses and represents, for each share, the sanction envisaged by the new suggested MIP. These resources are destined to the UMS. The Commission will decide on the amount of financial resources to be assigned to each UMS on the basis of seriousness of the problems to tackle and the projects presented by countries which the aid is destined to. To avoid having to form a new institution, the Fund should be managed by the European Investment Bank. The resources of the Fund would be designed to spur UMS's internal demand.

   This could be implemented according to different forms. For instance:

   a) through **incentives** to particular typologies of demand: i.e. fashion, typical UMS's products (wines, oil, textiles, etc.:). The choice of demand typologies to be funded is crucial. They could regard those with higher multipliers on output and employment or with larger social impact.
   b) through **bonuses** assigned to the MS's citizens for visiting UMS's **tourist** places;
   c) through new spending in **human capital formation** in the UMS, such as the funding of new schools;
   d) through a temporary purchase of goods produced by factories experiencing a **liquidity crisis** which put their existence at risk.

(Insert Figure 2, here)

A more symmetric adjustment

Then the Stabilisation Fund should be funded by the surplus countries(fig.3). The amounts of contributions of each SMS to the Fund would be strictly correlated to the difference between the actual surplus and the threshold value (4% of GDP): equal to that difference or to a percentage of it.

In this way the partisan spirit of the MIP would vanish. Not only in

29 We are talking about cyclical intervention by the Union.

this way also the build-up of CA surpluses is discouraged by the SMS[30], while it is not in the political interest of UMS to show persistently high unemployment rates.

The central idea at the basis of the new policy tool is in the need to recycle demand from SMS to the UMS, not simply transfer financial resources to the *recipient countries*[31].

The choice of countries with an employment rate relatively high (UMS) and countries with relatively high current account surplus (SMS) is clearly justified by the need of having not coincident set of countries. In this way we could have the mentioned transfers of demand from the second group toward the first one. This aspect is normally justified also on an empirical basis. That is, normally the SMS *with a significant CA surplus* and UMS *with significant unemployment* do not coincide.

Moreover, already normally in the SMS group relationship between CA and U is *negative* i.e. a higher CA surplus gives way to a lower unemployment rate, as shown in fig.1a. The model able to explain this link between CA and unemployment is a competitiveness-type. Not only: the negative relationship between CA and unemployment, in the SMS, with a CA/GDP > 4% is confirmed by the EMU's historical data (2000-13, fig 1.b).
In contrast, in the UMS the relationship between CA and unemployment is *positive.* In other words, in MS with high unemployment, it is evident that an improvement of the CA balance is linked to a higher unemployment rate. (fig. 1a).

How can this positive relationship be explained within the EMU institutional framework? A very intuitive way could be as follows. A MS with a high unemployment rate is usually a vulnerable country with biting fiscal constraints. To face these constraints, it should reduce its internal demand through a public spending reduction and/or increased taxes, or by favoring a decrease of nominal wages. The cut in domestic absorption will produce an improvement in the CA balance, thanks to lower imports, while the unemployment rate will go up. The basic model in this case is an old Keynesian in which the desired level of internal demand (ID*) is lower than the potential one (ID) to make it consistent with a given

30 This kind of funding recalls to the mind the Keynesian scarce currency clause

31 My proposal has an original birth, but distinguished \names are close to it: as mentioned in section 3, the McDougall-Jenkins Plan launched in 1977; John M. Keynes who in 1943 suggested an automatic recycling of financial resources from the surplus towards the deficit countries. Compared with Jenkins' my proposal has not a continuous application, but the philosophy is the same. The 1943 Keynes's Plan was about a recycling of financial resources, while I believe that recycling of demands of goods and services, i.e. through direct support to them e this is surely more effective for the reasons explained in the text.

level of CA°. (fig 2a)[32]

Indeed this positive relationship between CA and unemployment is also in this case confirmed by 2000-13 historical data regarding GIPS, as shown by fig. 2b. However, on the economic and policy plan, the idea of a Stabilisation Fund financed by the SMS will meet insurmountable objection by the SMS, and *in primis* by Germany. The challenge is: should we give up attempting to *demand transfers from the SMS to the UMS?*

The answer is no, for *at least* five crucial reasons.

i) First, structural reforms, i.e. those in labour markets, as continuously required by Germany and the ECB, could be harmful if they are not simultaneously associated with an expansion of domestic demands.

ii) We should remember that the CA surpluses of SMS mean not only that their internal demand is lower than its potential, but also that they are sucking demand out of the UMS. (M. Wolf [2014] They achieve an internal balance through an external imbalance (surplus). On the contrary, UMS are forced to reach an external balance through an internal imbalance, i.e. an increase of unemployment. In a word, the SMS' contributions to the Fund could be considered an intra-national 'compensation' .

iii) Surplus countries would be called to support the domestic demand of weaker MS, saving them the option of internal devaluation and making the Union more stable. Thus the suggested risk-sharing mechanism pursues not only stabilisation purposes, but **the public good objective given by the stability of the Union,** as well.

iv) The new mechanism will make the adjustment process more symmetric, avoiding more generalised and dangerous social distress.

v) Not only, the build-up of CA surpluses is in this way also discouraged by the SMS[33] *, while it is not in the political interest of UMS to show persistently high unemployment rates.*

Finally let us to concentrate on the characteristics of the new risk- sharing toll by comparing it to those identified by Hammond and Von Hagen, defined as optimal.

First of all, the new instrument is **simple**. *That is, the conditions which trigger it are a CA surplus higher than 4% of GDP and an unemployment rate higher than 10%. They must refer to the* ***two years before*** *the new instrument is applied.*

Secondly, it is ***automatic:*** *once those conditions are verified the mechanism is immediately and automatically applied,*

Thirdly, it is applied for a period ***of two years.*** The suggested Stabilisation Fund is an instrument of short-term economic policy designed to cope with the cyclical

32 We have CA= X-M ; M= a0+a1DI where DI = potential demand and CA°= X- M° and M° = a0+a1DI° where ° mans " desired" with CA° > CA because DI° < DI.

33 This kind of funding recalls to the mind the Keynesian scarce currency clause

unemployment. Naturally, it would be up to the Commission to control the actual destination of financial resources and to prevent opportunistic behaviour, such as moral hazards, on the part of countries with high unemployment.

All the new public spending by the SMS cannot be considered within the European budgetary constraints. Moreover the Fund's benefits should not be considered an alternative to other forms of fiscal rules relaxation, e.g. like the exclusion of the European Structural Funds' co-financed projects from the Stability and Growth Pact. The particular way that I have suggested to fund the domestic demand of MS in economic and social trouble allows us to qualify the meaning of two crucial terms: solidarity and distributional neutrality.

As concerns **solidarity**, it is often said that SMS should help weaker MS because without solidarity the euro-zone is doomed to fail, or at least to meet many more problems. It is true. But within the suggested risk-sharing mechanism solidarity is not called upon: the contributions of SMS' to the demand of UMS is based on a **rule** established for the stability of the Union as a whole. This aspect – the union stability- is not ignored by the Treaty. The 1992 Maastricht Treaty recognises the importance of Member States '*conducting their economic policies with a view to contributing to the achievement of the objectives of the Community' (art 102a)* stating that Member States must '*regard their economic policies as a matter of common concern and ... coordinate them within the Council' (art 103 (1))*. Moreover if the '*economic policies … risk jeopardizing the proper functioning of economic and monetary union, the Council may ... make the necessary recommendations to the member States concerned'* (art 103).

The same could be said as concerns the **distributional neutrality condition (dnc)** that each risk-sharing mechanism should meet in EMU, according to what we learned from one BC's paper in section 3. Instead, in our case, these **dnc** (in both definitions) should not be stiffly applied, because of the new mechanism's aims for the stability of the euro-zone as a whole.

Anyway if the risk of moral hazard – i.e. the temptation to benefit from the new mechanism without trying to reduce structural unemployment- is real,the distributional neutrality condition should be envisaged as a way to deter it. However it is also not easy to conceive a national government tempted to persistently show high unemployment rates! Finally, it is clear in the evidence that the new mechanism shares Summers' hypothesis on the implications of a **secular stagnation.** That is: there is a need for generalised and significant support for internal demands; the superiority of budgetary policy with respect to monetary policy, as we have just noticed. Stagnation and deflation cannot beovercome without a Keynesian policy of strong recovery of demand.

Here is an important by-product of the new mechanism. Indeed, the Eurozone is persistently and significantly exposed to the International economic cycle. That in

a measure higher than its dimensions would leave to suppose. The new suggested instrument could be, tanks to the automatic recycling of national demands, an effective device to endogenously create a self sufficient internal demand of the Euozone as a whole.

7. Some Concluding Remarks

To sum up:

1) According to Martin Wolf [2014] the euro has been a mistake. This is not true. The real mistake has been to not have provided the Union with an insurance mechanism able to cushion asymmetric cyclical developments. If this is not possible in the more or less immediate future, then the life of the euro will come to an end. This is why the "Bruegel debate" on risk-sharing mechanisms is very important: it surfaces in a delicate phase of the euro's life.

2) A growing number of economists are proposing that monetary policy, even unconventional measures such as quantitative easing (QE), recently adopted by the ECB are unable to draw the weakest MS from the current phase of stagnation. The same is heard about banking unions or other tools designed to repair failures but insufficient to avoid them in the first place. Also structural reforms of goods and labour markets are insufficient if not implemented in a context of economic growth. The ongoing Bruegel debate on the Secular Stagnation Hypothesis is gaining ground. It is a reasonable perspective which makes the adoption of risk-sharing mechanisms even more urgent.

To overcome the well-known lack of solidarity in EMU it is necessary to underline that the "stability of the Union" is a public good, a superior objective to which all MS must contribute. In this vein, we can imagine a drastic reform of the Macroeconomic Imbalances Procedure (MIP). The MIP has many flaws which we have dwelt on and these should be addressed.

As it has been said, if we wish to understand how far the folly may go, we should study the MIP. The reform here suggested aim at reducing its scoreboard to an indicator of social and economic pain and another of economic strength. The unemployment rate is the first; a structural current account, the second. The latter is a prove of a level of domestic demand lower than potential's.

This paper focuses on these two indicators in order to forge an insurance mechanism able to guarantee macroeconomic stability. The importance of the suggested mechanism crucially depends on its capability to generate automatically an adequate level of demands at national and federal plan and to fight against their

uneven distribution within the Union.

Finally, the new mechanism, allowing an automatic recycling of national domestic demands, might represent an important step towards the creation of a high domestic spending of the Union as a whole making it less dependent on the external macroeconomic cyclical conditions.

(Insert Figure 1a-2a-2b, here)

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References

Asdrubali P, Sorensen B, Yosha O (1996) Channels of interstate risk sharing: United States 1963-1990- The Quarterly Journal of Economics vol.111: 1081-1110

Darvas Z (2010a) Europe's role in global imbalances, G20 Monitor, Bruegel, http://www.bruegel.org/nc/blog/detail/article/45-europes-role-in-global-imbalances/

Darvas Z (2010b) The Euro Conundrum, Bruegel blog, http://www.bruegel.org/nc/blog/detail/article/230-the-euro-conundrum/

Darvas Z (2012) Intra-euro rebalancing is inevitable but insufficient, Bruegel Blog http://www.bruegel.org/publications/publication-detail/publication/747-intra-euro-rebalancing-is-inevitable-but-insufficient/

De Grauwe P (2010) A mechanism of self-destruction of the Eurozone- in Intraeconomics 6

European Economy (2012) Scoreboard for the surveillance of macroeconomic imbalances- Occasional Papers 92 February

Merler S, Pisani-Ferry J (2012) The simple macroeconomics of North and South in EMU Working Paper 2012/12, Bruegel

Claeys G, Darvas Z, Wolff G (2014) Benefits and Drawbacks of European Unemployment Insurance, Policy Brief 2014/06, Bruegel

European Council (2010) Strengthening Economic Governance in the EU, Report of the Taskforce to the European Council

Gianviti F, Krueger AO, Pisani-Ferry J, Sapir A, von Hagen J (2010) A European mechanism for sovereign debt crisis resolution: a proposal, Blueprint 10, Bruegel

Hallerberg M, Marzinotto B, Wolff G (2012) – On the effectiveness and legitimacy of EU economic policies- Bruegel Policy Brief n.4 November

Hansen A (1939) Economic progress and declining population growth- in The American Economic Review March pp.1-15

Kenen P (1969) The theory of optimum currency areas: an eclectic view, in R.A. Mundell and A.K.

Swoboda (eds.) Monetary problems in the international economy- Chicago University of Chicago University Press
Majocchi A, Rey M (1993) A special financial support scheme in economic and monetary union: Need and nature, in European Economy- Reports and Studies (5): 457-80
Marzinotto B, Sapir A, Wolff G (2011) 'What kind of fiscal union?', Policy Brief 2011/06, Bruegel
Merler S, Pisani-Ferry J (2012) Sudden stops in the euro area, Policy Contribution 2012/06, Bruegel
McKinnon R (1963) Optimum Currency Areas- in American Economic Review p.717-725
McKinnon R (1984) A new international standard for monetary stabilization. The MIT Press March
Mundell I (1961) A theory of Optimum Currency Area- in American Economic Review September: 657-665
Mundell R (1973) Uncommon arguments for common currencies, in Harry G. Johonson and Swoboda A. (eds.) The economics of common currencies. Proceedings of the Madrid Conference on Optimum Currency Areas Allen &Unwind LTD London
Pisani-Ferry J, Wolff G (2012) The fiscal implications of a banking union. Bruegel Policy Brief September
Sapir A (2005) Globalisation and the reform of European social models, Policy Contribution, Bruegel
Sapir A, Wolff G (2013) The neglected side of banking union: reshaping Europe's financial system
Sapir A, Wolff G Euro (2015) Area governance: what to reform and how to do it. Bruegel Policy Brief
Tresor-Economics (2014) An employment insurance scheme for the euro area- Minister de l'Economie du redressement productif et du numerique n.132
Summers L (2013) Speech at the 14th IMF Annual Research Conference in Honor of Stanley Fisher, November 18
Summers L (2014) US Economic Prospects: Secular Stagnation, Hysteresis, and Zero Lower Bound-Business Economics n.2
Verde A (2015) External imbalances: Models and historical experiences
Wolf M (2014) The shifts and the shocks. Allen Lane London 2014
Wolff G (2012) A budget for Europe's monetary union, in Policy Contribution, n.12 Bruegel
Wolff GB (2012) Arithmetic is absolute: euro area adjustment, Policy Contribution 2012/09, Bruegel

Figure 1 External imbalances in EMU (CA/GDP)

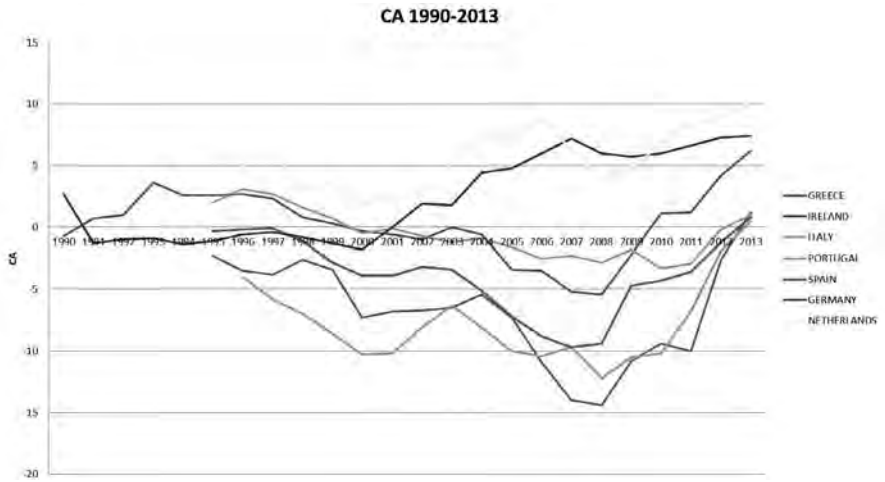


Figure 2 Unemployment rates (Y axis) and CA surpluses (X axis)

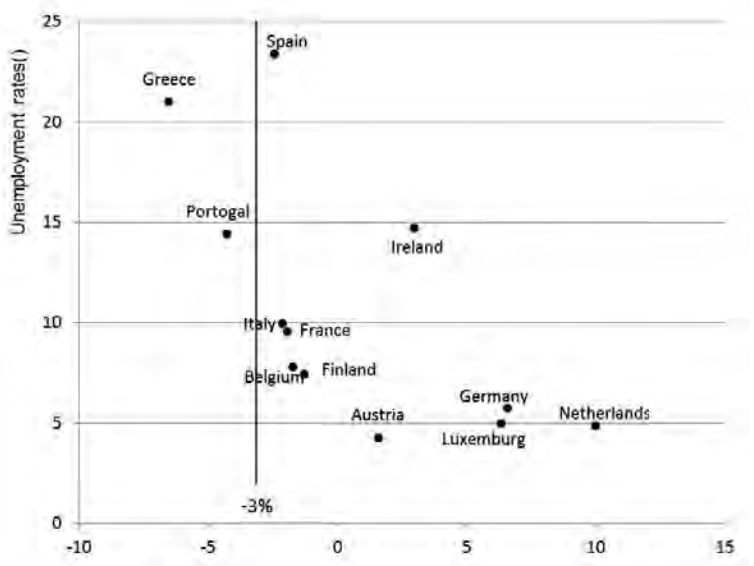


Figure 1a Current accounts and unemployment rates of CA deficit countries: average historical data

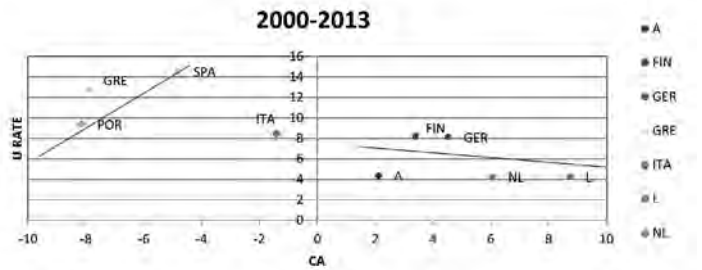


Figure 2a Current account and unemployment rates : theoretical scheme for CA deficit countries. Internal devaluation model. Goal : to improve CA through demand squeeze (lower Y) . Relationship between CA and U from 1 to 4

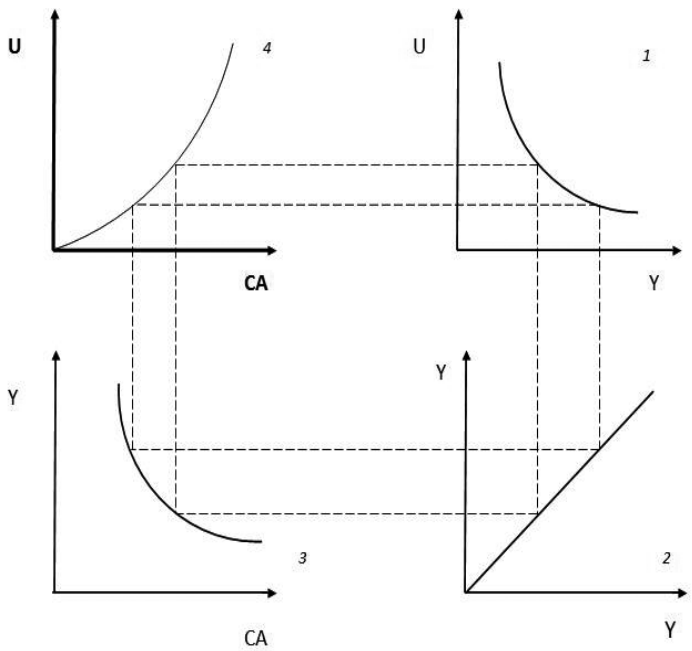


Figure 2b Current accounts and unemployment rates : theoretical scheme fordeficit countries. Real exchange rate devaluation. Goal: improvement of CA through RER devaluation- Relationship between CA and U from 1 to 4

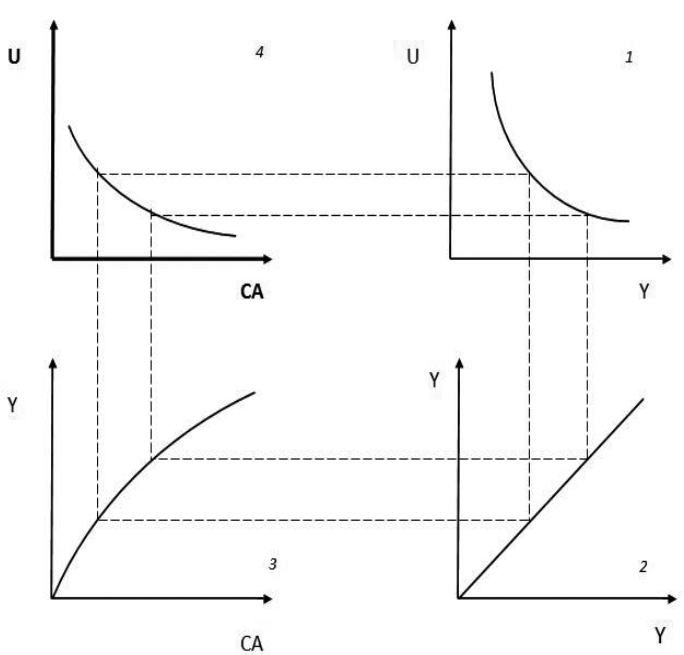
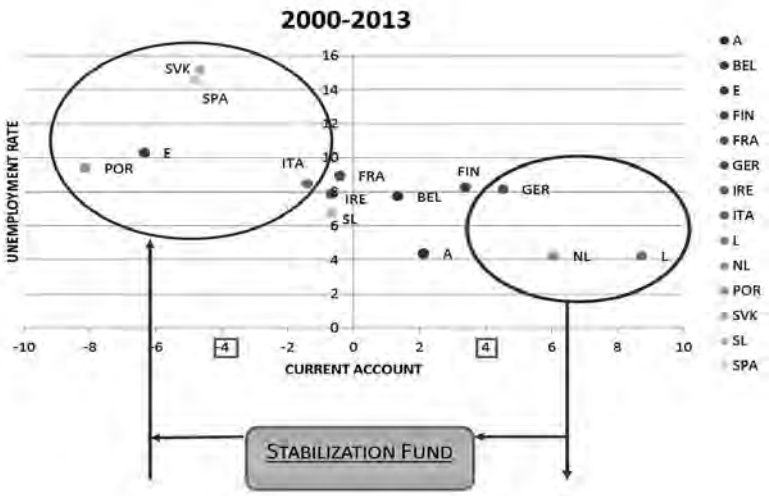


Figure 3 Stabilization Fund Mechanism. Current Account and Unemployment Rate 2000-2013



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PAPER

Public Euroscepticism Intensifying in Turkey

Can Büyükbay

Abstract The objective of this study is to present and explain Turkish public perceptions of the European Union and Europe. This study aims to give an overview of the changes in public opinion and then to evaluate it by considering data from different surveys. It adresses two questions. First, why and to what extent do people support the European Union, and what are the objections, worries and reservations about the EU? Secondly, how have these perceptions changed from 2002 to 2015? Consequently, it argues that public Euroscepticism Turkey develops as a response to the EU's country-specific conditionality.

Keywords Public Euroscepticism - European Integration - Turkish Politics Public Opinion - Eurobarometer

1. Introduction

Turkey's relationship with the European Union (EU) has a long history that reaches back to their application for associate membership in the European Economic Community (EEC) in July 1959 and the resulting Ankara Agreement in 1963. Accordingly, Turkey has been part of the European integration project from the very beginning of the process. Nevertheless, the process has been fiercely contested and slow, so that Turkey was only recognised by the EU as a candidate country at the Helsinki Summit on 11 December 1999. The recognition of Turkey's candidacy

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at the Helsinki Summit and the beginning of accession negotiations on 3 October 2005 constitute important turning points for Turkey's relations with the EU. EU membership has become a reality for the Turkish public and elites, and is seen as a means to further national democratisation, modernisation and economic development. These turning points accelerated both the socio-political transformation guided by the Copenhagen Criteria and also created critical attitudes towards the EU and European integration. Accordingly, the accession process has engendered both enthusiasm and criticism by domestic actors both at the state and civil society levels (Öniş 2003). Questions of loss of sovereignty, cultural and religious differences, past memories as well as the Cyprus and Armenian issues have emerged as important discussion points. The attitudes towards the EU and Europe have ranged in a continuum from happiness, consent, contentment and sober sentiments to rejection, denial and outright hatred. This is not surprising, as the Turkey-EU relationship is a story of up and downs, misunderstandings, prejudices and argumentative fallacies.

The perceived economic success during the AKP (Justice and Development Party) era has, from the party's coming to power in 2002 until today, generated an increasing self-confidence among conservative and Islamic groups and, in consequence, the discourse "Turkey has no further need for the EU" has become more dominant, especially after the European economy fell into its deepest recession since the 1930s. Political and civil society leaders began voicing doubts about the direction in which Europe is moving. The so-called "Turco-scepticism" in Europe among political leaders[1] and the public also created the impression that the EU would never accept Turkey as a member even if it fulfilled all the necessary criteria. Thus, Euroscepticism has grown, particularly in conservative and Islamist circles, due to a loss of trust in the EU, Turkey's increasingly active role in her geographical neighbourhood and its economic success standing in contrast to the economic crisis in the EU. Furthermore, religious and cultural arguments dominated the discussions about Turkey`s possible EU membership on both sides of the process. Statements made by EU leaders along with their unwillingness to speed up the process along with the AKP's tactics have been further complicated by the Cyprus problem, which has almost deadlocked the accession process. One major associated challenge was when the Republic of Cyprus took up the EU presidency in 2012. Turkey has refused to deal with the Cypriot president, and no chapters were opened during the second part of 2012. This slowed down the reform process, despite efforts such as the New Positive Agenda, which was launched in Ankara on 12 May 2012 by European Commissioner for Enlargement and Neighbourhood Policy Stefan Füle.

1 The former French President Nicolas Sarkozy and the German Chancellor Angela Merkel questioned Turkey`s EU membership and Europeanness on the grounds of geographical, historical, cultural and religious reasons.

The structure of this study is as follows. The literature review and theoretical approach are presented in the second part. After summing up the state of the research on Euroscepticism in theoretical and case-specific terms, the survey results will be presented. The conclusion brings together the arguments from the preceding parts, signifies new arguments and places the empirical findings in relation to the broader conceptual debates of Euroscepticism.

2. Euroscepticism

In existing studies in and of different countries, Euroscepticism is mainly analysed in terms of public opinion[2] (Niedermayer 1995; Eichenberg and Dalton 1993, 2007; Hooghe 2007; Hooghe and Marks 2004) or in terms of party politics (Taggart 1998, Hooghe et al 2004, Kopecky and Mudde 2002, Ray 1999, Szczerbiak and Taggart 2008a and 2008b). Gifford (2008), Hansen and Waever (2002), Ichijo and Spohn (2005), and Diez Medrano (2003) analysed the link between national identity and collective understandings of Europe. Another categorisation of the studies can be performed according to their geographical area. There are researchers who analysed attitudes in Western Europe (Carey 2002, Mclaren 2002, Gabel 1998) or focused on the CEECs countries using a more comparative perspective (Taggart and Szczerbiak 2004, Kopecky and Mudde 2002, Marks et al. 2006, Herzog and Tucker 2009). Hainsworth et al. (2004) analysed the Euroscepticism of the right of French politics as exemplified by elements of the extreme right, Front National, the Eurosceptic, Mouvement pour La France (founded in 1994 by its leader, Philippe de Villiers) and the broader Gaullist movement. This focused on the issues of extreme nationalism, the long history of nation-state building and imperialism. They conclude that for these right-wing groups, historical positions on the primacy of national unity, national sovereignty and the nation-state may lead to a deep distrust of supranational structures and institutions, and consequently opposition to the EU.[3]

In Turkey, most of the recent literature on Turkey-EU relations represents the first group and mainly involves two different approaches (see Monceau 2009: 99). The first is a historical approach, offering a chronology of Turkey-EU relations

2 After the ratification of the Maastricht Treaty, public opinion research has expanded and researchers have begun paying attention to economic considerations and problems over the public's national identity (Herzog and Tucker 2009). The public opinion surveys mainly focus on the influence of utilitarian factors in economic sense and on cultural or identity issues.

3 Turkey can quite be seen as similar to the French case in terms of the focus of Kemalist rhetoric on the primacy of the nation-state and national unity. A certain meaning of Euroscepticism is associated with Mustafa Kemal Atatürk as the leader of Turkish nation parallel to as in the association of the French Euroscepticism with another important leader in twentieth century politics: Charles de Gaulle.

from the 1963 Association Agreement to the official start of accession negations with the EU in 2005. The second is an institutional approach, examining the political and economic dynamics of Turkey's European integration. These approaches emphasise the difficulties and challenges that Turkey has faced in the course of European integration, the EU's expectation and Turkey's achievements in realising the Copenhagen criteria and the impact of reforms on the its political, economic and legal system. Nevertheless, examining the attitudes of the Turkish elite and public towards European integration will become a more important issue because of increasing Euroscepticism in Turkey. Analyses regarding the attitudes of domestic actors on Turkey's relations with the EU includes the roles of members of the Turkish Parliament (Mclaren and Müftüler-Bac 2003), military (Cizre 2004), political parties (Güneş-Ayata 2003, Avcı 2004, 2011a, b, Gülmez 2008), public opinion (Çarkoğlu 2003, Yılmaz 2003, Kentmen 2008), business associations (Atan 2004, Yankaya 2009, Eylemer and Taş 2007) and the trade unions (Yıldırım et al. 2008). Başak Taraktaş (2008) attempted to identify patterns of popular and party-based Euroscepticism in the CEECs and Turkey before 2002, and hypothesises that the particularity of the Turkish context is based the nature of the opposition to Turkish accession in Europe and the uncertain nature of the accession process. Başak Alpan (2010) examines the contested nature of the concept of 'Europe' by using the Laclau-Mouffean discourse analysis and concentrates on how discourses on 'Europe' contribute to a process of constructing political frontiers in Turkey. Hakan Yılmaz (2002, 2003) extensively studied public opinion towards the EU.

3. Origins, Definitions and Types of Euroscepticism

The term Euroscepticism (a combination of the terms 'Euro', meaning the European Union, and 'sceptic', meaning doubtful), emerged in the British political and journalistic context in the mid-1980s and has been characterised as "further contributing to a sense of the country's 'awkwardness' or 'otherness' in relation to a Continental European project of political and economic integration" (Harmsen and Spiering 2004:13). As a British concept, Euroscepticism was mainly interpreted as a phenomenon that opposes the Europeanisation of legislation and politics. In the domain of journalistic epistemology, it was first used in a 1985 article in *The Times*, in which it was used to refer to the 'anti-marketers' who were opposed to Britain joining the Common Market. It became popularised thanks to Margaret Thatcher's Bruges Speech at the College of Europe in 1988, in which she outlined an alternate vision for Europe and Britain (Leconte 2010:3).[4]

4 Euroscepticism was originally elite-driven. Two important landmarks in the history of the term are the Empty Chair Crisis of the 1960s by De Gaulle and Margaret Thatcher's Bruges Speech at the College of Europe.

Thatcher warned against the centralisation of political structures in the European Community and the concentration of power in Brussels, claiming that was an intent to diminish national identity. Furthermore, in the British context, the term was used to denounce anti-integrationist positions taken by members of the Labour and Conservative parties, and more broadly in emphasising the uniqueness of Britain vis-à-vis Continental Europe. In this case, doubts about EU institions are considered to be a sign of Euroscepticism. British Euroscepticism has a radical (or, in Taggart and Szczerbiak's terms, harder) meaning, although Euroscepticism can refer to all opinions critical of the EU in a harder or softer manner (Spiering 2004:130).

While early use of the term was limited to describing a specific British phenomenon, Euroscepticism spread to continental Europe in the early 1990s as part of the debate over the ratification of the Maastricht Treaty as an all-encompassing term mainly implying opposition to the EU. Accordingly, due to this as well as to the repercussions of Eastern enlargement, Euroscepticism became a general phenomenon throughout Europe and a variety of approaches to Euroscepticism have been developed by continental European scholars. The definitions range from outright rejection of European integration to soft reformist criticisms. As a political discourse, the rejection of the value of European integration primarily relied on identity claims based hostility to "otherness" (a polarisation between "us and them"). Moreover, harder versions of Euroscepticism suppose that cultural distinctiveness, national identity and integrity[5], and political sovereignty are distorted by the Europeanisation process, largely neglecting its economic and social benefits. To sum up, in the literature, Euroscepticism may denote a reaction against the current polity, to the EU's increasing competencies and supranational powers, to its widening and deepening processes or, alternatively, it can manifest itself as a fundamental opposition to European integration. The following excerpt aptly explains the penetration of the EU into the national context and its implications:

> *The emergence of a hegemonic great power or a new regional project poses a challenge to any nation state. At elite as well as popular levels a perceived genuineness, an established representation of the past, has to be reconciled with a new regional identity and culture…It might 'activate' dimensions of the nation's history that support or contradict the established self-understanding. (Malmborg and Strath 2002:13)*

At this point, it should be noted that the adaptation of the term Euroscepticism necessitates in the context of different countries an analysis of national political traditions and the history of European integration for that particular country (Harmsen and Spiering 2004). Hence, in order to describe the dynamics of Euroscepticism,

5 Euroscepticism has high tendency to be driven primarily by nationalist considerations. In its EU-related discourse, many actors use the language of nationalism and patriotism.

it is important to understand its context, discursive elements as well as its cultural, ideological and historical specifics.

The concept of Euroscepticism was introduced by Taggart (1998:366) into the scholarly context and defined as follows: "The idea of contingent or qualified opposition, as well as incorporating outright and unqualified opposition to the process of European integration." A broad definition that includes various positions was later developed and refined by Szczerbiak and Taggart, introducing the conceptulisation of Euroscepticism into hard and soft categories. Taggart and Szczerbiak (2004:3) defined hard Euroscepticism as an "outright rejection of the entire project of European political and economic integration and opposition to one's country joining or remaining a member of the EU." On the other hand, soft Euroscepticism is defined as: "where there is not a principled objection to European integration or EU membership but where concerns on one (or a number) of policy areas leads to the expression of qualified opposition to the EU, or where there is a sense that 'national interest' is currently at odds with the EU's trajectory" (Taggart and Szczerbiak 2004:6). Accordingly, Taggart and Szczerbiak's two-dimensional conceptual mapping of Euroscepticism enables us to differentiate between hard and soft manifestations of Euroscepticism. Soft Eurosceptic actors are opposed to particular aspects of the EU project and stand against complete withdrawal from the EU, whereas hard Eurosceptic actors mainly support decision making on the level of the nation-state and the weakening of the powers of the EU's political and administrative institutions. Ravny (2004) advocated analysing different degrees of soft and hard Euroscepticism by placing it on a continuum, and to think the magnitude of Euroscepticism in ordinal terms. Accordingly, he pays special attention to the differing degrees of soft and hard Euroscepticism on the basis of the number and relevance of EU policies that an actor opposes as well as the vehemence of the anti-EU rhetoric. By understanding Euroscepticism as opposition to the European integration project or to some of its aspects, he further differentiates between different degrees of strategically-driven and ideologically-driven Euroscepticism.

Returning to the original concept of Taggart (1998), who emphasises attitudes towards European integration, Kopecky and Mudde created a two-stage differentiation. To differentiate between the various forms of Euroscepticism, they rely on David Easton's ground-breaking differentiation of forms of support for political regimes and distinguish between diffuse and specific support for European integration. Diffuse support means support for the basic ideas of European integration. Specific support implies the practice of European integration. This refers to the current state of the EU. Accordingly, Kopecky and Mudde proposed a new typology. As illustrated in Table 1, Euroscepticism consists of two dimensions (Kopecky and Mudde 2002). First, the ideological dimension that encompasses support for European integration. This is categorized as "Europhiles" and "Europhobes". Europhiles

accept the principle idea of European integration while the Europhobes reject the basic idea of European integration. Secondly, the strategic dimension that deals with the acceptance of the EU being divided into EU-Optimists, who accept the EU as an institution and support the functioning of the EU, and the EU-Pessimists, who do not support the EU's current form and operation or even confront it critically. These two dimensions lead to a fourfold typology of actors according to their stance on European issues.

4. Public Euroscepticism in Turkey

When Turkey received candidate status at the Helsinki Summit in 1999, Turkish attitudes toward the project were quite positive. However, levels of approval and rejection of the European integration have not been constant in Turkey. Different opinion polls indicate that Turkish public approval of European integration has been continuously decreasing since 2004. This shift in public attitudes towards integration is an important turning point and it happens parallel to the slowing down of the accession process (Bardakçı 2007). This trend is confirmed by the findings of the Eurobarometer public opinion survey sponsored by the European Commission. Until 2004, a large number of Turks responded positively to the Eurobarometer trend question of whether membership is considered a "good thing" or a "bad thing". Since then, however, this rate of approval has dropped to a minimum level. Figure 1 shows the percentage of support for the EU, as operationalised in the Eurobarometer survey:

(Insert Figure 1, here)

The figure above clearly shows the downward trend of enthusiasm vis-à-vis the EU: In 2004, 71% of respondents viewed the EU membership as a good thing and 7% as a bad thing. In contrast, the Eurobarometer survey of Autumn 2010 indicates that 42% of Turks say that Turkey's membership would be a good thing (minus 29 points since Spring 2004), while 32% (plus 25 points since Spring 2004) consider that it would be a bad thing. The response to the question whether membership would have beneficial to one's country shows a similar trend. Figure 2 shows the downward trend of the positive answers:

(Insert Figure 2, here)

IIn Spring 2005, 68% of respondents considered EU membership to be beneficial, while in Autumn 2010 the percentage fell to 42% (-26%). One can observe small increases in the positive attitudes in some years, but it remains a fact that the rate fell to an all-time low in Autumn 2010. The Eurobarometer statistics thus reveal a downward trend in the percentage of positive answers. In a similar vein, we can observe a negative trend in the image of the EU in Turkey. Figure 3 illustrates this:

(Insert Figure 3, here)

By Autumn 2013, the positive image of the EU in Turkey had decreased to 20%, an all-time low. This finding shows a similar negative trend such as the other two graphics. However, in Spring 2014, we observe an increase in the positive image of the EU. This increase is related to the corruption allegations in domestic politics and decrease of the trust to domestic institutions.

In Autumn 2012, the respondents answered the question, what the EU does mean to them personally, with economic prosperity (26%) and freedom to travel, study and work anywhere in the EU (23%).[6] In order to comprehend the EU's image better, the Eurobarometer Autumn 2010 survey asked which words are appropriate to describe the EU.[7] As shown in the table there are differences between Turkey and the EU-27 countries. Whereas in Turkey "modern" describes the EU with a percentage of 77%, in the EU this percentage is 64%. The word "democratic" obtains the second highest percentage in Turkey at 58% and heads the table in the EU with 68%. Table 1 shows the words describing the EU in Turkey and the EU-27:

(Insert Table 1, here)

As in any other European country, in Turkey there is a high correlation between support for the EU and the level of knowledge about European integration. Therefore, the understanding of EU issues are crucial in diminishing Euroscepticism. In the Autumn 2010 Barometer, the respondents were asked to declare if a given statements was true or false.[8] At 38%, Turkey is well below the European average of 63%. It has the lowest score among the candidate and member countries surveyed. It can be summarised that among the Turkish public, we can find the lowest level of subjective and objective knowledge about the EU.[9]

In Turkey, only a minority of respondents trust the European Union. In Spring 2005, this percentage was 41%, and 18% in Autumn 2014. The Eurobarometer surveys indicate that the trust in the European Union did not increased after Turkey

6 Generally, the items 'economic prosperity', 'freedom to travel', 'study and work', 'democracy' and ' a stronger say in the world' top the list and obtained the highest scores before 2012. The negative item that has the highest percentage is 'the loss of cultural identity.

7 Please tell me for each of the following words if it describes very well, fairly well, fairly badly or very badly the idea that you might have of the European Union. Modern; Democratic; Protective; Inefficient; Technocratic.

8 For each of the following statements about the European Union could you please tell me whether you think it is true or false? The EU currently consists of 27 Member States; The Members of the European Parliament are directly elected by the citizens of each Member State; Switzerland is a member of the EU.

9 Other surveys also indicate that respondents' knowledge of the topics regarding EU membership is very low. More than 50% of Turks believe that they have the lowest possible level of knowledge on the issues (Carkoglu 2003:25).

obtained its candidacy status. The low level of trust is highly related with the belief of unfair treatment by the EU towards Turkey (Carkoglu 2003: 26). Figure 4 shows the declining trend in Turkey in comparison to EU-27 from 2005 to 2012:

(Insert Figure 4, here)

There are three main problems with the data obtained from the Eurobarometer surveys. The first is the relatively late inclusion of Turkey in the Eurobarometer survey (beginning in 2001). The second problem is the sampling due to the difficult conditions of data collection in Turkey. The third and most important problem with Eurobarometer surveys is the nature of questions. The questions are not well-prepared for an in-depth analysis of the Turkish public (Senyuva 2006). Hence, it would be necessary to show the results of surveys taken by Turkish political scientists to compare to the Eurobarometer findings. Below, I will briefly explain the most important public surveys in Turkey.

A public opinion survey conducted in May and June 2002 sponsored by the Turkish Economic and Social Studies Foundation (TESEV) examined the different bases of support for the EU and Euroscepticism in the Turkish public opinion. The researcher summarises the study's findings in the following excerpt:

> *Euroscepticism in Turkey tends to increase from higher to lower income groups, from higher to lower education levels, from more to less access to written information, from more to less familiarity with European countries and languages, from modern, urban and high-tech to traditional, rural and low-tech occupations, from a self-identification based on Republican citizenship to an ethnic and religious self-identification, from more to less association with Kurdish culture and identity, from lower to higher degrees of religiosity, from the left-wing to the right-wing of the ideological spectrum, from the support base of the secularist to the one of the Islamic- oriented political parties, from the support base of the centrist to the support base of the extremist political parties. (Yılmaz 2003:75)*

The study indicates that despite the overwhelming support for the EU in 2002 (64%), an equal part of the respondents expressed doubts and lack of confidence toward the EU (Yılmaz 2003: 1). Firstly, half of the respondents considered the EU as a Christian Club (49%) and think that the EU would never accept a Muslim country like Turkey joining, irrespective of Turkey's fulfilment of the Copenhagen Criteria (48%). Secondly, 62% of the respondents thought that the EU has treated Turkey unequally by imposing certain criteria on Turkey that are not part of the normal accession criteria. 61% of the respondents also said that Europeans do not understand Turkey and the Turks at all. Moreover, the public considers EU membership not a popular project, but a state one – driven by elites and the project of the secularist-centrist political establishment (Yılmaz 2003:59). The most interesting observation

from this research is that there at the time there were different forms of Euroscepticism but no Eurorejectionism, as every sub-group supported EU membership by a decisive majority and the Turkish public does not reject the concept of shared sovereignty with EU institutions. Yılmaz highlights the absence of the Eurorejectionism in contrast to strong Turcoscepticism:

> *The virtual absence of a meaningful Turkish Eurorejectionism strikingly contrasts with ever growing European exclusionism and outright rejectionism directed against Turkey. This European rejectionism targeting Turkey, which can be observed among both the elites as well as the common people of Europe, and which uses historical, geographical, civilizational, religious, cultural or political motives, stands in a dramatic contrast with the almost non-existent Turkish rejectionism aimed at Europe (Yılmaz 2003:77)*

Further research examined the Turkish public's fears, doubts and anxieties vis-à-vis Europe and the European Union, and defined the basic types of anxiety concerning Europe and European Union (Yılmaz 2003). These are listed as *historical anxiety* based on past fears, *exclusion anxiety* based on the fear of being excluded by Europe via double standards, *sovereignty anxiety* based on the fear of losing the national sovereignty, *religious anxiety* stemming from regarding the EU as a Christian Club, *separatism anxiety* based on the fear of the damage to national unity caused by the EU[10] and *moral anxiety* tied to the erosion of traditional values.[11]

Another study from 2002 investigated public opinion towards the EU with a focus on attitudes towards Europe, religiosity and faith, degree of nationalism, political preferences and conventional demographic characteristics. It employed a multivariate statistical analysis, showing that factors such as nationalistic attitudes, Euroscepticism, religiosity, anti-democratic attitudes led to low degree of support for EU membership. With the exception of nationalistic attitudes, these attitudinal indicators were found to be the most influential of all variables in the study and are the major sources for rejecting EU membership. Çarkoğlu explains the findings of the study in the following:

10 In a survey carried out by Istanbul's Bilgi University in 2006, a strikingly high number of respondents (52%) claimed that the EU tried to disintegrate Turkey.

11 Exclusion anxiety is based on the observation regarding double standards of the EU (61%) and that the EU will not accept Turkey as a member, even if Turkey satisfies all the necessary conditions (50%). Historical anxiety is manifested by respondents agreeing (40%) with the statement that the conditions of the EU are similar to the capitulation of the Ottoman Era agree or to the Sevres Treaty (30%). Sovereignty anxiety is manifested agreeing (53% of respondents) to the statement that the Turkish state will be brought to an end if Turkey does everything the EU asks her to do. Religious anxiety is based on the agreement (56%) with the statement that the EU is founded on Christian values. Separatism anxiety is manifested with the agreement (66%) to the statement that some EU countries supported the PKK. Moral anxiety is manifested on the agreement to the statements that joining the EU will lead to the corruption of young people's moral values (55%) and the corruption of religious values (54%) (Yılmaz 2003:81).

> *From a policy perspective, there exist many so-called "sensitive" issues that can easily be used by groups and parties who choose to oppose EU membership. These issues are more likely to be publicly expressed, and thus conveniently exploited, within a nationalistic, Euro-skeptic and religious rhetoric so as to make them more palatable to the largely EU-supportive Turkish public. The choice of the rhetoric adopted may significantly change the level of support for or against policy modifications necessary for the fulfilment of the Copenhagen Criteria. (Çarkoglu 2002:187)*

A more recent study analysing citizen support for EU membership based on pooled Eurobarometer data scrutinises three factors (Kentmen 2008): national identity, Islam and utilitarian considerations to explain individual support for Turkey's accession to the EU. Although research has shown that religion plays an important role in the attitudes of individuals towards the European Integration project,[12] interestingly, the study discovered that attitudes towards the EU do not vary with attachment to Islam. Rather, influence on national identity and macro-economic advantages play a role in shaping attitudes. The study points out that in the European integration process, which structures the socio-economic structure of a state, the public evaluates the integration process in terms of its influence on national identity and on its contributions to the Turkish national economy.

The findings of the study go against the widespread correlation of the concepts of Islam and anti-Westernism. In contrast, the study found out that religious individuals are not less supportive of the EU. Supporting this finding, Ihsan Dagi (2004) maintains that many individuals with strong attachment to Islam have supported European values such as democracy and liberalism as a response to state authority over religious freedom. Despite these empirical findings, it is oversimplifying to claim that religious attachments have no effect of attitudes of the EU. Moreover, in the integration process, individuals face a new social form through changes in the political and social structure, and they may hold to their religious values as a mechanism providing stability (Hagevi 2002; Nelsen et al. 2001).

Reasons for the Shift in Public Opinion

There are a variety of possible explanations for this negative shift in public opinion. Bardakci (2007) lists the underlying reasons: the dramatic decrease in public support for the EU is linked to the pessimistic attitude of major European countries, especially France and Germany, and to the negative European public opinion regarding Turkey's EU membership. Additionally, utilitarian motives, namely the

12 Research has mainly concentrated on the differences of being a Protestant or Catholic in attitudes towards the EU and European Integration, and contrasted the strengthening role of Protestantism on attachment to a nation in comparison to transnational Catholic culture (Hagevi 2002, Nelsen et al. 2001, Vollaard 2006).

perceived costs of accession, come into play. Some sectors, such as agriculture, would lose a significant amount of state subsidies in the EU accession process as part of measures to strengthen public finance.

Moreover, the EU's perceived double standards in the case of Cyprus is a vital factor. In the eyes of the Turkish public, the EU made them feel disillusioned as Brussels did not stick to its promise of lifting the isolation of Northern Cyprus if Turkish Cypriots supported the referendum for reunification based on the 2004 Annan Plan. Although an overwheliming majority of Turkish Cypriots supported the reunification plan, the embargos on and isolation of Northern Cyprus still remain intact. Additional dissatisfaction also stemmed from the rising demand in European circles that Turkey acknowledge Armenian genocide claims as almost a pre-requisite for Turkey's EU membership. These, along with the resumption of PKK attacks in 2005 despite the EU reforms and the nationalist reaction, which enlarged freedom of expression and the rights of minorities have all contributed to the dramatic rise of Euroscepticism among the Turkish public. That is the reason that during the post-accession process in 2007, Turkish popular support for the EU membership has declined to an all-time low (Bardakci 2007). As Bardakci (2007) argues, the decrease in public support for the EU paralleled the worsening of Turkey-EU relations at the official level. Surveys conducted by the European Commission and the German Marshall Fund[13] confirm this development. The public reacted negatively to this slowing down of the accession negations in 2006, and the image of the EU worsened in the eyes of the public (Bardakci 2007). In a similar vein, the 2007 Transatlantic Trend Survey indicates that the majority of Turks (54%) considered the EU global leadership undesirable which was part of the overall negative image of the EU. At this point, it should be underlined that the decline in trust of the EU on the part of the public opinion may lead to any political movement to use anti-EU rhetoric to mobilise their support base (Çarkoğlu 2007:2).

The Transatlantic Trend Survey's findings indicate similar results and enlarges the perspective on public opinion of the West.[14] In 2004, the survey indicated that Turkish respondents strongly support the EU membership (73%).[15] They identified the main reason for their support as the economic benefits of membership for Turkey (70% of respondents affirming). The report states that there is a high rate of "don't know" answers among Turkish respondents to different questions in the sur-

13 The Eurobarometer surveys and others show similar results. According to a study of the German Marshall Fund "the ratio of Turks who see membership in the EU as a 'good thing' fell from 73% in 2004 to 54% in 2006 and to 50% in 2008.

14 The Transatlantic Trend Survey is a comprehensive survey of European and American public opinion and is a project of the German Marshall Fund of the United States. Turkey was included for the first time in 2004.

15 The percentage of the respondents, who view EU membership as a good thing has declined from 73% in 2004 to 32% in 2008.

vey, indicating that Turkey's European identity remains a work in progress. Compared to 70% of EU members in 2005, only 41% of Turks wanted the EU to become a superpower like the United States. In 2006, the Transatlantic Trend Survey focused on the question of whether Turkey is turning away from the West. The survey came to the conclusion that Turkey has cooled toward Europe with a percentage of 45% (-7 points in comparison to 2004) and the United States with a percentage of 20% (-8 points in comparison to 2004), but has warmed toward Iran with 43% (+7 points in comparison to 2004).[16] Accordingly, Turkish politicians, notably Turkish foreign minister Abdullah Gül, warned that disappointment about the slowing down of the accession process could cause Turkey to drift away from the West and the EU (Transatlantic Trend Survey 2006:17). Gül stated that Turkey is jeopardising itself by turning away from its alliances in the West, and that "moderate liberal people [in Turkey] are becoming anti-American and anti-EU," particularly "young, dynamic, educated, and economically active people" (Financial Times 2006:11 cited in Transatlantic Survey 2006:19). Although the accession negations started on 3 October 2005, there is an unresolved conflict about the Cyprus issue and negative reactions of the European public and some European politicians against the Turkish accession.

Moreover, Turkish-American relations have worsened after the American's invasion of Iraq, and Turkey has repeatedly mentioned its objections to American policies in the Middle East. In 2007, the Transatlantic Trend Survey focussed on the issue of Turkey's relations with the West. In that year, accession negatiations with the EU worsened when the EU suspended eight of the thirty-five chapters in the negotiation framework and the negative attitude of the new French President Nicholas Sarkozy towards Turkey's EU Membership strengthened Euroscepticism in Turkey. The approval ratings of the Turkish people towards the United States have fallen to 11% in 2007 (-9% in comparison to 2006) and towards the EU 26%. The issue of Turkey has remained a matter for debate in EU politics and Turkey is considered more isolated than ever from West and East. In 2008, 55% of Turkish respondents agreed that Turkey has different values that are not really shared by the West. At the same time, US president Barack Obama said in an interview that if the EU pushed the Turkish accession sluggishly, "...this will inevitably influence the way Turkish people see Europe. If they do not feel themselves as part of the European family, it is natural that they [Turks] will search for other partners and allies" (Transatlantic Survey 2007). To conclude, Transatlantic Trends looked to see if Turkey was drifted away from the West and concluded that support for EU membership has fallen,

16 In 2008, Turkish warmth towards the European Union is 33% and towards the United States 14%, showing downward trend in feelings towards both since 2004.

criticism of the U.S. and the EU has continued, Turkish feelings towards the EU have cooled and finally that support for NATO has declined.

5. Conclusion

The negative trend of the public opinion as can be observed in the Eurobarometer and other surveys cannot simply be equated with hard-Euroscepticism or anti-Europeanism. Instead, growing Euroscepticism in Turkish public opinion is the result of the belief in the inequality of the accession process and growing distrust of the EU (Taraktaş 2008:254). Hence,by considering the EU-driven factors, this study argues that Euroscepticism in Turkey involves domestic reactions to the EU's conditionality on particular issues and the EU's extra conditions during the accession negotiations.

In studying Euroscepticism, core ideas of strategy or ideology have often been used to 'explain' why things happen. However, this study of public Euroscepticism of Turkey shows that once one is located in a specific instance it quickly becomes apparent that there are lots of other contextual factors at play. Accordingly, it can be questioned whether the same concepts and categories that we know of from Euroscepticism in member states are applicable to the candidate countries and Turkish case. This leads to the conclusion that we should supplement the traditional categories and resolve contradictions by using a contextual approach. Turkish Euroscepticism is multi-causal and is not only based on ideological or strategic factors but it involves also a reactionary aspect.

This study provides insights into the discourse about European Union and European integration that has been taking place in Turkish public opinion since 2002. By focusing on the surveys of public Euroscepticism in Turkey and international suveys, this study seeks to explain the main determinants of rising skepticism against EU accession. Consequently, it argues that public Euroscepticism in Turkey develops as a response to the EU's country-specific conditionality.

References

Alpan B (2010) Demarcating Political Frontiers in Turkey: Discourses and Europe-as-Hegemony after 1999. Unpublished PhD thesis, Department of Political Science, University of Birmingham, United Kingdom

Anderson C, Reichert MS (1996) Economic Benefits and Support for Membership in the EU: A Cross-National Analysis. Journal of Public Policy 15(3): 231–50

Atan S (2004) Europeanisation of Turkish Peak Business Organisations and Turkey-EU Relations. Pp. 100-121 in Turkey and European Integration: Accession Prospects and Issues, edited by Nergis Canefe and Mehmet Ugur. London and New York: Routledge

Avcı G (2004) Turkish Political Parties and the EU Discourse in the Post-Helsinki Period: A Case of Europeanization. Pp. 194-215 in: Turkey and European Integration: Accession Prospects and Issues, edited by Nergis Canefe and Mehmet Ugur. London and New York: Routledge

Avcı G (2011a) The Justice and Development Party and the EU: Political Pragmatism in a Changing Environment. South European Society and Politics 16(3): 409-421

Avcı G (2011b) The Nationalist Movement Party's Euroscepticism: Party Ideology Meets Strategy. South European Society and Politics 16(3): 435-447

Bardakçı M (2007) Decoding the Rise of Euroskepticism in Turkey. Insight Turkey, October issue

Çarkoglu A (2003) Who Wants Full Membership? Characteristics of Turkish Public Support for EU Membership. Turkish Studies 4(1): 171-194

Celep Ö (2011) The Republican People`s Party and Turkey`s EU Membership. South European Society and Politics 16(3): 423-434

Cizre Ü 2004) Problems of Democratic Governance of Civil-Military Relations in Turkey and the EU Enlargement Zone, European Journal of Political Research, Vol:43, No:1: 107-125

Diez Medrano J (2003) Framing Europe: Attitudes to European Integration in Germany, Spain and the United Kingdom. Princeton, NJ: Princeton University Press

Ehin P (2001) Determinants of Public Support for EU Membership: Data from the Baltic Countries. European Journal of Political Research 40: 31–56

Eichenberg RC, Dalton RJ (1993) Europeans and the European Community: The Dynamics of Public Support for European Integration, International Organization, 47(4): 507-534

Eichenberg RC, Dalton RJ (2007) Post-Maastricht Blues: The Transformation of Citizen Support for European Integration, 1973-(2007) Acta Politica 42(2/3): 128-152

Eurobarometer (2002-2014) European Commission. Retrieved 23 February 2015 (http://ec.europa.eu/public.opinion/index.en.htm).

Eylemer S, Taş I (2007) Pro-EU and Eurosceptic Circles in Turkey. Journal of Communist Studies and Transition Politics 23(4): 561-577

Franklin M, van der Eijk C, Marsh M (1995) Referendum Outcomes and Trust in Government: Public Support for Europe in the Wake of Maastricht. Pp. 101-118 in The Crisis of Representation in Europe, edited by Jack Hayward. London: Frank Cass.

Gabel M (1998) Interests and Integration: Market Liberalization, Public Opinion and European Union. Ann Arbor, MI: University of Michigan Press

Gabel M (1995) Public Support for European Integration: An Empirical Test of Five Theories. The Journal of Politics 60(2): 333-54

Gabel M, Palmer H (1995) Understanding Variation in Public Support for European Integration. European Journal of Political Research 27(1): 3–19

Gabel M, Whitten G (1997) Economic Conditions, Economic Perceptions, and Public Support for European Integration. Political Behaviour 19(1): 81–96

Güneş-Ayata A (2003) From Euro-scepticism to Turkey-scepticism: changing political attitudes on the European Union in Turkey.The Journal of Southern Europe and the Balkans 5(2): 205-222

Hagevi M (2002) Religiosity and Swedish Public Opinion on the European Union.Journal for the Scientific Study of Religion 41(4): 759–69

Hainsworth P, O'Brien C, Mitchell P (2004) The Politics of Euroscepticism on the French Right. Pp. 37-58 in Euroscepticism: Party Politics, National Identity and European Integration, edited by Robert Harmsen and Menno Spiering. European Studies 20. Amsterdam: Editions Rodopi.

Hansen L, Waever O (2002) European Integration and National Identity. The challenge of the Nordic States. London: Routledge

Harmsen R, Spiering ME (2004) Euroscepticism and the Evolution of European Political Debate. European Studies 20: 13-35

Herzog A, Tucker J (2009) The Dynamics of Support: The winners–losers gap in attitudes toward EU membership in post-communist countries.European Political Science Review 2(2): 235-267

Hobsbawm EJ (1990) Nations and Nationalism since 1780. Cambridge: Cambridge University Press

Hooghe L (2007) What Drives Euroskepticism? Party-Public Cueing, Ideology and Strategic Opportunity.European Union Politics 8(1): 5-12

Hooghe L, Marks G (2005) Calculation, Community and Cues. Public opinion and European Integration.European Union Politics 6 (4): 419-433

Hooghe L, Marks G, Wilson CJ (2004) Does left/right structure party positions on European integration?Pp. 120-140 in European Integration and Political Conflict, edited by Gary Marks and Marco R. Steenbergen. New York: Cambridge University Press

Hooghe L, Marks G (2004) Does Identity or Economic Rationality Drive Public Opinion on European Integration?PS: Political Science & Politics 37(3): 415–20

Kopecky P, Mudde C (2002) The Two Sides of Euroscepticism: Party Positions on European Integration in East Central Europe.European Union Politics 3(3): 297-326

Kritzinger S (2003) The Role of the Nation State on Individual Support for the European Union. European Union Politics 4(2): 219-241

Leconte C (2010) Understanding Euroscepticism.London. NP: Palgrave Macmillan.

Lipset SM, Stein R (1967) Cleavage Structures, Party Systems and Voter Alignments: An Introduction.In Party Systems and Voter Alignments: Crossnational Perspectives.ed. Seymour M. Lipset and Stein Rokkan. New York: Free Press

Madeley J, Sitter N (2005) Differential Euroscepticism among the Nordic Christian Parties: Protestantism or Protest?Pp. 1-26, collected conference papers from the annual meeting of the Norwegian Political Science Association, 11-13 August

Malmborg auf M, Strath B (2002) Introduction: The National Meanings of Europe.Pp. 1-18 in The Meaning of Europe, edited by Mikael auf Malmborg and Bo Strath. New York: Berg Publishers.

Marks G, Hooghe L, Nelson M, Edwards E (2006) Party Competition and European Integration in the East and West: Different Structure, Same Causality.Comparative Political Studies 39(2): 155-175

McLaren LM (2002) Public Support for the EU: Cost/benefit analysis of perceived threat?The Journal of Politics 64(2): 551-566

McLaren L, Müftüler-Bac M (2003) Turkish Parliamentarians' Perspectives on Turkey's Relations with the European Union.Pp. 195-218 in Turkey and European Union, Domestic Politics, Economic Integration and International Dynamics, edited by Ali Carkoglu and Barry Rubin. London: Frank Cass

Monceau N (2009) Turkish Elites' and Public Opinion's Attitudes Towards the European Union

within the Framework of Turkey's Full Membership Process to the European Union.Pp. 92-121 in Civil Society Dialogue between France and Turkey-Transcending Stereotypes, edited by Senem Aydin Düzgit and Ayhan Kaya. Istanbul: Bilgi Üniversitesi Press

Nelsen BF, Guth JL, Fraser CR (2001) Does Religion Matter? Christianity and Public Support for the European Union.European Union Politics 2(2): 191–217

Niedermayer O (1995) Trends and Contrasts.Pp. 53-72 in Public Opinion and Internationalized Governance, edited by Oskar Niedermayer and Richard Sinnott. New York: Oxford University Press

Öniş Z (2003) Domestic Politics, International Norms and Challenges to the State: Turkey-EU Relations in the Post Helsinki Era.Turkish Studies 4(1); and pp. 16-48 in Turkey and the European Union, edited by Ali Carkoglu and Barry Rubin. London and Portland: Frank Cass

Öniş Z, Yılmaz S (2009) Between Europeanization and Euro-Asianism: Foreign Policy Activism in Turkey During the AKP Era.Turkish Studies Special Issue: 1-31

Ray L (1999) Measuring Party Orientations Towards European Integration: Results from an Expert Survey.European Journal of Political Research 36(2): 283-306

Sitter N (2002) Opposing Europe: Euroscepticism, Opposition and Party Competition.SEI Working Paper No. 56, 1-29

Spiering M (2004) British Euroscepticism.Pp. 127-149 in Euroscepticism: Party Politics, National Identity and European Integration, edited by Richard Harmsen and Menno Spiering. Amsterdam: Rodopi

(2001) Polish Public Opinion: Explaining declining support for EU membership.Journal of Common Market Studies 39(1): 105-122

Szczerbiak A, Taggart P eds. (2008a) Opposing Europe? The Comparative Party Politics of Euroscepticism. Volume 1: Case Studies and Country Surveys. Oxford: Oxford University Press

Szczerbiak A, Taggart P eds. (2008b) Opposing Europe? The Comparative Party Politics of Euroscepticism. Volume 2: Comparative and Theoretical Perspectives. Oxford: Oxford University Press

Taggart P (1998) A Touchstone of Dissent: Eurosceptism in Contemporary Western European Party Systems.The European Journal of Political Research 33: 363-388

Taggart P, Szczerbiak A (2004) Theorising Party-Based Euroscepticism: Problems of Definition, Measurement and Causality.SEI Working Paper No. 69

Taraktaş B (2008) A Comparative Approach to Euroscepticism in Turkey and Eastern European Countries.Journal of Contemporary European Studies 16(2): 249-266

Transatlantic Trend Survey. 2006 and 2007. Key Findings.The German Marshall Fund of the United States. Retrieved 23 February 2014 (http://trends.gmfus.org/files/archived/doc/2006_english_key.pdf).

Venables AJ (2003) Winners and Losers from Regional Integration Agreements.Economic Journal 13(490): 747–61

Vetik R (2003) Elite versus People? Euroscepticism in Estonia.Cambridge Review of International Affairs 16(2): 257-271

Vetik R, Nimmerfelf G, Taru M (2006) Reactive Identity versus EU Integration.SMS 44(5): 1079-1102

Vollaard H (2006) Protestantism and Euro-Skepticism in the Netherlands.Perspectives on European Politics and Society 7(3): 276–97

Yankaya D (2009) The Europeanization of MÜSIAD: Political Opportunism, Economic Europeanization, Islamic Euroscepticism.European Journal of Turkish Studies 9(2009). Retrieved 14 April 2010 (http://ejts.revues.org/index3696.html).

Yavuz MH (2006) The role of the new bourgeoisie in the transformation of the Turkish Islamic movement.Pp. 1-22 in The Emergence of a New Turkey: Islam, Democracy and the AK Party, edited by M. Hakan Yavuz. Salt Lake City: University of Utah Press. 1-22

Yıldırım E (2008) Turkish Labour Confederations and Turkey›s Membership of the European Union.Economic and Industrial Democracy, Vol. 29, No. 3, 362-387

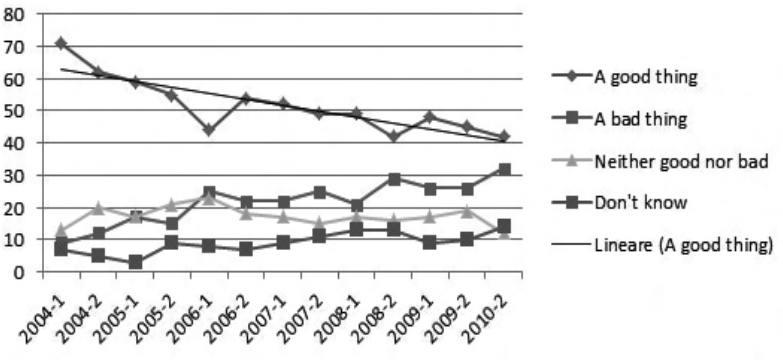
Yılmaz H (2002) Indicators of Eurosupportiveness and Euroscepticism in the Turkish Public Opinion.TESEV.Istanbul

Yılmaz H (2003) Euroscepticism in Turkey: Doubts, Anxieties and Fears of the Turkish Public Concerning Europe and the European Union.Open Society Institute. Istanbul

Yılmaz H (2006) Euroskeptizismus in der Türkei- Parteien, Eliten und öffentliche Meinung, 1995-2006.Pp. 215-245 in Die Türkei und Europa, edited by Gabriele Clemens. Berlin: Verlag LIT

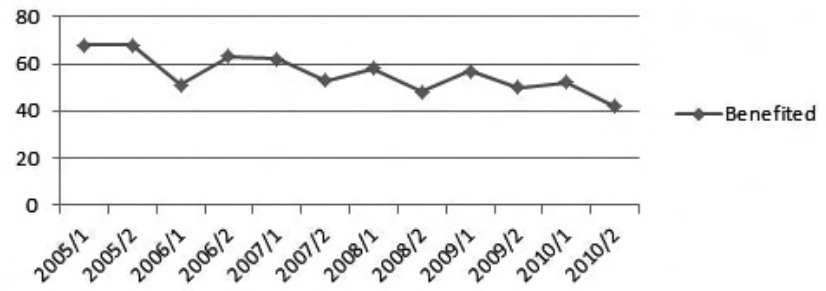
Yılmaz H (2011) Euroscepticism in Turkey: Parties, Elites and Public Opinion, in South European Society and Politics.iFirst Article, 1-24

Figure 1 Support for the EU: Generally speaking, do you think that (our country)'s membership of the European Union would be…?



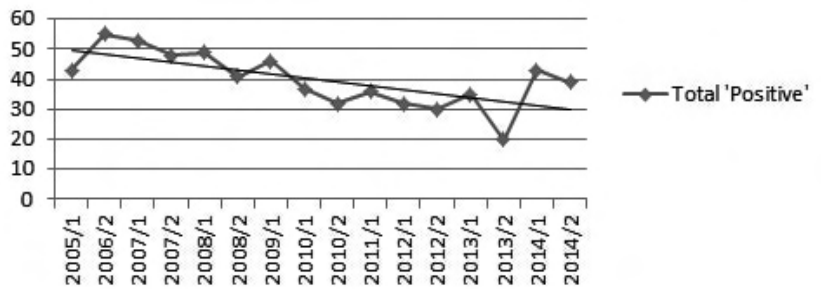
Source: Eurobarometer (2004, 2005, 2006, 2007, 2008, 2009, 2010)

Figure 2 Benefits of the EU membership: Taking everything into account, would you say that Turkey has/would have on balance benefited or not from being a member of the European Union?



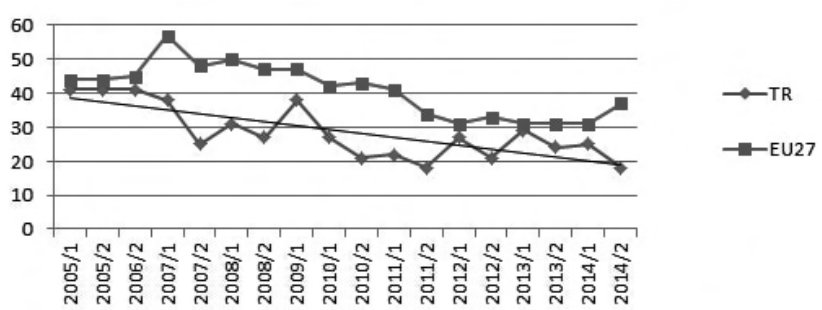
Source: Eurobarometer (2005, 2006, 2007, 2008, 2009, 2010)

Figure 3 Image of the EU: In general, does the European Union conjure up for you a very positive, fairly positive, neutral, fairly negative or very negative image?



Source: Eurobarometer (2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012,2013,2014)

Figure 4 Trust in the EU



Source: Eurobarometer (2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012,2013,2014)

Table 3 Words describing the image of the EU in Turkey and the EU-27

	Turkey	EU-27
Modern	77%	64%
Democratic	58%	68%
Protective	45%	54%
Inefficient	39%	42%
Technocratic	42%	47%

Source: Eurobarometer, Autumn 2010

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PAPER

Does Too Much Work Hamper Innovation? Evidence for Diminishing Returns of Work Hours for Patent Grants

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Abstract This study suggests that individual time is an important factor that needs to be considered in innovation research. We define two types of time: work time and free time. We find that work time has a positive but diminishing effect on innovative output such that after a certain point the innovation-enhancing role of work time is taken over by individual free time. Using a sample of OECD countries and Russia covering the period 2000-2011, we estimate a quadratic relationship between work time and per capita innovative output. For a hypothetical economy that has no other holidays but weekends, we estimate that individuals should not work more than about 6.6 hours a day for maximizing innovative output. We also present a categorization of countries based on their innovative output and work hours that may kindle interest for certain case-specific future research.

Keywords Innovation – Patents - Working Hours – Time - Neo-Capital Theories - Network Failures

JEL Classification O30 - O31- J08 - J22 - M5

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1. Introduction

As narrated by Vitruvius, 2,200 years ago[1] Archimedes had spent a long time trying to figure out a definitive answer to clear the suspicion of King Hieron II of Syracuse that whether a jeweller substituted some of the gold to be used in his crown for a cheaper metal like silver. The answer came to Archimedes in a bath while observing water displacement and he immediately hopped out and ran onto the streets naked shouting 'Eureka! Eureka!'. Many centuries later, a close friend of Sir Isaac Newton, an antiquarian called William Stukeley, recalls: "after dinner, the weather being warm, we went into the garden, and drank thea [sic] under the shade of some apple-trees [sic] ... amidst other discourse, he told me, he was just in the same situation as when formerly, the notion of gravitation came into his mind."[2] And more recently, while relaxing in a California basement, Steve Wozniak realized that a combination of computer circuitry, a typewriter keyboard and video screen was possible (Wozniak, 2006). Reviewed by Davis et al. (2013), "Many companies, such as Google, provide employees with free time for their own pet projects." However, Armbruster (1989), Elsbach and Hargadon (2006) indicate that "...corporate programs that give employees the opportunity for unstructured free time do not necessarily enhance creativity." With respect to temporal structures, greater encouragement provided by companies for developing free time ideas and incorporating a free, leisure time element into their strategies consist of bootlegging (e.g., Augsdorfer, 2008), brainstorming (e.g., Litchfield, 2009), hacking (Lakhani and Wolf, 2005), and open source invention (Jeppesen and Lakhani, 2010).

This study is structured as follows: in Section 2 we provide a literature review indicating the theoretical and practical need for analysing the working hours dimension with respect to the presence of varieties of imperfections in neo-capital formation processes and related governance failures in agent-based networks. The data and a descriptive analysis are presented in Section 3. Section 4 covers the empirical approach and elaborates on the estimation results. Finally, Section 5 discusses the research implications and future perspectives.

2. Theoretical background and literature review

Within the contexts of firms, research labs, universities, or systems of national/regional innovation, scientific and technological innovations are being realized ultimately by the human agent. The evolutionary passage from individual inventors to research and technology development teams as groups of human agents is dis-

1 https://www.math.nyu.edu/~crorres/Archimedes/Crown/Vitruvius.html retrieved on 1 August 2014.

2 http://www.newtonproject.sussex.ac.uk/view/texts/diplomatic/OTHE00001 retrieved on 1 August 2014.

cussed by Schumpeter with respect to the shift in the institutionalization processes and structures of the locus of innovation after the World War II.[3] In this evolutionary and institutional regard, Winter and Nelson (1982) described routines of innovation by big firms in generating technological innovations, and detailed the features of national systems of innovation with comparative analysis (Nelson, 1993). The stock and flow of ideas and interests (in terms of data, information, knowledge, and technology) among people, enterprises and institutions as nodes which are linked to each other by complex set of relationships, financial and discursive ties and interactions, simply forming networks, constituted the idea and the interest that the locus of innovation is embedded in networks and thus, in networking other than solely being dependent on hierarchies and/or markets (Powell, 1990). Granovetter (1973) and Granovetter (1983) developed and discussed the nature of these links, being strong and/or weak ties, for exploitative and explorative activities of the firms, and concluded on the significance of the strength of weak ties for explorative activities in these networks. Turkeli and Wintjes (2014) supersede the special-case systems of innovation (e.g. technological, sectoral, national systems of innovation) by describing the societal system of innovation that concentrates on the interactions amongst these special-case systems of innovation from the perspective of multiplex networks, and stress the importance of these multi-domain and multi-level potentials that are activated by organizing societal synergies between "social participative creativity" and "economic innovative efficiency." In conjunction to these assessments of systems and networks of innovation, it is indeed relevant to discuss the agent-based extensions to the classical capital approach, namely the neo-capital approaches in terms of human capital, social capital and cultural capital (Lin, 1999). Lin (1999) reviews[4] and describes human capital (accumulation of surplus value by labourers) and social capital (access and use of resources embedded in social networks) as investments. These investments are in technical skills, knowledge, social networks and mutual recognition and acknowledgement at the group level. Capital as investment in the production and circulation of commodities is then of relevance to only the classical capital approach. Other than human and social capital, cultural capital (reproduction of dominant symbols, meanings, and values) is assessed via the internalization or misrecognition of dominant values where solidarity and reproduction of the group form its social capital.

Systems of innovation theories and varieties of neo-capital together provide a fruitful ground to conduct agent-based (e.g. human capital and entrepreneurs) yet

3 For example, from banker(s)-financed individual inventor(s) (Mark I) to bank- and/or government-funded research teams of big firms (Mark II) - (Schumpeter, 2013).

4 These neo-capital theories are based on the works of Schultz (1961), Becker (1964), Putnam (1995), Coleman (1988), Burt (2000), Bourdieu (1977), Lin and Smith (1998), Marsden (1988) and Sprengers et al. (1988). Classical theory is of Marx (1909), please refer to Lin (1999) for additional works of these authors.

aggregate-level analyses (e.g. group networks, regional, and national level analyses). This actor-structure interactive approach enables us to analyse the underlying mechanisms of how capital -not necessarily as only classical investments in the production and circulation of commodities, but also as investments in technical skill and knowledge, social networks, mutual cognition, internalization or misrecognition of dominant symbols, meanings, and values- might contribute into our understanding of structuration of innovativeness, and innovation.

At the individual level, similar to the continual construction of human capital, time is a requirement for the re-investment in technical skills and knowledge due to varieties of deterioration in the processes of continual exploitation and exploration of the best and next social capital possibilities and cultural capital schemes. Investment in these social networks, repetitive participatory presence and practices leading potentially to mutual trust, recognition and acknowledgement (which in turn enable further access and use of resources embedded in these social networks) requires time. The internalization or even misrecognition of dominant symbols, meanings, and values via discussions, bargaining, negotiations, self-reflections and decision-making require time as well. The conditions under which these time requirements might have already been sufficiently incorporated into the official working hours would have necessitated that the source of innovation such as ideas, costs, knowledge as resource, and options were perfectly internal to the firm.[5] However, all of the three neo-capital varieties intrinsically carry imperfections: a continuing need for time in order to participate into continual formation and update of varieties of neo-capital does exist at the individual level. For instance, attending to a professional training programme to achieve a certificate (human capital), attending to a professional networking workshop of industry-universitygovernment organizations in order to learn the conditions of use or access to resources, exchange tacit ideas (social capital), or attending to a visionary public hearing on the policy agenda that covers until 2050 in order to see if a firm recognizes or does not recognize the dominant values, meanings, and/or symbols for innovation (cultural capital). The evidence of the reliance upon external sources, knowledge, and actors with open boundaries in order to develop and commercialize inventions is empirically observed (Arora et al., 2014). In this regard, Arora et al. (2014) states that "this extensive reliance upon outside sources for invention also suggests that understanding the factors that condition the extramural supply of inventions to innovators is crucial to understanding the determinants of the rate and direction of innovative activity." Similarly, other than government or market failures, we can stress the potential of networking imperfections and governance failures (Jessop, 1999) due to these neo-

5 A firm that has non-deteriorating human capital with perfect access and use of resources external to the firm embedded in social networks, with an archetypical level of fixed internalization or misrecognition of the dominant values in a static business environment supported via flawless finance and faultless discourse under a techno-economic policy.

capital related weaknesses and needs of participating agents. The overall reflection of this situation to the average working hours could basically follow two paths: (1) officially working more in terms of time in order to invest in networks and interact with other human, social and cultural groups due to the boundedness of individual human, social and cultural capital to cope with imperfection and deterioration. This could basically be the inhumane, asocial and uncultured re-formation and update of human, social and cultural capital that could create innovations without a human face. And (2) officially working less in terms of time in order to create either more work-related free time to invest in varieties of neo-capital in an every-day passage to leisure time, or leisure time, whereas even leisure time has its significant contribution to innovativeness (Davis et al., 2013). Therefore, we hypothesize that a trade-off exists between work time and free time with respect to innovative output which we empirically test in Section 4.

3. Data and descriptive analysis

Our data are from the statistics published by the Organization for Economic Co-operation and Development (OECD), World Intellectual Property Organization (WIPO), and The World Bank (WB). The period covered is the years 2000 through 2011. Our initial sample consisted of thirty-four OECD countries and Russia. We have imputed a relatively small number of non-consecutive missing values for certain variables. However, due to a large amount of missing data for certain countries, our sample was reduced to twenty-seven countries listed in Table A.1 in the appendix. The variables used in this study and their definitions are presented in Table 1 and the associated descriptive statistics are in Table 2. There is a large amount of variation in the variable *Patents granted*. As will be discussed in Section 4, this variable enters our model as the dependent variable in per capita terms, and *Hours worked* is our main explanatory variable of interest. We plot these two variables using the z-scores of their averages over time for each country in Figure 1. At a first glance to Figure 1, we observe that while the distribution of the z-scores of average hours worked is close to normal, the distribution of the z-score of average patents per capita is highly skewed: most countries have below average per capita patent grants (i.e. they are under the horizontal line). This figure also groups the countries into four categories, represented by the four quadrants: those that have higher than average work hours and higher than average patent grants per capita (four countries in quadrant 1), those that are below average in both indicators (thirteen countries in quadrant 3), those that have less than average work hours but have more than average patents per capita (two countries in quadrant 2), and finally the countries that have more than average work hours but still have less than average per capita patent grants (eight countries in quadrant 4). There are some additional interesting implications of Figure 1. A straightforward expectation would be that countries in which

individuals work more on average should produce more innovative output in terms of patents per capita. This would imply that almost all countries would be grouped in quadrants 1 and 3. However, we observe that a large number of countries have more than average work hours but do not have higher than average patent grants per capita. Leaving out a possible outlier, Republic of Korea, we have a visual hint that too much work hours may actually have an adverse effect on innovative output. This observation also implies that the relationship between work hours and innovation may not be linear. That is, rather than a constant returns to work hours on innovation, considering a relationship characterized by diminishing returns could be of interest. We further elaborate on this view and test the relevant hypothesis in Section 4. We also see in Figure 1 that countries that have less than average patent grants per capita are predominantly located in Europe. Moreover, among these countries, the ones that have higher work hours but less per capita patents are mostly located in Eastern Europe while those that have less than average work hours are in Western Europe. The variation in the ln total number of granted patents and work hours are presented in Figure 2 which also ranks the countries by these two variables. Republic of Korea ranks high in both total patent grants and work hours, in line with Figure 1. A roughly S-shaped curve resembling a normal distribution is visible for *ln Patents granted*. For *ln Hours*, Republic of Korea and Mexico are at the top of the ranking. This is an interesting observation as in per capita terms, Republic of Korea has the highest patents grants while Mexico is one of the countries with the least patent grants per capita. However, in total terms, Mexico ranks on the top half as sen in the left-hand-side part of Figure 2. To visualize how innovative output evolved over time, Figure 3 plots the average patents per 1000 people for the above identified four country categories over the period 2000-2011. We observe that in the recent years, the economies what "work less" but have higher per capita patents, have surpassed their peers who "work more" in terms of innovative output.

(Insert Table 1-2, here)

(Insert Figure 1,2,3)

4. The model and empirical results

We build our empirical specification based on the framework of Jones (1995) where in an economy, the change in knowledge Ȧ is defined as:

$$\dot{A} = \delta L_A A^{\emptyset} l^{(\lambda-1)} \qquad (1)$$

where LA is the number of people searching for new knowledge and ideas, A is the existing knowledge (or productivity), lA represents innovation-reducing externalities created by overlaps and duplications in the research and development (R&D)

process, and δ is the "arrival rate" of innovation (i.e.the rate of new idea generation of the R&D process). The parameter Ø represents the external returns on existing knowledge such that if Ø < 0 innovation decreases in A. In other words, the more the stock of existing knowledge in an economy, the harder it is to produce new knowledge. Alternatively, Ø > 0 would mean the opposite (that there are positive external returns to A). Finally, in the case where the production of new knowledge is independent of the existing knowledge in an economy, then Ø = 0. The parameter λ measures the share of duplication externalities such that $0 < \lambda < 1$ and $\lambda = 1$ would imply that such externalities do not exist.

In our adaptation of the Jones (1995) model, we argue for the augmentation of innovation-oriented labour LA by individual time spent on labour activity: more work will set the ground for greater creativity which may result in increased innovative output. On the other hand, we argue that this proposed increasing returns on work time is of diminishing nature: after a certain amount of work time, *free time* will take on the role of creativity-enhancing individual time. However, too much of either these two types of time would be undesirable: considering two extremes, a person unemployed for a long-term will be increasingly distanced from markets and will have harder time to assess their needs. Such an individual will also have less access to experience, training, and concentration offered in a work environment. On the other hand, a person that almost has no leisure time, will be mentally and/or physically tired, will not have access to non-work related social engagements which can be creativity-enhancing, and will have less opportunity to think outside the structural limits required by his or her work.

We hypothesize that there exists a balance point between work time and free time which would maximize the creativity required for generating innovative ideas (i.e. a point were the two types of time exchange roles). This motivates us to define the *time-augmented labour* term as $\hat{L}_A$, such that $\hat{L}_A = L_A W^{\alpha}$ where W is the amount of average work time and $0 < \alpha < 1$. After the inclusion of this term, the log-linearized form of 1 is:

$$\ln(A)=\ln(\delta)+\ln(\hat{L}_A)+\alpha \ln(W)+\phi \ln(A)+(\lambda-1)\ln(l) \qquad (2)$$

and subtracting $\ln(\hat{L}_A)$ from both sides yields:

$$\ln(\dot{A}/L_A)=\ln(\delta)+\alpha \ln(W)+\phi \ln(A)+(\lambda-1)\ln(l)$$

While our empirical specification is based on the theoretical framework of 3, it is not a one-to-one representation of this equation: we represent the diminishing returns proposed by α in the empirical model by representing αln(W) by a quadratic term as $\beta_1 \ln Hours+\beta_2(\ln Hours)^2$ in our empirical model where Hours represents W and is the average work hours per worker as defined in Table 2.

According to Furman et al. (2002), the per capita GDP of a country "captures the ability of a country to translate its knowledge stock into a realized state of economic development" and therefore, "yields an aggregate control for a country's technological sophistication." Following this view, we proxy the previous stock of knowledge, A, by the level of GDP per capita while the flow of per capita innovation $\dot{A}/L_A$ is measured by the number of patents granted per capita. Even though this measure could be imperfect as not all innovations may be patented and strategic patenting may be present[6], the number of patents is a commonly used measure in the innovation literature to represent innovative output (Cohen et al., 2000).

It is important to emphasize at this point that our variables are measured as country aggregates. As will be discussed in Section 5, a more specific data set such as industry specific measures may provide certain advantages. However, we argue that positive externalities arising from social interactions are best-represented using country aggregate measures. For instance, individuals employed in the aerospace industry may leave work earlier, but if their counterparts in the textile industry are still at work, both groups will be deprived of a potentially creative informal interaction which could perhaps lead to a discussion on a topic such as the materials used in producing pilot or astronaut suits. Therefore, while certain industries may traditionally be more innovative, they may still rely to positive externalities from less innovative sectors to some extent.

In order to control for the possible higher share of patent-seeking individuals involved in the R&D related activities, we control for the relative size of R&D activities in an economy by including the ratio of gross domestic R&D expenditure to GDP. The inclusion of *R&D to GDP ratio* also may help cope with a potential omitted variable bias: if R&D related activities are typically associated with less working time than non-R&D related ones, then patent grants per capita would be high for certain countries not because they have more free time, but because they are engaged in relatively more R&D activities, which in turn allow for more free-time by nature. While this mechanism need not be true in practice, we control for the relative size of the R&D related activities in a country also for the purpose of dealing with this potential issue.

The terms δ and l are implicitly included in our model. In addition to *R&D to GDP ratio*, we include the ratio of people between the ages twenty and thirty-four who are enrolled in tertiary education, and electricity consumption per capita. *R&D to GDP ratio* and *Tertiary ratio* account for the human capital that can influence the arrival rate δ. On the other hand, as human capital needs to rely on technological capital stock, we aim to measure the arrival rate enhancing non-human capital with

6 Such as patents that are created by individuals, yet not only owned by individuals but also by firms or organizations, institutions (e.g. university-owned patents, university-invented patents of firms, patents of firms, patents of public research organizations) (Verspagen, 2006; Crespi et al., 2010).

Electric consumption per capita. Finally, we expect that the negative duplication or overlap externalities defined by Jones (1995) are more likely to be present the larger innovation oriented activities exist in an economy. Therefore, *R&D to GDP ratio* and *Tertiary ratio* are also expected to account for these externalities.

Finally, as in Furman and Hayes (2004) and Krammer (2009) we allow for a two-year time lag between factors that influence new idea generation and the actual registration of new knowledge such that the dependent variable is measured at time t+2. As a result, our empirical specification takes the following form:

$$\ln(\text{Patents per capita})_{(i,t+2)} = \gamma + \beta_1(\ln\text{Hours})_{(i,t)} + \beta_2(\ln\text{Hours})^2_{(i,t)} + \beta_3 \ln(\text{GDP per cap})_{(i,t)} + \beta_4 \ln(\text{Electric cons.per cap})_{(i,t)} + \beta_5(\text{Tertiary ratio})_{(i,t)} + \beta_6(\text{R\&D to GDP ratio})_{(i,t)} + e_{(i,t)} \quad (3)$$

where e_{it} is the error term. We estimate this model using country specific fixed and random effects estimation together with the inclusion of year dummies.

Our estimation results are presented in Table 3. While both models find the expected signs on the two components of the quadratic term representing work hours, only the in fixed effects (FE) model the quadratic specification is jointly significant with an F-test p-value of 0.0255. A Hausman test of fixed versus random effects yield a p-value of 0.0021, suggesting the use of a fixed effects specification. Therefore, we concentrate on the results suggested by the FE model.

The coefficients on lnHours and $(\ln \text{Hours})^2$ estimated by the FE model in the first column of Table 3 suggest that in an inverse U-shaped relationship exists between ln Hours and $\ln(\text{Patents per capita})_{i,t+2}$ with a maximum at lnHours $\approx$ 7.45. For a hypothetical economy which does not have any other holidays other than weekends (i.e. with approximately 260 business days in a year) this value corresponds to about 6.6 hours per day per working persons. Therefore, in such an economy, individuals seeking new ideas would be expected to be more innovative if they work up to 6.6 hours a day. While the innovativeness of these individuals would increase as they work more until this point, their innovativeness is expected to decline if they work further past this estimated maximum work hours. Sufficiently long work hours could even cause individuals to be less innovative compared to amounts of work hours that are below 6.6. This estimated maximum work hours depends on how many work days are in a given year, therefore is increasing in non-work days.

Figure 4 where ln Hours and ln(Patents per capita)i,t+2 are plotted visualizes this result. The corresponding value for each country for the given years in the sample are represented with point markers which show the distribution of the data and the country groups. The black curve is the predicted relationship between work hours and patent grants per capita estimated by the FE model, with a maximum at 6.6. The colored lines represent the same relationships estimated by cross-sectional

Ordinary Least Squares (OLS) estimations for each year using the same set of explanatory variables.[7] [8]

We do not observe significant coefficient estimates on the remaining explanatory variables in our model. Only in the random effects model, ln Electric consumption per capita yields a significant coefficient estimate.

These non-significance of estimates on the variables that are expected to play an innovation-enhancing role could be due to the previously discussed duplication or overlap externalities which may have offset the expected effects. It could also be that given the profiles of the countries included in our sample[9], the variation in these variables do not explain the differences in innovative output and only variations in work hours determine these differences. The correlation matrix of the variables used in the empirical estimation is presented in Table A.2 for exploring possible near-perfect collinearity among the regressors. We do not expect such near-perfect multicollinearity as the strongest observed correlation is about 0.7 and is between *ln Electricity cons. per cap.* and *ln GDP per capita*.

(Insert Table 3, here)

(Insert Figure 4, here)

5. Concluding remarks

This study has suggested the inclusion of individual work time in the knowledge production function such that labour is represented in a time-augmented manner. Additionally, we have hypothesized that work time yields diminishing returns for innovation. We observe that after a maximum point, free time, as opposed to work time, assumes the innovation enhancing role. Based on a sample consisting of only upper-middle and upper income economies, we estimated that if an economy has about 260 business days, this estimated maximum corresponds to about 6.6 work hours per day. Our research tested the hypothesis under question in aggregate terms. Innovation ultimately happens in an individual's brain, and factors such as creativity, motivation, tiredness, and interactions with other individuals are closely related to individual time. We advocate that future research is needed in order to further explore the relationship between time and innovation which we have uncovered in this study.

7 In the yearly cross-sectional estimations, the outlier Republic of Korea is left out.

8 The OLS predicted curves are smoothed by estimating a fractional polynomial using ln Hours and the predicted values of $\ln(\text{Patents per capita})_{i,t+2}$.

9 Our sample does not include countries that are classified as lower-middle or low income economies as of the completion date of this study according to the World Bank classification at http://data.worldbank.org/about/country-and-lending-groups#Upper_middle_income retrieved on 1 August 2014.

Research using industry level data, urban level spatial units, and firm level survey data together with country-specific case studies could shed more light on how the work time - free time balance can be thought of in relation to achieve higher innovativeness. Finally, our descriptive analysis suggested a categorization method of economies based on their innovative outputs and work hours. This categorization could be of interest for future case studies as it can form a basis for country-comparative research framework.

References

Armbruster BB (1989) Metacognition in creativity. In Handbook of creativity, pages 177–182. Springer

Arora A, Cohen WM, Walsh JP (2014) The acquisition and commercialization of invention in American manufacturing: Incidence and impact. Technical report, National Bureau of Economic Research

Augsdorfer P (2008) Managing the unmanageable. Research-Technology Management, 51(4):41–47

Becker GS (1964) Human capital: a theoretical analysis with special reference to education

National Bureau for Economic Research, Columbia University Press, New York and London

Bourdieu P (1977) Outline of a Theory of Practice, volume 16. Cambridge University press

Burt RS (2000) The network structure of social capital. Research in organizational behavior, 22:345–423

Cohen WM, Nelson RR, Walsh JP (2000) Protecting their intellectual assets: Appropriability conditions and why US manufacturing firms patent (or not). Technical report, National Bureau of Economic Research

Coleman JS (1988) Social capital in the creation of human capital. American journal of sociology, pages S95–S120

Crespi GA, Geuna A, Nomaler O, Verspagen B (2010) University IPRs and knowledge transfer: is university ownership more efficient? Economics of Innovation and New Technology, 19(7):627–648

Davis LN, Davis JD, Hoisl K (2013) Leisure time invention. Organization Science, 24(5):1439–1458

Elsbach KD, Hargadon AB (2006) Enhancing creativity through mindless work: A framework of workday design. Organization Science, 17(4):470–483

Furman JL, Hayes R (2004) Catching up or standing still?: National innovative productivity among follower countries, 19781999. Research Policy, 33(9):1329 – 1354

What do we know Innovation? Selected papers from an International Conference in honour of Keith Pavitt

Furman JL, Porter ME, Stern S (2002) The determinants of national innovative capacity. Research policy, 31(6):899–933

Granovetter M (1983) The strength of weak ties: A network theory revisited. Sociological theory, 1(1):201–233

Granovetter MS (1973) The strength of weak ties. American journal of sociology, pages 1360–1380.

Jeppesen LB, Lakhani KR (2010) Marginality and problem-solving effectiveness in broadcast search. Organization science, 21(5):1016–1033

Jessop B (1999) The dynamics of partnership and governance failure. Citeseer

Jones CI (1995) R&D-based models of economic growth. Journal of political economy, pages 759–784

Krammer S (2009) Drivers of national innovation in transition: Evidence from a panel of Eastern European countries. Research Policy, 38(5):845–860

Lakhani KR, Wolf RG (2005) Why hackers do what they do: Understanding motivation and effort in free/open source software projects. Perspectives on free and open source software, 1:3–22

Lin N (1999) Building a network theory of social capital. Connections, 22(1):28–51

Lin TH, Smith RL (1998) Insider reputation and selling decisions: the unwinding of venture capital investments during equity IPOs. Journal of Corporate Finance, 4(3):241–263

Litchfield RC (2009) Brainstorming rules as assigned goals: Does brainstorming really improve idea quantity? Motivation and Emotion, 33(1):25–31

Marsden PV (1988) Homogeneity in confiding relations. Social networks, 10(1):57–76

Marx K (1909) 1867. Capital. A Critique of Political Economy

Nelson RR (1993) National innovation systems: a comparative analysis. University of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship

Powell WW (1990) Neither market nor hierarchy. Research in Organizational Behavior, 12:295–336

Putnam RD (1995) Tuning in, tuning out: The strange disappearance of social capital in America. PS: Political science & politics, 28(04):664–683

Schultz TW (1961) Investment in human capital. The American economic review, pages 1–17

Schumpeter JA (2013) Capitalism, socialism and democracy. Routledge

Sprengers, M, Tazelaar, F, and Flap, H. D. (1988) Social resources, situational constraints, and re-employment. Netherlands Journal of Sociology, 24(2):98–116.

Turkeli S, Wintjes R (2014) Towards the societal system of innovation: The case of metropolitan areas in Europe. Technical report, United Nations University, Maastricht Economic and social Research and Training Centre on Innovation and Technology, working paper 2014-040

Verspagen B (2006) University research, intellectual property rights and European innovation systems. Journal of Economic Surveys, 20(4):607–632

Winter SG, Nelson RR (1982) An evolutionary theory of economic change. University of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship

Wozniak S (2006) iWoz: Computer geek to cult icon: How I invented the personal computer, co-founded Apple, and had fun doing it. WW Norton & Company.

Table 1 Variable Definitions

Name	Description
Patents per capita	Total patent grants count divided by national population. Source: WIPO IP Statistics Data Center. Source for popu ation data: OECD Stat.
Hours Worked	Average annual hours actually worked per worker. Source: OECD Stat.
Name	Description
GDP	Gross Domestic Product, constant PPP calculated using constant 2005 USD's. Source: OECD Stat.
Electric cons. per cap.	Electric power consumption, kilowatt-hours per capita. Source: The World Bank.
Population	Total population and population by age. Source: OECD Stat.
Tertiary ratio	Total number of students who are enrolled in tertiary education divided by the national population between the ages 20 and 34. Source: OECD stat (for both education and population data).
R&D to GDP ratio	Gross domestic expenditure on Research and Development as a share of total GDP, constant PPP calculated using constant 2005 USD's. Source: OECD Stat.

Table 2 Descriptive Statistics (Pooled)

Variable	Mean	Std. Dev.	Min.	Q1	Q3	Max
Patents granted	18978,12	44664,05	16	831	11042,5	238323
Hours worked	1778,6	218,15	1381	1653	1902	2512
Hours worked per day (260)	6,84	0,84	5,31	6,357,692	7,315,385	9,66
GDP (Millions)	1320921,84	2452915,28	8398,93	177793,4	1499960	13846778
Electric cons. per cap.	8547,01	6992,36	1615,31	5,474,781	8,499,824	52373,88
Population between 20-34	10214399,38	13338294,15	62867	1610155	1,22E+7	63953140
Population	47317543,86	62964811,46	281154	7397200	6,11E+7	31158780
Total tertiary enrollment	2070669,46	3509785,9	9667	299802	2243747	21016126
R&D Expenditure	29482,66	66663,27	224,18	3,001,037	22294,09	382536,66

Observations: 27 countries, 12 years.

Table 3 Estimation results for equation 4

	(1)	(2)
	FE	RE
ln Hours	229.7**	49.52
	(87.16)	(42.36)
(ln Hours)²	-15.41**	-3.113
	(5.748)	(2.786)
ln GDP per capita	-0.0624	0.274
	(0.990)	(0.466)
ln Electric cons. per cap.	0.226	0.918**
	(0.514)	(0.459)
Tertiary ratio	-4.616	-2.835
	(2.975)	(2.768)
R&D to GDP ratio	-35.55	16.03
	(32.62)	(20.08)
Constant	-864.5**	-215.8
	(324.9)	(161.3)
Observations	270	270
Number of countries	27	27
Observations per country	10	10
Year Dummies	Yes	Yes
	(1)	(2)
	FE	RE
Within R-Squared	0.127	
Hours of work (260 days)	6.631	10.96
F-test p-value for quadratic variable	0.0255	0.154
Hausman test FE vs RE p-value	0.0021	

Standard errors in parentheses: *p < 0.10, **p < 0.05, ***p < 0.01

Figure 1 Countries and their standardized mean work hours and patents per capita

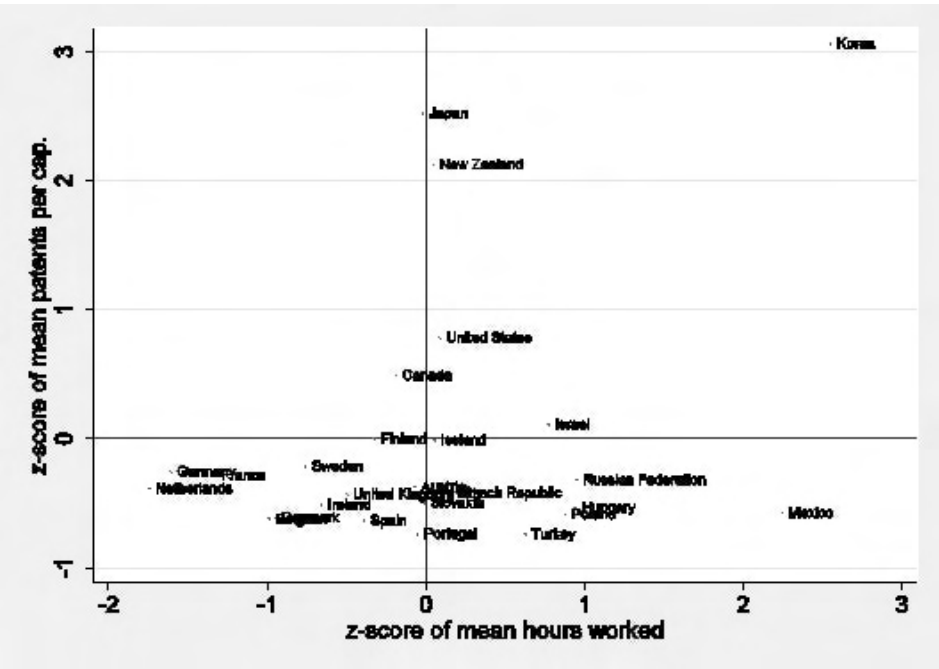
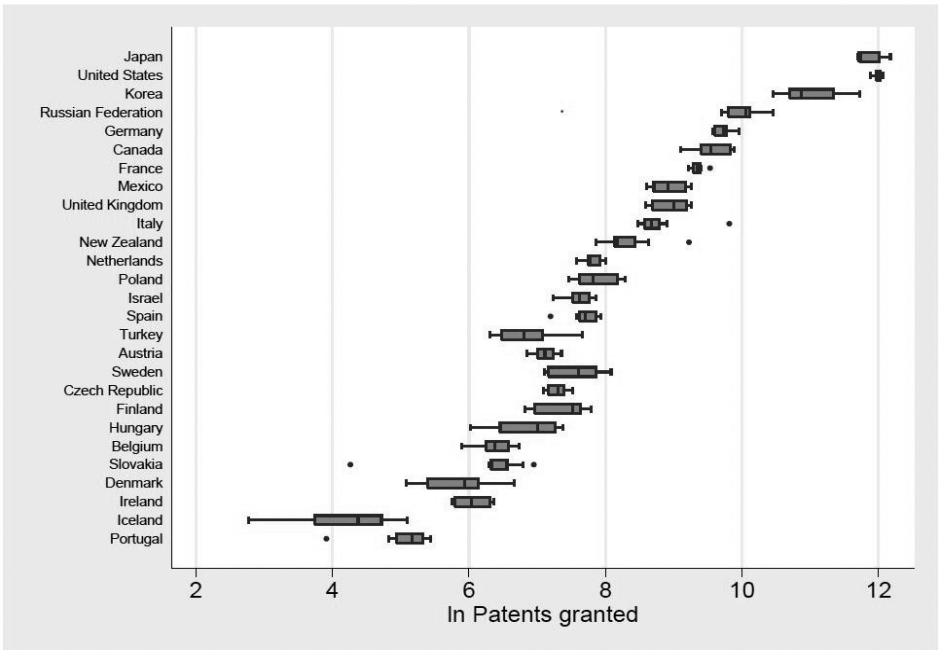


Figure 2 Comparison of variation in Patents granted and work hours by country

(A) LN Patents granted



(B) LN Hours worked

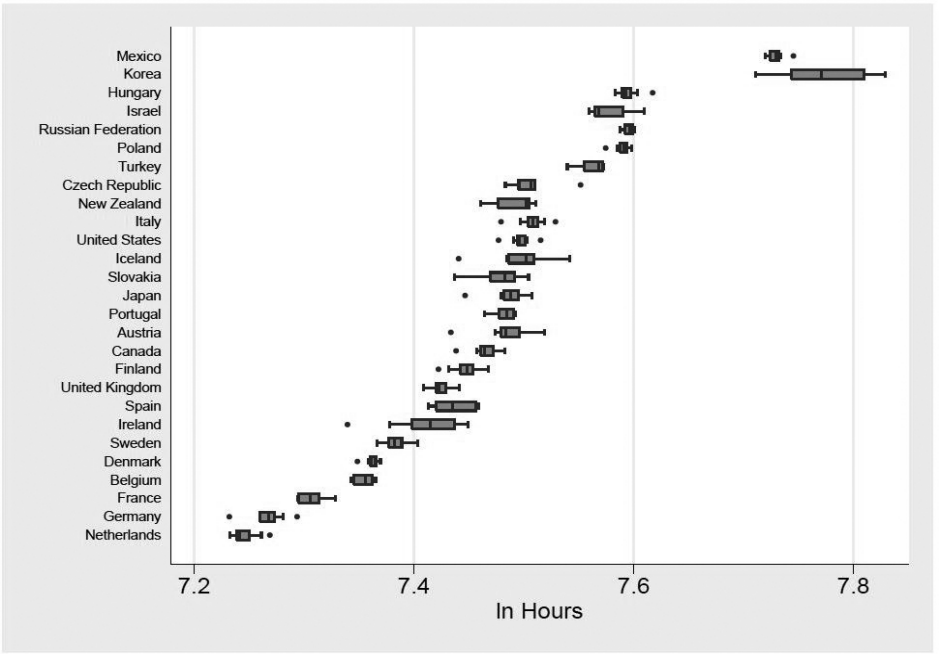


Figure 3 Mean work hours and patents per 1000 capita, 2000 to 2011

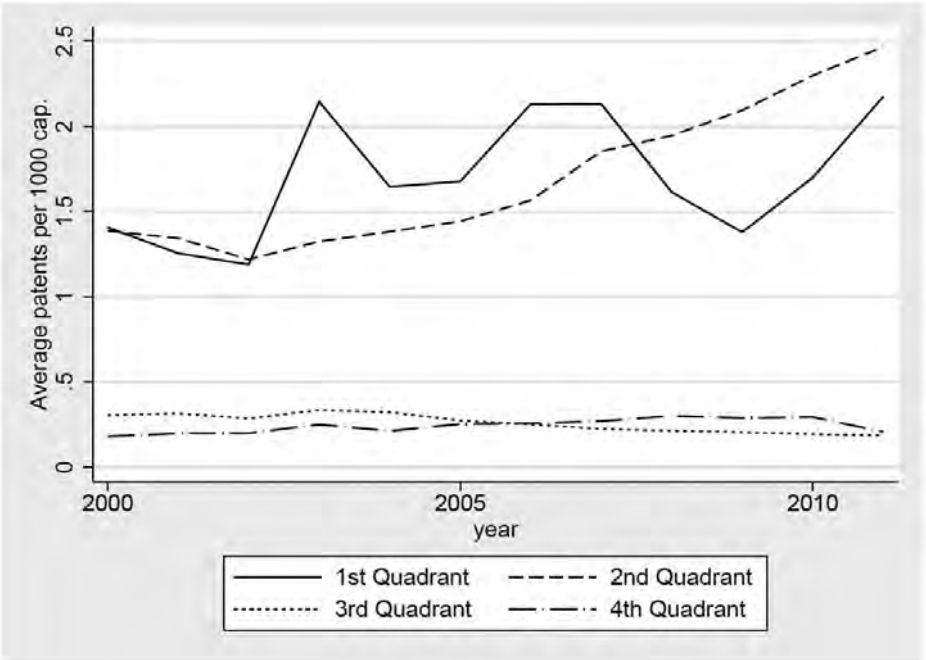
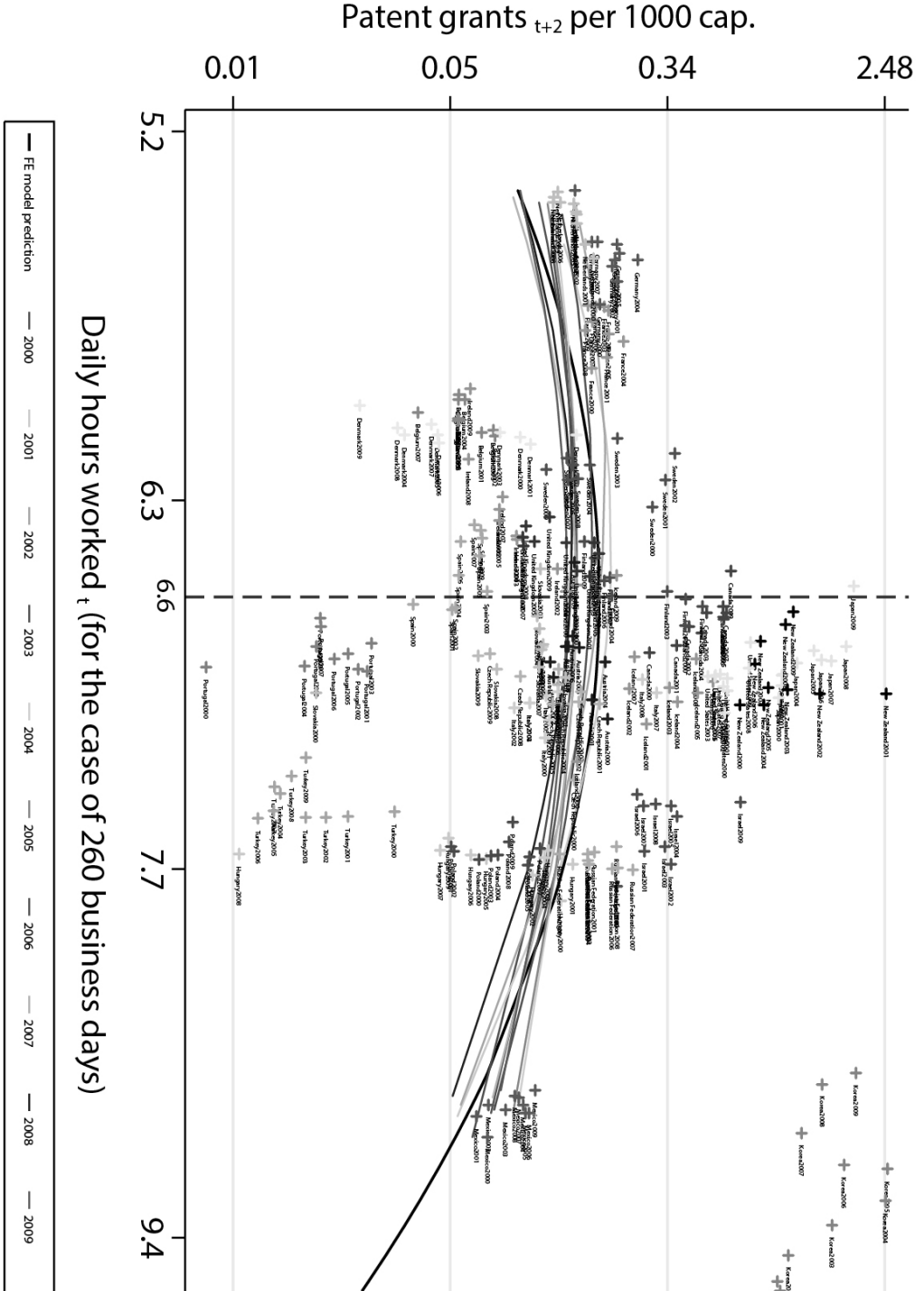


Figure 4 Estimated relationship between work hours and patent grants, FE model.



A. Appendix

Table A.1. List of countries

Austria
Belgium
Canada
Czech Republic
Denmark
Finland
France
Germany
Hungary
Iceland
Ireland
Israel
Italy
Japan
Korea
Mexico
Netherlands
New Zealand
Poland
Portugal Russia
Slovakia
Spain Sweden
Turkey
United Kingdom
United States

Table A.2. Cross-correlation table

Variable	ln Hours	ln GDP per capita	ln Electricity cons. per cap..	*Teritary ratio*	*R&D to GDP ratio*
ln Hours	1.000				
ln GDP per capita	-0.632	1.000			
ln Electricity cons. per cap	-0.345	0.709	1.000		
Tertiary ratio	-0.009	0.321	0.573	1.000	
R&D to GDP ratio	-0.237	0.598	0.654	0.440	1.000

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PAPER

Beyond The Formal Economy: Evaluating The Level of Informal Employment In Montenegro

Milivoje Radović • Milena Lipovina-Božović • Jovan Đurašković

Abstract This paper aims at investigating the level of informal employment on the Montenegrin labour market. For estimating the size of informal employment a direct method was applied using two surveys based on the opinion of the enterprises and employees. This two surveys are used for the approximation of the level of informal employment, as well as for the evaluation of the losses for the fiscal revenues and the Budget as a whole. The conducted analysis reveals the significant degree of the anomalies on the labour market, especially regarding degree of the informal employment which is highly correlated with many structural reforms in the economy and the crisis that affected the Montenegrin economy in the preceding period. The authors conclude that that employment should be a corner stone of the future development of Montenegro and therefore, diminishing the level of informal employment should be one of main tasks for the Montenegrin Government since it produces many negative effects for the economy.

Keywords Informal Employment - Labour - Taxes and Contributions

JEL Classification J46 - O17 - E26 - C83

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1. Introduction

The shadow economy is a global problem. Its expansion, especially in developing countries jeopardizes the foundations of a socioeconomic system. Numerous scientific studies conducted by the International Labour Organisation (ILO) and other international institutions, scientists and economic researchers suggest that the shadow economy is ubiquitous, regardless of the nature of the economic system (neoliberal, social market or transitional) and that it gains in strength continuously, particularly in those countries where there is no sufficiently strong institutional framework. As an inseparable part of the shadow economy, informal employment is a crucial issue for economic policy makers, especially fiscal and labor market policies. Since this question is at the heart of the research, we should, first of all, be very careful when providing a conceptual definition of the informal sector, as well as its causes and effects.

One of the first difficulties faced by economic researchers is to clearly define the phenomenon of informal business operation. The most commonly used working definition of shadow economy is the following: "market-based production of goods and services, whether legal or illegal, that escapes detection in the official estimates of GDP" (Schneider & Williams 2013). Using a somewhat different approach this term is defined as follows: "shadow economy represents those economic activities and income derived from them, which altogether circumvent or avoid government regulation, taxation and control" (Feige 1989). According to the ILO definition, the informal economy comprises "all activities that are, in law or practice, not covered or are insufficiently covered by formal arrangements" (ILO 2013).

As a theoretical concept, informal sector became the subject of economic research at the beginning of the 1970s. Two studies played an important role in the proliferation of scientific papers on informal sector, one by a British anthropologist Keith Hart (1972) on the Ghana example and the other by the International Labour Organisation on the Kenyan example. In both cases, continuous expansion of unregulated and unregistered economic activities was noted. In the decades that followed, many theorists attempted to identify the nature and causes of economic activities which were part of the informal sector.

However, regardless of the causes and nature of informal sector, a greater presence of "shadow" economic activities presents serious problems to the state budget, businesses, the market and the economy as a whole.

It is precisely due to all the more significant negative externalities arisen from this problem, both at the micro and macro levels, that the theoretical approach in economic research got a wider dimension. Namely, after the 2002 International Labour Organisation Conference, the concept of informal sector has been expanded into the concept of informal economy, which implies that informality is no longer

seen as a property of a certain sector of economy, but as a universal characteristic of all economic sectors.

Researchers who have done research in informal economy on the market have paid special attention to the phenomenon of informal employment. This is due to the fact that the relationship between employers and workers is one of the most complex transactions in economy. Labour law, labor statistics and labor organization have all given the central position in their analysis to the symbiotic relationship between the two groups of subjects in the labor market. The interdependence of employers and workers is characterized by a shared interest in generating business income, as well as a degree of competition when the income is distributed. However, many workers in the labor market, receiving a certain wage, are not recognized as being subjects in an employer-employee relationship; they are not registered or work unreported – "off the books". They are, in fact, characterized as informal employees or "non-standard" workers.

Employment in the informal sector comprises: "all jobs in informal sector enterprises or all persons who, during a given reference period, were employed in at least one informal sector enterprise, irrespective of their status in employment and whether it was their main or a secondary job." This definition of the International Labour Organisation from 2002 was amended a year later, because the original one left out one important segment of informal employment – informal employment outside of informal enterprises. Broader understanding offered a new definition of informal employment, as "total number of informal jobs, whether carried out in formal sector enterprises, informal sector enterprises, or households" (Jutting, Parlevliet and Xenogiani 2008). Thus, *employment in informal sector* and *informal employment outside of informal sector* represent two different forms of informalization of employment. Employment in informal economy is the sum of both categories.

In addition to the often quoted definition of the ILO, researchers often provide their own definition of the concept of informal employment, in order to take into account local or national specificities of the labor market. In this regard, a working definition of informal employment in our research has been made which reads: *"informal employment is employment without secure contracts, employment benefits or social protection, that is, activities of unreported work engagement in which companies do not register their workers or report only part of their earnings to avoid or reduce the tax burden."* This definition offers a broader approach to informal employment. It primarily recognizes a wide-spread practice in many economies, particularly the Western Balkans: the employer will declare only a certain part of the employee's wage to the fiscal authorities (usually at minimum wage level) while the remaining part of the wage is paid "in cash" or, informally (ILO 2011).

The effects of this practice are similar to those of other forms of informal employment, such as taxes and social security contributions evasion, employment benefits evasion etc. Undoubtedly, it is a problem that illustrates the complexity of distinction between formal and informal business operation. What follows is an overview of previous research on the topic of shadow economy with a focus on the results achieved in Montenegro. The third part explains the methodology of the research conducted. The fourth part presents the results of the research with an estimate of the volume of the informal employment and an estimation of losses to the Budget of Montenegro. In the fifth part the authors give the conclusions of the conducted analysis.

2. Literature Review

Recent studies of shadow economy on the example of OECD countries, suggest that this is a socio-economic "disaster" that does not subside and whose presence is significantly felt even in most developed economies. In addition to the size of shadow economy, a number of key processes that condition its expansion have been identified. The impact factors are illustrated in the following way (Schneider & Buehn 2012):

1. *The higher the tax burden*, measured by the personal income tax, payroll taxes, and/or indirect taxes, *the bigger the shadow economy*, ceteris paribus.
2. *The lower the tax morale* is and the weaker social norms, the higher the shadow economy, ceteris paribus.
3. *The higher unemployment* is, the *bigger the shadow economy*, ceteris paribus
4. *The more regulated official business activities* are, *the bigger the shadow economy*, ceteris paribus.
5. *The higher the self-employment quota* is, *the bigger the shadow economy*, ceteris paribus.
6. *The lower the quality of institutions* measured by the rule of law is (or lower levels of corruption), *the bigger the shadow economy*, ceteris paribus.

Of these factors, the coefficient of the unemployment rate variable has the biggest influence on the shadow economy with a standardized coefficient between 0.53 and 0.65. It is followed by the personal income tax with a standardized coefficient between 0.27 and 0.40; followed by the tax morale variable between 0.21 and 0.3; followed by business freedom with a standardized coefficient between 0.29 and 0.35, etc (Schneider & Buehn 2012). The extent of the shadow economy in OECD countries decreased in the period 2000-2010. At the beginning of the period, the shadow economy was at the level of 20.7% of the official GDP, and at the end

of the period, it was 18.3%. There is an evident trend of a slight growth of the shadow economy in most OECD countries, during the global economic crisis (eg. in Canada, from14.9% of GDP in 2008 to 15.5% of GDP in 2009, in Norway, in the same period, from 17.7% to 18.6% of GDP, etc.). The OECD countries with the highest volume of shadow economy in relation to GDP in 2010 were Bulgaria (31.9%), Romania (30.9%) and Mexico (30%). On the other hand, the lowest share of shadow economy in national GDP was recorded in Switzerland (8%), the USA (9.1%) and Luxembourg (9.6%). (Schneider & Buehn 2012).

Looking at the average relative impact of causal variables on shadow economy in the period 1999-2010 in the example of 39 OECD countries, the same study comes to the conclusion that indirect taxes had the greatest relative impact on shadow economy – up to 29.4%.The latest research of the shadow economy in Europe (A.T.Kearney 2013), shows that the lowest volume of the "gray" zone in the previous 10 years was recorded in 2013. The European average is 2.15 billion euros, or 18.5% of European GDP. Of course, there are some differences between regions. Thus, Eastern Europe lags well behind Western Europe. While the level of the shadow economy in Austria and Switzerland is around 8% of GDP, it is about 30% in Lithuania, Latvia, Bulgaria and Croatia.

Taking into account the sectoral approach, a greater presence of shadow economy is evident in the sectors of construction (31%), wholesale and retail trade (20%), hotels and catering (19%) and manufacturing (15.5%). Several factors have contributed to the dominance of informal business operation in these sectors – first of all, undeclared work (especially in construction) and a large number of small value cash transactions (an overnight hotel stay, a short taxi ride, etc.).

In recent years, a growing number of researchers have been shifting the focus of analysis from formal employment towards informal employment problems, as evidenced by numerous research papers. An evident increase in the number of studies on the subject of informal employment is expected due to the fact that the relative share of informal employment compared to formal employment has been on the rise in many regions of the world (OECD 2002; Schneider 2008; ILO 2011). Taking into account the existing forms of informal employment the important conclusions of reputable studies that have been conducted on the examples of the SEE countries should not be overlooked. A Eurobarometer survey on the example of five countries of South Eastern Europe (Bulgaria, Cyprus, Greece, Romania and Slovenia) indicates that informal wage employment in the percentage of 24% is the cause of informal employment (Williams 2010a,b). In the research of the last decade quasi-formal employment has been identified, which means that employees in the formal sector receive two wages – both an official and an unofficial, «envelope» wage. (Neef 2002; Žabko and Rajevska 2007; Williams 2007; Woolfson 2007; Round et al. 2008; Williams 2008, 2009). According to the above-mentioned

Eurobarometer survey, 16% of all employees in the surveyed economies receive envelope wages which make up an estimated 60% of total earnings.

There is widely accepted evidence that informal employment is in higher percentages characteristic of self-employed and individual entrepreneurs (ILO 2002; Renooy at al. 2004; Williams 2004; Perry and Maloney 2007). A 2007 Eurobarometer survey concludes that 76% of the total informal employment is generated in the area of self-employment. In South Eastern Europe, as shown by the same research, 46% of the total informal employment is accounted for by small businesses to support friends, relatives, neighbours, acquaintances and other close social relations (Williams 2010a). Small, rural family businesses in the region of Southeastern Europe that often do not place their products on the market are mostly influenced by informal employment (Hudson et al. 2012).

Bearing in mind the determinants of informal employment, authors mostly agree that informal employment is closely related to: the size of enterprises (smaller businesses have a greater share in informal employment) (Rice 1992; Hanlon et al. 2007; Williams 2006; Tedds 2010); the legal form of business activities (individual entrepreneurs participate in higher percentage in informal employment compared to other subjects); the age of a company (newer firms are more susceptible to informal employment than older businesses) (Williams 2006; Tedds 2010).

Studies in the phenomenon of informal economy have been carried out recently in some countries of the Western Balkans. In March 2013, a research report on the informal economy was presented in *Serbia*. According to the research, the volume of the shadow economy in Serbia was estimated using the three methods listed below.

According to the MIMIC model (multiple indicators, multiple causes) the shadow economy amounted to 33.2% in 2001, it dropped to 30.1% by 2008, then increased to 30.6% in 2009, and dropped again to 30.1% in 2010. The second, the HTC (household tax compliance) method is based on data from the macroeconomic accounts. Based on these calculations, it was concluded that the volume of the shadow economy in Serbia amounted to 23.6% of GDP in 2010. Finally, based on a survey of business conditions, it was found that the shadow economy accounted for 21% of GDP (Fond za razvoj ekonomske nauke 2013).

According to research conducted in *Bosnia and Herzegovina*, it was estimated that the shadow economy accounted for about 23% of all economic activities in B&H; about 25% in FB&H, 18% in RS and 25% in Brcko. 290,000 people were engaged in the shadow economy sector in 2008. Of these, 80% were unemployed persons. If the entire estimated amount of the shadow economy had been registered as formal economy, the domestic product of Bosnia and Herzegovina in 2008 would have risen by 16.53% (Tomaš 2010). The 2011 International Labour Organisation research which dealt with the phenomenon of informal employment in the case of Albania,

Bosnia and Herzegovina, Moldova and Montenegro, confirmed the previous estimates of the extent of informal employment. In fact, in all four countries, at least 30% of all employees work "off the books". An interesting fact is that out of the total number of informally employed in Montenegro, 77% are engaged in the formal economy, while 15.8% are self-employed. The largest number of informally employed is engaged in agriculture, and in terms of age, most of them belong to the younger population. Workers with fewer skills and less education are more susceptible to informal employment. One of the conclusions of the research is that partial payment of wages as envelope wages is a common practice and one of the most important adverse effects on budget revenues (ILO 2011).

In 2003, a research was conducted on the informal economy and unprotected work in Montenegro. Using a survey method it was estimated that more than 30% of workers in Montenegro were informally employed. The lack of legal employment opportunities and thus lack of opportunities for provision of resources necessary for life were cited as key factors when deciding to work "off the books". As many as 63.4% of employers stated high tax and contribution liabilities on wages of employees as the main reason for hiring workers in an informal way. There is an interesting finding from 2003, which is almost identical to a recent UNDP survey, which shows that almost half of the workers do not work within their own professions. Approximately 40% of the surveyed workers were informally employed for more than two years, indicating that this problem in Montenegro was pronounced and long-term in character (Radović & Bakrač 2003). It is important to note that the phenomenon of informal employment has not been the subject of detailed analysis recently, which is the main impetus to devote more research attention to the issue. Therefore, this work is one of the most significant contributions to the understanding of this issue in the aftermath of the crisis, whose solution is of particular importance in terms of the integration process of Montenegro into the EU.

3. The Research Methodology

The methodology of estimating the volume and effects of informal employment is in many ways specific. Although the phenomenon is not unknown in economic theory and practice with a long tradition of research on this subject, there is no straightforward procedure for its monitoring and measurement. Each model is oriented towards estimation, because the nature of informal employment and shadow economy in general is such that it is hard to quantify. If it is assumed that there are two large groups of methods of assessment of informal employment (direct and indirect) (Tomaš 2009) in this study a combination of the methods will be used in order to take advantage of both methods and minimize disadvantages. In the direct method which is used in this paper, primary data were obtained in a study involving

a survey of a representative random sample of Montenegrin citizens older than 15 years, and a survey on a representative quota sample of registered employers.
The advantages of this approach compared to other approaches are multiple because in this way more detailed information can be gathered that will allow analysis of different aspects of the problem of informal employment, which does not exist in the secondary data sources. However, the quality of assessment via this method is highly correlated with the level of representativeness of the sample, that is, the coverage of the target population and the degree of socially desirable responses that may be the result of a possible cover-up of the intensity of involvement in the shadow economy in the labor market.

In addition, the indirect method is used here as an auxiliary tool to complement the study of the already existing statistical base as well as for conducting an expert correction in the analysis. In the framework of the implementation of the indirect method with previously obtained results based on the direct method, an overall estimation has been performed of the scope and impact of informal employment on the Budget of Montenegro. The research on the informal employment in Montenegro was conducted based on a survey whose main objective was an estimation of the volume and effects of the informal employment. The survey was conducted at two levels (conducted by IPSOS Strategic Marketing in the period from July 27 to August 3, 2013): based on the opinions of business entities and individuals separately. When it comes to the survey with businesses, the sample was defined as a quota. The sample allocation for businesses was done on the basis of region, activities and size class of the businesses (size class was determined based on the number of employees in a business, not taking into account revenues). Data were collected during field surveys, and the sample size was 209 business entities.
Legal entities were selected from a list of companies and entrepreneurs registered in the Central Registry of the Commercial Court and classified by strata. The stratification was based on: Region, Company Size, Activities. The sample allocation to strata was proportional to the size of the given strata in the basic set. A simple random sample was used without replacement by strata. The sample is representative at the national level and for these strata.

It is important to note that the survey has covered only the officially registered companies. However, many studies suggest that in almost all countries of the world the level of informal employment is significantly higher in non-registered enterprises than in those registered (ILO 2011). Nevertheless, conducting a survey research on a sample of non-registered business entities is almost impossible. One of the reasons is a lack of records on non-registered business entities, which is a limitation in terms of formation of a representative sample. This is why we tried to supplement information by conducting a comprehensive survey of citizens on the extent of informal employment. Based on the information that they possess, we

tried to acquire, at least partially, a perception of the informal employment in both registered and non-registered companies. This is possible because the respondents are often employed in non-registered companies. As previously mentioned, defining the sample implies a previous stratification of the basic set, schedules in the choice of primary and secondary sample units and, finally, establishing quotas by categories of respondents. Bearing in mind the risk that directors/managers of companies might refuse to participate in a survey or give candid answers about their involvement in various forms of informal employment, it was decided that the survey be conducted on a sample of natural persons in whom a higher degree of willingness to give honest answers was observed. Despite all the risks, the survey was carried out successfully with a high percentage of answers to the questions in the questionnaire.

Using a field survey method, 927 natural persons were examined. The selected sample was random two-stage and stratified. The selection of households was carried out by simple random sampling, while the choice of the household members was made on the basis of the Kish grid. The stratification of the sample was carried out based on the type of settlement (urban or rural) and geo-economic regions. The post-stratification was performed on the basis of gender, age, type of settlement, education, ethnicity and geo-economic regions.

The questionnaire that was used for businesses consists of several parts. The first part relates to general information about the company. The second part contains information on informal businesses and employment. These are followed by questions about the causes and motives of informal employment. Finally, the last part includes questions that will help in defining policy proposals for reducing informal employment.

On the other hand, the questionnaire on the basis of which the attitudes of natural persons concerning informal employment were examined is divided into three parts. The first part includes information on basic demographic characteristics of the respondents. The second part is related to their personal experience, while the third part contains questions related to labour rights, as well as the causes of informal employment and recommendations for its elimination.

4. The Research Results

(1) The characteristics of informal employment

Analyzing the perception of employers and individuals on informal employment, we tried to identify the extent to which both are familiar with the real meaning of the term “informal employment”. Comparing the responses of employers and individuals, we conclude that both see the notion of informal employment as work

without payment of contributions on earnings in legally registered businesses. Also, a significant number of the respondents believe that informal employment can be identified with working for employers who have not registered their businesses. Informally employed persons are considered to be those individuals who are paid contributions in part or who are not paid contributions at all. Table 1 shows the percentage of formal and informal employment by main characteristics of the surveyed companies. According to the type of business entity, entrepreneurs are more involved in the activities of informal employment than companies (43.8% versus 31.9%, respectively).

(Insert Table 1, here)

Different studies point to a link between informal employment and the size of an enterprise, which shows that businesses with a smaller number of employees are more prone to informal employment (Williams 2006, Hanlon, Mills and Slemrod 2007, Tedds 2010). The survey shows similar trends in Montenegro. Namely, informal employment is most present with micro enterprises and entrepreneurs (45.4%). Informal employment is predominantly represented in the private sector, while almost negligible in the state sector, which is manifested through the payment of contributions on only one part of the earnings.

In relative figures, informal employment is for the most part present in tourism and catering (53%), followed by trade (48.4%). On a regional basis, the largest part of informal employment occurs on the Coast, which was expected due to the large number of seasonal workers (the survey was conducted during the summer season). The analysis of the structure of informally employed based on the survey of individuals shows that 12% of informally employed persons are not Montenegrin citizens. In terms of gender structure, the share of men was significantly higher in the population of informal employees (66%). The reasons lie primarily in high inactivity rate of women in Montenegro, working conditions in the informal sector and traditional gender roles. Based on the estimates, in the opinion of individuals, one in five business entities in Montenegro is engaged in some form of informal employment. According to the same survey, majority of the informally employed completed primary or secondary education only.

(2) The estimate of the volume of informal employment

The estimatation of the volume of the informal employment was done separately

on the basis of the survey for natural persons, on the one hand and the survey with businesses, on the other. Namely, based on the survey of 209 companies a base of registered business entities in Montenegro was formed from which we obtained data on the share of informal employment in the formal sector. The estimation was performed on the basis of the respondents' opinion on the following issues: (1) participation of their own enterprises in informal employment, and (2) their estimate of the involvement of other companies similar to theirs in informal employment. Analyzing these two sets of data, an estimation was made of the lower and upper limits of the informal employment in the formal sector. The data obtained by analyzing the attitudes of employers about the presence of various forms of informal employment in companies similar to their own are presented in Table 2. The percentages in the table were obtained from a survey based on the responses about the number of employees in their company and the number of employees in companies similar to theirs.

(Insert Table 2, here)

Based on the data from the previous table, the estimate of the volume of informal employment, including those workers who are paid taxes and contributions partially or not at all and work in similar companies, amounts to 33.3%. However, when estimating the share of informal employment in similar businesses, the respondents considered all economic entities regardless of whether they are registered or not.

(Insert Table 3, here)

Table 3 shows the information obtained directly from employers about the number of employees in their company. The data suggest that employers reported some forms of informal employment themselves, in about 21% of cases. This figure is alarming in view of the expectation that respondents might tend to report it lower than it actually is, due to the embarrassment and fear of being punished by the state authorities. However, such a high share of informal employment, according to information received from the employers, is worrying in a sense, because it speaks of the social acceptability of this phenomenon, as evidenced by the results from the second part of the research.

The lower limit of the volume of informal employment, obtained on the basis of the survey with businesses, refers exclusively to assessing the extent of this phenomenon in the formal sector (i.e. with registered companies). Since, in order to estimate the total loss due to the informal employment in the Montenegrin economy, it is necessary to include the presence of this phenomenon in the informal sector as well (i.e. companies that are not registered), the base of survey questions

with individuals was used to assess the volume of informal employment. The estimate obtained in this way is more complete because it covers employees in both the formal and informal sectors. Also, an additional estimate based on surveying the data obtained from individuals serves to check the credibility of the previous estimates based on the survey with companies. Therefore, it is the estimate of the informal employment share in the total employment in the reference week. The percentages obtained represent the share of informally employed in relation to the total number of workers who performed an activity in exchange for money in the reference week. The share of the population who performed an activity in exchange for money in the reference week amounts to 41% of the total population of citizens older than 15 years.

(Insert Table 4, here)

Based on the data from Table 4 it can be concluded that, according to the individual respondents, the estimated share of informal employment accounts for 29% of the total employment. This estimate is closer to the upper limit estimate based on the survey with businesses, which is in line with our expectations, because when assessing the share of informal employment in similar businesses, the employers did not take into account only the registered companies but all the businesses of similar size and activity, regardless of whether they are registered or not. It should be borne in mind that this estimate ignores those employees who think that they are paid full taxes and contributions, and in fact do not know whether this is the case and to what extent. The confidence interval, which allows drawing conclusions with a probability of 95% for the evaluation of the number of workers that are partially paid taxes and contributions ranges from 12.0% to 19.4%, and the boundaries of this interval are taken as the lower and upper limits of participation in the total employment of those who are partly paid taxes and contributions. The confidence interval for those that are not paid taxes and contributions ranges between 10.2% and 17.1%.

(3) Estimation of losses due to informal employment

The estimation of losses due to informal employment was done in two ways: (1) based on the data from the survey of employers the loss was calculated in relation to the Budget due to the informal employment in the formal sector outside the state administration and (2) based on the data from the survey of natural persons the total loss was assessed due to the informal employment in relation to the Budget. According to the Monstat data, the number of people from the category of 15 years and older is 501, 278. The survey, which was conducted among citizens, showed that in the reference week, 41% of the total population performed an activity in exchange for money, which at the level of the total population is 205,524. As the survey with business entities included registered companies only, for the purpose of

assessing the losses on the basis of this survey, the total number of employees in the registered companies was used which amounted to 164, 309 employees.

In this study, the loss due to the informal employment (IE_m)in July 2013 is expressed as a sum of part of the loss arising from unpaid taxes and contributions: (1) for those who are not paid taxes and contributions, and (2) those who are partially paid taxes and contributions,

$$IE_m = IE_{nc} + IE_{pc} \quad (1)$$

whereby IE_{nc} is the loss in cases where taxes and contributions are not at all paid, and IE_{pc} the loss in situations where taxes and contributions are paid in part. It should be noted that it was impossible to determine precisely by the survey on which part of the total wage taxes and contributions were paid when they were paid in part, and in the further analysis we had to start with the assumption that the workers who were not paid full taxes and contributions had their earnings registered in the statutory minimum amount of net income and that the total contributions were paid at the rate of 67% of net earnings.

The symbols used in the model are defined as follows:

n - 41% population older than 15 years;
n_f - number of employees in the formal sector;
$\alpha = 67\%$ - the rate of conversion of net wages in the amount of taxes and contributions;
p_{nc} - average net earnings of the respondents who are not paid taxes and contributions;
p_{pc} - average net earnings of the respondents who are paid taxes and contributions in part;
p_{min} - net minimum wage;
β_i - estimated participation of the employees who are partly paid taxes and contributions;
γ_i - estimated participation of the employees who are not paid taxes and contributions;

The values of the coefficients β_i and γ_i vary depending on whether an estimation of the lower or the upper limit is performed, as shown in Table 4.

Based on the survey of individuals, the loss incurred with the employees who are not paid taxes and contributions was calculated as follows:

$$IE_{nc} = \gamma_i \bullet n_f \bullet \alpha \bullet p_{nc} \quad (2)$$

The damage incurred due to non-payment of taxes and contributions on the full amount of wages, but on the amount of the minimum wage, was determined on the basis of the formula:

$$IE_{pc} = \beta_i \bullet n_f \bullet \alpha \bullet (p_{pc} - p_{nc}) \quad (3)$$

Bearing in mind that the survey was conducted during the summer tourist season, when the economic activity in Montenegro increases and the number of seasonal workers is particularly high, a slight correction was made of the obtained estimates, based on the data on the participation of seasonal workers among informally employed, which were obtained from the survey.

Specifically, the survey results show that among the employees who are not paid taxes and contributions, there are 30% of seasonal workers, while seasonal workers account for 20% of those who are partially paid taxes and contributions. Thus, these percentages were used to balance seasonal fluctuations, reducing the previously estimated losses by 30% and 20%, respectively, for a nine month period (except for June, July and August), in order to obtain a final estimate of annual damage. The correction of the equation (1) due to seasonal fluctuations and converting monthly losses into annual losses were performed using the following equation:

$$IE_a = IE_m \bullet 3 + (IE_{pc} \bullet 0{,}8 + IE_{nc} \bullet 0{,}7) \bullet 9 \quad (4)$$

The estimated share of informal employment (β_i and γ_i) in the formal sector is shown in Table 3. For the estimation of the loss incurred to the Budget as a result of the volume of informal employment, the previously obtained estimates were used as well as the data on the amount of the Budget for 2013 and the budget revenues. If we consider the fact that the budget revenues for 2013 amounted to €1,161,800,821 and the Budget for 2013 to €1,375,793,668.99, the percentage of losses to the budget due to informal employment is given in the following table.

(Insert Table 5, here)

Taking into account the seasonal fluctuations, the total annual loss due to informal employment in the formal sector is estimated at 50.8 million or 4.4% of the Budget revenues. Using a procedure similar to that described in the above models, the volume of total informal employment was estimated based on the survey of a representative sample of citizens older than 15 years. The model presented by equations 1 to 4 was also used for the estimation on the basis of the responses of natural persons, with one difference. Namely, instead of the number of employees in the formal sector (n_r), the information about 41% of the population older than 15 years was used here (n).

(Insert Table 6, here)

Based on the estimate from the survey with natural persons it has been found that the total loss due to informal employment annually amounts to about 93.6 million. The estimated damage incurred to the Budget in 2013 ranges in the interval from 5.1% to 8.5% and from 6.1% to 10.0% in relation to the budget revenues.

Finally, it is important to note that the analysis conducted was focused on the estimation, not the exact determination of the share of informal employment in the total employment. Therefore, this fact should be kept in mind when using its results.

This is all the more so because it is a phenomenon that is difficult to analyze, given that informal employment is not in the domain of the regular and institutional, but occurs in almost every form of economic activity and in various forms.

5. Conclusions

Reducing informal employment is one of the biggest challenges facing the Montenegrin economy. Informal employment is a significant obstacle to the functioning and development of a market-oriented economic system. Although work in the area of informal employment for many households remains an important source of income for living expenses, its negative consequences, both for individuals and for the society as a whole, exceed its benefits.

As with any research, this research has its objective limitations, primarily related to the degree of sincerity of the respondents when answering questions. The data obtained by the survey are the result of beliefs, attitudes, opinions and perceptions of the respondents, and as such are to some extent unreliable. For example, there are situations in which employees receive a salary and think that they are paid taxes and contributions, and, in fact, that is not the case. Therefore, when designing the survey questionnaire, attention was paid to the nature of the questions, the way they were asked, their order, and thus the previously mentioned problems were minimized. The dilemma of the comprehensiveness of the survey is certainly always present, even when it is about making a list, not to mention a very subtle kind of research such as this. The problem occurs due to the fact that there is no sample framework that would allow precise targeting of unregistered employers engaged in economic activity. Also, surveys with citizens systematically ignore participation of marginalized groups living in informal settlements, as well as those with the highest socio-economic status. However, the selected sample contains all the necessary elements that a representative sample should have.

Based on the results of the survey research with employers and individuals, it has been found that informal employment is predominant in the private sector (the services sector, trade, tourism and construction sectors). In regional terms, informal employment is highly present in the central part of Montenegro and on the Coast, primarily due to seasonal workers. Also, the survey has found that companies established in the recent past are to a greater extent involved in informal employment because this is how they become more competitive, especially if they faced a barrier to market entry. In addition, according to the survey, 60% out of the total number of informally employed work in officially unregistered enterprises, while out of the total number of those engaged in an activity for profit in the reference week, 42% were once engaged in a form of informal employment. Based on the results of the survey with employers, the volume of informal employment in the formal

sector outside the state administration has been estimated. The reported levels of the informal employment as a proportion of the population employed in commercial entities outside the state administration range from 20.9% to 33.3%.

Based on the survey with individuals, the estimated share of informal employment in relation to the total number of workers performing an activity in exchange for money in the reference week is 29.3%. The estimated 95% confidence interval ranges between 22.2% and 36.4%. Using the model for estimation of losses due to informal employment, it has been estimated that the damage incurred to the Budget amounts to about 96.5 million annually, which is a significant loss to public finances of a small economy such as Montenegrin. These results indicate that we should start solving this problem as soon as possible, since making these flows regular would significantly improve quite an unstable fiscal position of Montenegro.

The basic precondition for the reintegration of informal employment in the legal channels is a rapid completion of a market-oriented economic system, consistent implementation of the law, full protection of property rights and contracts, establishing macroeconomic stability and developing financial markets. It is noteworthy that significant results in solving this problem cannot be achieved by the application of isolated measures and activities without joint efforts aimed at developing democratic institutions and the general improvement of the overall economic environment.

These measures and actions must be accompanied by the support of all social partners, as well as their greater participation in and contribution to solving this problem. They must be immediate and long-term in character accompanied by an appropriate strategy, performed at a measured pace and based on a combination of stimulative and repressive measures.

References

A.T.Kearney (2013) The Shadow Economy in Europe, VISA Europe, UK

Feige EL (1989) The Underground economies, Tax evasion and information distortion, Cambridge University Press, Cambridge.

Fond za razvoj ekonomske nauke (2013) Siva ekonomija u Srbiji: novi nalazi i preporuke za reforme, multiple authors, Belgrade

Hanlon M, Mills L, Slemrod J (2007) An empirical examination of corporate tax noncompliance in: Auerbach A, Hines JR and Slemrod J (eds) Taxing Corporate Income in the 21st Century. Cambridge, Cambridge University Press, pages 140-62

Hudson J, Orviska M, Caplanova A (2012) The impact of governance on wellbeing. Social Science Indicators

ILO (2002) Decent work and the informal economy. Geneva: International Labour Office,

ILO (2011) A comparative Overview of Informal Employment in Albania, Bosnia and Herzegovina, Moldova and Montenegro, International Labour Office, Geneva

ILO (2013) The informal economy and decent work: a policy resource guide, supporting transitions

to formality, International Labour Office, Geneva
Jutting J, Parlevliet J, Xenogiani T (2008) Informal Employment Re-loaded, OECD, Working Paper No. 266
Neef R (2002) Aspects of the informal economy in a transforming country:the case of Romania. International Journal of Urban and Regional Research 26(2): 299-322
OECD (2002) Measuring the non-observed economy
Perry G, Maloney WF (2007) Overview: informality- exit and exclusion in: Perry GE, Maloney WF, Arias OA, Fajnzylber P, Mason AD and Saavedra-Chanduvi J (eds) Informality: exit and exclusion. The World Bank, Washington DC, 1-19
Radović M, Bakrač R, Đurić D (2003) Neformalna ekonomija i nezaštićeni rad u Crnoj Gori, SSSCG i CRID, Podgorica
Renooy P, Ivarsson S, van der Wusten-Gritsai O, Meijer R (2004) Informal employment in an enlarged Union: an analysis of shadow work – an in-depth study of specific items. European Commission, Brussels
Rice E (1992) The corporate tax gap: Evidence on tax compliance by small corporations in: Slemrod, J. (ed) Why People Pay Taxes: Tax Compliance and Enforcement. Ann Arbor, MI: University of Michigan Press, 24-39
Round J, Williams CC, Rodgers P (2008) Corruption in the post Soviet workplace: the experiences of recent graduates in contemporary Ukraine. Work, Employment & Society 22 (1): 149-66
Schneider F (2008) The hidden economy. Cheltenham: Edward Elgar
<<<<<<<<<the Driving Forces?, Institute for the Study of Labor (IZA), Discussion Paper No. 6891, Bonn
Schneider F, Williams C, The Shadow Economy (2013) The Institute of Economic Affairs, London
Tedds LM (2010) Keeping it off the books: an empirical investigation of firms that engage in tax evasion. Applied Economics 42 (19): 2459-73
Tomaš R (2009) Siva ekonomija u Bosni i Hercegovini, Friedrich Ebert Stiftung
Tomaš R (2010) Kriza i siva ekonomija u Bosni i Hercegovini, Friedrich Ebert Stiftung BiH,
Williams CC (2004) Cash-in-hand work: the underground sector and the hidden economy of favours. Basingstoke: Palgrave Macmillan
Williams CC (2006) Evaluating the magnitude of the shadow economy: a direct survey approach, Journal of Economic Studies 33 (5): 369–85
Williams CC (2007) Tackling undeclared work in Europe: lessons from a study of Ukraine, European Journal of Industrial Relations 13 (2): 219–37
Williams CC (2008) Beyond necessity-driven versus opportunitydriven entrepreneurship: a study of informal entrepreneurs in England, Russia and Ukraine, International Journal of Entrepreneurship and Innovation 9 (3): 157–66
Williams CC (2009) Formal and informal employment in Europe: beyond dualistic representations, European Urban and Regional Studies 16 (2): 147-59
Williams CC (2010a) Tackling undeclared work in southeast Europe: some lessons from a 2007 Eurobarometer survey, Southeast European and Black Sea Studies 10 (2): 123-45
Williams CC (2010b) Evaluating the nature of undeclared work in South-Eastern Europe, Employee Relations 32 (3): 212-26
Woolfson C (2007) Pushing the envelope: the informalization of labour in post-communist new EU member states, Work, Employment and Society 21 (3): 551-64
Žabko MA, Rajevska F (2007) Undeclared work and tax evasion: case of Latvia, Paper presented at colloquium of the Belgian Federal Service for Social Security on Undeclared Work, Tax Evasion and Avoidance. Brussels, June,

Table 1 Percentage Of Formal And Informal Employment By Enterprise Characteristics

	Formal employment	**Informal employment**	
	% employees who are paid full contributions	% employees who are paid contributions in part	% employees who are not paid contributions
Total	66.7	19.9	13.4
Type of company			
Company	68.2	19.2	12.7
Entrepreneur	56.2	25.3	18.5
Number of employees			
1-Sep	54.6	28.7	16.7
Oct-49	72.6	16.2	11.2
50-250	77.8	10.7	11.4
251 and over	67.7	19.6	12.7
Ownership structure			
Private	60.3	23.0	16.7
State	97.0	1.7	1.3
Other	64.1	29.9	6.1
Activity			
Production	71.6	19.5	8.9
	Formal employment	**Informal employment**	
	% employees who are paid full contributions	% employees who are paid contributions in part	% employees who are not paid contributions
Trade	51.7	27.2	21.1
Tourism and catering	47.0	34.7	18.3
Other	75.7	14.0	10.3
Region			
North	71.9	15.7	12.4
Center	73.2	14.4	12.4
South	43.2	39.8	16.9

Table 2 Estimate Of The Volume Of Informal Employment On The Basis Of Employers' Opinion On The Share Of Informal Employment In Similar Companies

	Formal employment	**Informal employment**	
	Full taxes and contributions paid	Taxes and contributions paid in part	Taxes and contributions not paid
Share of informal employment	66.70%	**19.90%**	**13.40%**
Estimate of informal employment		**33.3%**	

Table 3 Estimate Of The Volume Of Informal Employment In The Formal Sector On The Basis Of Information On One's Own Company

	Formal employment	**Informal employment**	
	Full taxes and contributions paid	Taxes and contributions paid in part	Taxes and contributions not paid
Share of informal employment	79.15%	**13,23%**	**7,62%**
Estimate of informal employment		**20.85%**	

Table 4 Estimate Of The Volume Of Informal Employment According To The Survey Of Natural Persons, %

Status of the respondents	**Taxes and contributions partially paid**	**Taxes and contributions partially not paid**	**Total number of informal employees**
Lower limit	12.0	10.2	22.2
Central estimate	15.7	13.6	29.3
Upper limit	19.4	17.1	36.4

Table 5 Estimate Of Damage Due To Informal Employment In The Formal Sector

Loss in July 2013	Loss per annum	Loss relative to the Budget revenues	Loss relative to the Budget
5,212,560 €	50,807,551 €	4.4%	3.7%

Table 6 The Total Loss Due To Informal Employment Based On The Survey Of Natural Persons

	Lower limit of the interval	Estimate	Upper limit of the interval
In July 2013	7,316,057 €	9,696,936 €	12,077,814 €
On an annual basis	70,692,104 €	93,640,685 €	116,589,266 €
In relation to budget revenues	6.1%	8.1%	10.0%
In relation to the Budget	5.1%	6.8%	8.5%

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PAPER

Cross-Border Labour Mobility: Do East-West and East-East Labour Flows Differ?

Tiiu Paas • Mart Kaska

Abstract The paper focuses on the examining cross-border labour mobility between the neighbouring countries looking also for the answer to the question whether cross-border labour mobility can pursue win-win expectations of the increasing international labour mobility after the EU eastward enlargement. The aim of the paper is to outline differences in the socio-demographic and job characteristics of the people who participate in East-East and East-West cross-border labour mobility. The empirical part of the paper relies on the CV Centre database analysing cross-border labour mobility of Estonian people who have worked in a neighbour country – Finland and Sweden (East-West mobility) and Latvia or Russia (East-East mobility) relying on the CV Centre database. The results of the study show that ethnicity and education are important determinants in explaining differences between the East-West and East-East labour flows. Possible consequences of cross-border labour mobility are twofold. Cross-border labour mobility can support economic development of both source and target country but at the same time also can generate some threats of brain waste, particularly in the case of East-West labour flows.

Keywords Geographic labour mobility - EU enlargement - East-West and East - East labour flows - Neighbour countries - Estonia

JEL Classification J61 - O57 - R.23 - P52

1. Introduction

The model of the European Single Market has increased awareness towards the

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mobility phenomenon. There is broad political consensus regarding the freedom of movement for capital, goods, services as well as labour in the European Union (EU). Geographic labour mobility covers both trans-national migration as well as cross-border commuting. With the enlargement of the EU in 2004 and the gradual opening of labour markets to foreign workers, different forms of international labour movement besides permanent migration have received increasing attention. Non-permanent migration includes temporary, repeated, circular and contract migration, and also long-distance commuting between the countries.

Although much research activity has been devoted to trans-national migration as well as to different types of job-to-job migration since the eastward enlargement of the EU (e.g. Dustman et al, 2003; Zaitseva and Zimmermann, 2008; Kahanec and Zimmermann, 2010; Kahanec 2012; Kahanec et al 2014), the type of geographic labour mobility – cross-border mobility including commuting – has received less attention. Therefore this paper analyses cross-border labour mobility between neighbour countries focusing also to the question whether labour mobility can pursue win-win expectations of the increasing international labour movement after the EU eastward enlargement. The aim of the study is to outline possible differences in the socio-demographic and job-related characteristics of the Estonian people who have worked in neighbour countries Finland and/or Sweden (this is referred to as East-West mobility) compared to people who have worked in Latvia and/or Russia (this is referred to as East-East mobility). Finland and Sweden are among the wealthiest states in the EU, whereas Latvia and Russia are former socialist countries with lower level of economic development comparing to the Nordic neighbours.

International migration, especially labour outflows, is a hot topic for Estonia – a small EU Member State with a population of about 1.3 million. Since joining the EU, the yearly out-migration figures in Estonia have more than doubled compared to 2004, reaching around 4600 out-migrants in 2014 (Statistics Estonia, 2015). According to the Population and Housing Census 2011 data, the total number of Estonian people who are working abroad, is around 25 000 (Krusell, 2013, p.131). The most popular cross-border migration destination country for Estonia is the closest neighbour country Finland. Estonia is a country where the number of cross-border commuters per 1,000 inhabitants is one of the highest in the EU, reaching 15.8 (MKW Wirtschaftsforschung, 2009). The high levels of cross-border commuting and labour force out-migration signal that the country's institutions have to profoundly monitor international labour mobility in order to elaborate and implement policy measures that not only reduce labour outflows, but also attract labour force with a range of knowledge, skills and network connections in order to benefit from the free movement of labour in the long run. We suppose that empirical evidence based knowledge about cross-border labour movement that rely on different data sources provide valuable information for elaborating policy measures that can sup-

port economic and business development of both source and target countries. The empirical part of the paper relies on the CV Centre (Keskus) database – an online job portal bringing together jobseekers and vacant job posts. The advantage of this database is that the sample size is relatively large when compared to some other data sources and additionally, it provides possibilities to get rather detailed information about the jobs an individual held and other background information. This database makes it possible to analyse main socio-demographic characteristics (e.g. age, gender, education, language skills, ethnicity, etc.) and job characteristics (occupations, duration of employment) of the Estonian people who have participated in the cross-border labour mobility. Of course, there are also limitations of the data because of the data collection process. All employment histories are self-reported and thus it is not known which information has been left out or particularly amplified. But we believe that despite of some possible limitations this database provide additional valuable information beside of Labour Force Survey (LFS), European Social Survey (ESS) and other databases with much fewer observations for a country for permanent monitoring of cross-border labour mobility.

The paper consists of four main sections. The next section provides a short overview of the theoretical considerations of international migration in general and cross-border labour mobility in particular, and summarises some previous empirical evidence. Section three introduces the database and research methodology. The results of empirical analysis are discussed in the section four and conclusions are presented in the final section.

2. Framework for Analysing Cross-Border Labour Mobility

Cross-border labour mobility, especially migration, has been a hot research topic for decades and with numerous strands. Sjaastad (1962) established what has later been termed the "human capital theory of migration," a framework under which the decision to migrate is considered as an investment in the individual's human capital, taking into account the costs and benefits of the act of migration. Some years later Lee (1966) formulated a general framework for migration analysis, distinguishing between mainly social or economic push and pull factors in origin and destination regions, institutional or physical barriers to migration and personal factors affecting the decision to migrate. Lee's (1966) framework includes both interregional macroeconomic disparities as well as individual characteristics. Departing from an individual framework, Mincer (1978) looked at migration decisions in the family context. Massey (1990) argued that migration analysis should include the individual, household and community level factors, the latter being connected to macroeconomic disparities between regions in income and employment levels. Al-

though Lee (1966) and Massey (1990) already noted the importance of pre-existing networks in the country of destination, this aspect of migration has become a strand of research on its own, as migrant networks in the destination country lower the costs of moving abroad for new migrants. Following Roy's (1951) discussion that was developed into a model by Borjas (1987), the question of the positive and negative selectivity of immigrant workers has become an important field in migration research. Also, recent literature has looked at the magnetic effects of welfare benefits; for example, Borjas (1999) found evidence from the US that generous benefits attracted more immigrants with lower education.

Empirical analyses have developed theoretical frameworks from several perspectives. Jennisen (2005) showed that GDP per capita has a positive and unemployment rate a negative effect on net international migration in the EU. The young, male, single and more educated people from urban areas are more likely to migrate (e.g. Zaiceva & Zimmermann, 2008; European Commission, 2008). Delbecq and Waldorf (2010) show that pre-existing communities in the destination country are the most important predictor in East-West labour movements. These results confirm the findings of Pedersen et al. (2004), who found distance (both physical and cultural) between the source and destination country and pre-existing networks in the destination country to have a significant effect on migration decisions. Evidence about the effects of welfare benefits from the EU is controversial. De Giorgi and Pellizzari (2009) found that greater welfare benefits act as a magnet for immigrants as include higher wages and lower unemployment rates. Giulietti et al. (2011) find no significant effects of unemployment benefit systems on immigration for EU migrants, although some significant effects for non-EU migrants.

Commuting literature has mainly focused on intra-regional (e.g. rural-urban commuting) movements or, linked to our analysis, on specific border regions (e.g. Gottholmseder & Theurl, 2011; Greve & Rydberg, 2003). Based on European Labour Force Survey data, Huber (2011) shows that, compared to non-commuters, cross-border commuters are more often male workers with medium level education they more likely are employed in manufacturing or construction and less likely in non-market services. Comparing labour mobility from EU12 (the EU so-called new member states) to EU-15 (the EU so-called old member states) (referred as East-West mobility) with the EU15-to-EU15 commuters (referred as West-West mobility), Huber and Nowotny (2008) show that the East-West labour flows have a larger share of young people (aged 20–29) with medium education levels. East-West labour flows were more characterised by construction, machine operating and agricultural occupations and West-West flows by professionals, technicians, managers and market services workers (Ibid). In addition, high-skilled workers primarily commute between EU15 countries (West-West flows) and low-skilled between EU12 countries (East-East flows) or from EU12 to EU15 (East-West flows)

(MKW, Wirtschaftsforschung 2009).

Evidence for Estonia shows that after joining the EU, people with university degrees are significantly less likely to emigrate and people with primary education most likely to do so (Anniste, et al., 2012 a and b). In addition, the majority of emigrants in 2007 were non-specialists and there were several times more manual workers compared to professionals and managers that left Estonia (Eesti Pank, 2008). The European Commission (MKW, Wirtschaftsforschung 2009) reports show that commuting between Estonia and Finland takes place weekly or even monthly rather than daily. The most recent and profound monitoring of the Estonian population and its international mobility bases on the Population and Housing Census 2011 data (Statistics Estonia, 2013, Krusell 2013). Among Estonian people who are working abroad majority have secondary or vocational education - 36% of outward workers (with primary education 16% and higher education 23%) and they are mainly working as craft and related trades workers (47%; in comparison, their share in the Estonian labour market is only 13%). At the same time the share of occupations that require higher qualifications (like managers, professionals, technicians, etc) is rather low (only 20%) comparing to their sharein the Estonian labour market (66%) (Ibid; p.133). Thus, the Census 2011 data show that Estonian people who are working abroad are comparatively well educated but their working positions are often rather low.

3. Data and Methodology

The empirical part of the paper is based on the CV Centre (Keskus) database. CV Market Group (CV Keskus) is the largest jobseeker database in the Baltic States including information about the socio-demographic characteristics and employment history of jobseekers. This database provides and alternative information source for monitoring people's cross-border labour mobility in order to get better overview of migration processes and socio-economic and occupational characteristics of people who are involved in the international labour mobility.

The CV Centre (Keskus) data mainly base on individuals' self-reporting and thereby reflecting the information that people themselves present to the labour market. We are aware that the information provided to the CV Keskus might be somewhat biased in that sense that people who are searching for a job through the online portal are probably more active in the labour market looking for new the working positions. The database has also some other possible shortcomings that present limitations for conducting an empirical analysis. For instance, job seekers of some occupations (e.g. medical workers), who have other sources and networks for labour mobility, may be under represented. The database does not always allow to correctly linking the information about all socio-demographic and job-related information

of a person. For instance, it is not always possible to connect marital status and data about children to previous occupations because these variables are not linked to a year (i.e. year of marrying or having children/ages of children). The same applies to some language skills. Although the CV data does not include ethnicity directly, we use mother tongue as a proxy for this. Reported English language skills could be regarded as a proxy for some capabilities of a person, and therefore, we include this information in our analysis. There are also some shortcomings regarding to the classification of the reported jobs according to the accepted occupational standards and sectors. We follow the framework of the occupational classification of the U.S. Bureau of Labour Statistics for analysing job posts and occupations reported in the CV-s.

The following analysis is based on the CV Centre data from the end of January 2010. This was a period with extremely high unemployment (15.5%/107,000 people were unemployed in the 4th quarter of 2009 and 19.8%/137,000 in the 1st quarter of 2010) (Statistics Estonia, 2013). In fact, unemployment rates have decreased since the 1st quarter of 2010. Unfortunately, due to some technical reasons, later information of the CV Centre was not available. But we believe that the beginning of 2010 as a period characterised by high unemployment level is a suitable time for pulling the data. In addition, the dataset includes jobseekers that were working at that point in time. CV Centre (Keskus) data enables us to analyse past cross-border movements of workers as CVs include information about the past five jobs, but we cannot distinguish between past commuters (around 25% of the observations declared the duration of their most previous occupation abroad to last for up to three months) and long-term and short-term migrants (almost 2% of observations worked in a neighbouring country for at least 10 years).

Our sample consists of 8,456 CVs of individuals aged 15 or more who have been involved in the cross-border labour mobility. 6,019 (71.1%) individuals worked in Finland, 1,071 (12.7%) in Sweden, 1,070 (12.7%) in Russia and 296 (3.5%) in Latvia. Thus, 84% of labour flows from Estonia to neighbour countries are East-West flows and the remaining 16% are East-East flows. We estimate two logistic regression models to confirm and somewhat enlarge the results of the descriptive analysis of socio-demographic and job-related characteristics of East-West and East-East labour flows and to distinguish possible differences between these two groups of labour flows. In order to estimate regression models we had to clean our database once again due to the missing characteristics of some individuals. The total number of observations used by the estimating of logistic regressions was 5273.

The logistic models are as follows:

$$\log \frac{p(Y_i = 1)}{1 - p(Y_i = 1)} = \beta_0 + \sum_{k=1}^{K} \beta_k X_{ik} + u_i$$

(1)

Where $p(Y_i = 1)$ is the probability that an individual $i = 1, \ldots, n$ worked in Finland or Sweden (East–West cross-border mobility) and $1 - p(Y_i = 1)$ is the probability that an individual $i = 1, \ldots n$ worked in Latvia or Russia (East-East mobility); X_{ik} are explanatory variables that contain socio-demographic and job-related characteristics for individual i ($k = 1, 1, \ldots K$, K-the number of explanatory variables). All explanatory variables are categorical.

The models look at the odds ratios of East-West flows (to Finland and Sweden) compared to East-East flows (to Latvia and Russia). We consider the odds ratio as a measure of effect size describing the strength of association between the outcome (dependent variable) and an explanatory variable. The odds ratio represents the odds that an outcome (in our case East-West mobility) will occur if a certain characteristic of an individual is present, compared to the odds of the outcome occurring in the absence of that characteristic. The difference between the two models is that the first model regresses only to socio-demographic variables, the second additionally controls for the individuals' job-related characteristics.

4. Empirical Results

4.1. Main Socio-Demographic Characteristics

Cross-border labour flows from Estonia to its western (Finland and Sweden, e.g. East-West labour flows) and eastern (Latvia and Russia, e.g. East-East labour flows) neighbour countries have some similarities as well as differences in the socio-demographic and job-related characteristics of mobile people. We consider these characteristics of mobile people as possible determinants of cross-border labour mobility between the neighbour countries. Ethnicity and gender of cross-border workers show clear differences when comparing East-West and East-East cross-border labour flows from Estonia. The former group is clearly dominated by males and ethnic Estonians. Workers in Latvia and Russia have predominantly been non-Estonians; male workers show only a slight majority.

Appendix 1 shows that there are some differences in composition of East-West and East-East labour if we consider the period of starting foreign jobs dividing it to the periods before and after EU eastward enlargement in 2004. For example, before the EU enlargement, female and male workers were equally represented in Sweden. After Estonia joined the EU, male workers in Sweden clearly outnumbered females two to one. For other countries, differences were not that remarkable in this aspect. This interesting observation can probably be explained by the circumstances that Sweden opened its labour market to the Eastern workers immediately as the EU

enlargement processes started. Using new opportunities for cross-border labour mobility, some of Estonian women started to work in Sweden as babysitters and cleaning woman. After Estonia joined the EU also other working posts were more open for the mobile people from Estonia. As Sweden started to be an important foreign investor in Estonia, some working posts we related to the FDI coming to Estonia.

Analysing the composition of the East-West and East-East labour flows according to the ethnicity, it is possible to conclude that non-Estonians are predominantly involved in the East–East cross-border labour mobility processes (65% in Latvia and 85% in Russia of the observed cases). Ethnic Estonians are mainly involved in the East-West labour mobility (over 75% of the reported cases). These results are not surprising taking into account good Russian language skills of the Estonian minorities.

Table 1 provides an overview of age groups by gender for each destination neighbour country. Among similarities, the largest share of mobile workers is aged 21–25. The only exception is female workers in Finland, where the youngest age group (15-20 years) is slightly but not remarkable larger. Female workers are also more represented in the two lower age groups compared to male workers in the case of Latvia and Russia (East-East flows). In general, based on the CV Centre data source, it possible to confirm that majority of the Estonian people working or have worked in the neighbour countries is young (the age below 36) people and they are predominantly men.

(Insert Table 1, here)

Data presented in Table 2 indicate that labour flows from Estonia to Finland and Sweden (East-West flows) are characterised by the lower shares of highly educated people than labour flows to Latvia and Russia (East-East flows). Labour flows to Finland and Sweden are dominated by people with secondary and/or vocational education. The results of our analysis confirm previous findings of Huber and Nowotny (2008) that younger age groups are more mobile and people who are involved in the East-West labour mobility most likely to have medium levels of education.

(Insert Table 2, here)

We also look at English language skills as an indication of potential characteristics of individual capabilities being aware that this information only reflects individuals' self-assessment of their foreign language skills. The share of Estonian people who moved to work in Sweden or Latvia have as a rule better English language skills comparing to people moved to Russia or Finland. The explanation behind this empirical evidence is that Russian and Finnish languages are widely spoken among Estonian people. Around 46% of Estonian people who have worked in Finland

reported Finnish language skills. As the workers in Russia have been of an ethnic minority in 83% of the reported cases, it is understandable that these people know well Russian language as the language of their destination country and English skills might not be essentially necessary in that mobility case.

4.2. Occupations and Duration of Jobs

We also analyse possible differences in East-West and East-East labour flows according to the occupations and job durations of mobile people (Table 3). Detailed data about job categories is presented in Appendix 2. The percentages of Estonian construction and real estate workers in Finland and Sweden show the largest shares reaching over 40% and 30% respectively. Industrial manufacturing, customer service and agricultural posts have also been popular among workers involved in cross-border labour mobility in the case of East-West flows.

(Insert Table 3, here)

Relying on the occupation categories that are grouped following the framework of the occupational classification of the U.S. Bureau of Labour Statistics we also analyse the composition of labour flows from Estonia to neighbour countries according to the occupational groups. Table 3 illustrates that East-West labour flows are in most cases concerned with lower-skilled occupations and/or sectors (e.g. construction, maintenance, transportation, production, etc.). In the majority of cases, East-East labour flows concern managers and professionals, but also sales and office posts. These results are consistent with previous empirical findings (MKW Wirtschaftsforschung: 2009; Huber & Nowotny, 2008) that East-West flows in the EU are characterised by a high share of low-skilled workers, whereas high-skilled workers mainly move between EU15 (West-West mobility) or EU12 countries (East-East mobility). The results are also consistent with the results that base the Estonian Population and Housing Census 2011 data (Krusell 2013).

Table 4 presents information about the duration of jobs in a neighbour country. It is worth noting that job posts in Latvia and Russia lasted, on average, twice as long as in Finland and Sweden. In all four destination countries the largest share of durations falls between 4 and 6 months. For East-West flows we can say that shorter job durations are dominant. However, for East-East labour flows seasonal (up to 3 months) posts are seldom. Over a third of the people who worked in Russia or Latvia worked for more than two years on their most previous post in those countries. The same figures for Finland and Sweden are below 20%. Comparing job durations before and after Estonia joined the EU, we noticed that in all four destination neighbour countries, seasonal jobs were most seldom before Estonia joined the EU.

(Insert Table 4, here)

In conclusion, the results of our descriptive analysis of job-related characteristics indicate that East-West flows are rather concerned with lower-skilled and short-term occupations that are often seasonal. East-East labour flows consist of more educated people and as a rule their job duration is longer. Thus, more rich western neighbour countries mainly attract people with secondary and vocational education who have less-skilled working positions in the destination countries. But despite of that these internationally mobile workers are winners in economic sense getting as a rule much higher salaries they potentially can get in the home country. Eastern neighbour countries attract more educated and skilled Estonian labour force. These people as a rule get higher and well paid working positions in the destination countries and these working positions are often related to the foreign direct investments and/ or other networks.

4.3. East-West *versus* East-East Cross-Border Labour Mobility: Determinants and Differences

To confirm the results of descriptive statistics and to check for statistical significance of the differences between the East-East and East-West cross-border labour flows and their possible determinants, we estimate two logistic regression models looking at the odds ratios for variables concerning the East-West and East-East labour flows. Table 5 reports the odds ratios from the two models along with robust standard errors below them in brackets.

(Insert Table 5, here)

The first model includes socio-demographic variables and a dummy variable indicating whether working abroad took place before or after joining the EU. Additionally, second model includes job-related characteristics (occupations, durations).

Empirical results that rely on the Model 1 are generally in line with the results we got implementing descriptive analysis. Men have been 1.5 times more likely to work in Finland or Sweden (East-West flows) than in Latvia or Russia (East-East flows). These results do not show significant differences between East-East and East-West flows in the age groups of workers. Minorities, work about 17 (1/0.06) times less likely in Finland and/or Sweden then in Russia and/or Latvia. People with higher education are 7.7 (1/0.130) times less likely to follow the pattern of East-West cross-border mobility compared to East-East mobility. When controlling for job-related characteristics in Model 2, the odds ratio is reduced to 5.6, but it still confirms that East-West labour flows are as a rule characterised by the less educated workers than East-East flows. Both models confirm the obvious fact, that East-West labour flows have increased more remarkable than East-East flows after

the EU eastward enlargement in 2004. The EU eastward enlargement has been step by step accompanied by the free movement of labour within the EU. The results from Model 2 confirm that the East-East labour flows are more likely to comprise more high-skilled workers and higher working positions. Work duration is longer in the case of East-East comparing to the East-West flows. There is clear evidence that Estonian people to work more often on seasonal or short-term job posts in Finland and Sweden (East-West mobility) comparing to other two neighbour countries (East-East flows).

In conclusion, the results of empirical analysis show that East-East cross-border labour flows consist of more educated and skilled people and they jobs are more long-term compared to East-West labour flows. People who are working in Finland and Sweden are probably in many cases over educated taking into account that they often have job posts that are below their self-reported education and skills. This situation indicates some evidence of possible brain waste.

4. Conclusion and Discussion

The focus of the paper has been on the examining differences between the East-East and East-West labour flows observing the main personal and job-related characteristics of the Estonian people who have worked in the neighbour countries. The analysis relied on the CV Centre (Keskus) database, with is rather unique in sense of its implementation to the analysis of cross-border labour mobility. The empirical results of the study are in general in conformity with the theoretical framework of cross-border labour mobility as well as with previous empirical evidence of labour mobility in Europe after the EU eastward enlargement. Cross-border labour mobility in the case of Estonia as a small country with post-socialist path-dependence follows similar patterns compared to previous cross-border labour flows between larger and also richer countries and regions. Comparing the results of our study with the previous empirical studies of cross-border labour mobility that rely on several other data sources (e.g. Labour Source Survey, European Social Survey, Population and Household Census) show that CV Centre (Keskus) database offers an additional valuable data source for monitoring international labour mobility offering information for studying some other aspects related to labour mobility (e.g. frequency of cross-border mobility, repeated migration, etc.). This database needs future developments taking into account the first research lessons on cross-border labour mobility.

The results of our study show that ethnicity and education are the most important determinants in explaining differences in East-West and East-East cross-border labour flows. Minorities and people with higher education have more often participated in the East-East cross-border labour flows comparing to the East-West flows. East-West labour flows are characterised by lower-skilled jobs in the fields

of construction, agriculture, manufacturing and customer service of the destination countries comparing to the East-East labour flows. Internationally mobile people who participated in the East-East labour mobility had often higher working positions (managers and professionals) in the destination countries comparing to the East–West flows. In addition, labour flows to wealthier neighbour countries Finland and Sweden are characterised by significantly shorter durations of job posts. More than 60% of mobile people worked in wealthier neighbouring countries for less than a year. Younger people have been more mobile in the case of both East-East and East-West flows comparing to older age groups and there are no statistically significant differences between the two groups of neighbour countries.

The results of the study allow us to argue that possible consequences of cross-border labour mobility are twofold. Close proximity of wealthy neighbour countries (like Finland and Sweden) provides opportunities for Estonian workers to significantly increase their income and to avoid unemployment, particularly in the rural areas, and thereby diminishes pressure on the Estonian social system. The so-called Eastern neighbour countries like Latvia and Russia mainly attracted better educated and well qualified Estonian workers, who got new challenges for developing their skills and obtaining experience of working in a new business environment. As a rule, such workers also earned salaries above the Estonian average thereby creating good preconditions for some new consumption demand in Estonia. Cross-border labour mobility also provides possibilities to create new business networks and to get new working skills and experience that can be useful for continuing working career after returning to home country. Thus, in that sense cross-border labour mobility has a positive impact on the economic development of both the source and destination countries. The latter got active and well-motivated new labour force which supported their economic development. But on the other hand, cross-border labour mobility provides some concern of brain waste taking into account that Estonian people who are working in economically well-developed neighbour countries have often had jobs that were below their qualifications and previous working skills.

In order to achieve an expected win-win situation of the increasing international labour mobility, policy measures that support reducing possible skill mismatches and brain waste and create favourable preconditions for effective skills exchange should be further elaborated and implemented taking into account socio-demographic and job related characteristics of people involved in the cross-border labour mobility processes. The implementations of certain package of economic and psychological measures that create favourable conditions for return migration are undoubtedly important in order to gain from cross-border labour mobility and to provide new challenges for economic and business development of the countries.

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References

2010 Standard Occupational Classification, Standard Occupational Classification Policy Committee (SOCPC) Bureau of Labour Statistics

Anniste K, Tammaru T, Pungas E, Paas T (2012a) Emigration After EU Enlargement: Was There a Brain Drain Effect in the Case of Estonia? University of Tartu – Faculty of Economics and Business Administration Working Papers Series 87, 20 p.

Anniste K, Tammaru T, Pungas E, Paas T (2012b). Dynamics of Educational Differences in Emigration from Estonia to the old EU Member States. TRAMES, 168(60/61) 3: 219-235

Borjas GJ (1987) Self-Selection and the Earnings of Immigrants. The American Economic Review, Vol. 77 (4): 531-553

Borjas GJ (1999) Immigration and Welfare Magnets. Journal of Labour Economics, Vol. 17 (4): 607-637.

Constant AF (2013) Sizing It Up: Labor Migration Lessons of the EU Enlargement to 27. In: Gortázar C, Parra C, Segaert B, Timmerman C (eds) European Migration and Asylum Policies: Coherence or Contradiction. Bruylant, Belgium, p 49–77

de Haas H (2007) Migration and Development: A Theoretical Perspective. Bielefeld: COMCAD, p.82

Delbeck BA, Waldorf BS (2010) Going West in the European Union: Migration and EU-enlargement. Purdue University, Department of Agricultural Economics, Working Paper 10-4.

Dustmann C, Casanova M, Fertig M, Preston I, Schmidt CM (2003) The Impact of EU Enlargement on Migration Flows. Home Office Online Report 25/03, p. 76

Eesti Pank. Tööturu Ülevaade 2/2008.

Eliasson K, Lindgren U, Westerlund O (2003) Geographical Labour Mobility: Migration or Commuting? Regional Studies, Vol. 37 (8): 827-837

Elsner B, Zimmermann KF (2014, forthcoming) 10 Years After: EU Enlargement, Closed Borders, and Migration to Germany. In: Kahanec M, Zimmermann KF (eds) Labor Migration, EU Enlargement, and the Great Recession. Springer, Heidelberg, Berlin

EU Commission (2008) Employment in Europe, Chapter 3: Geographical labor mobility in the context of EU enlargement. Directorate-General for. Employment, Social Affairs and Equal Opportunities. Office for Official publications of the European Communities. Luxembourg, October 2008

Fihel A, Kaczmarczyk P, Okólski M (2006) Labour Mobility in the Enlarged European Union. Inter-

national Migration from the EU8 Countries. CMR Working Papers, No. 14/72: 96

Giulietti C, Guzy M, Kahanec M, Zimmermann KF (2011) Unemployment Benefits and Immigration: Evidence From the EU. IZA Discussion Paper No. 6075, p.17

Gottholmseder G, Theurl E (2007) Determinants of Cross-Border Commuting: Do Cross-Border Commuters within the Household Matter? Journal of Borderland Studies, Vol. 22 (2): 97-112

Greve B, Rydberg M (2003) Cross Border Commuting in the EU: Obstacles and Barriers, Country Report: the Oresund Region, University of Roskildens, Research Papers 11/03, p.44

Huber P (2011) Educational Attainment and Education-Job Mismatch of Cross-Border Commuters in the EU. WIFO Working Papers, No. 388, p.35

Huber P, Nowotny K (2008) Regional Effects of Labour Mobility, in European Integration Consortium, Labour Mobility in the EI in the context of enlargement and functioning of the transitional arrangements, EU Commission, Brussels, p.132

Jennisen R (2005) Macro-Economic Determinants of International Migration in Europe. Population Studies Series, Purdue University Press, 206 p

Kahanec M, Zimmermann KF (2010) (eds). EU Labour Markets after Post-Enlargement migration. Springer: Berlin, et al.

Kahanec M (2012) Labour Mobility in an Enlarged European Union. IZA Discussion Paper No 6465, 48 p

Krusell S (2013) Estonian Citizens Working Abroad. Census Snapshots. Statistics Estonia, Tallinn, pp. 129-139

Lee ES (1966) A Theory of Migration. Demography, Vol. 3 (1): 47-57

Massey DS (1990) Social Structure, Household Strategies, and the Cumulative Causation of Migration. Population Index, Vol. 56 (1): 3-26

MKW Wirtschaftsforschung, Empirica Kft. (2009) Scientific report on the mobility of cross-border workers within the EU-27/EEA/EFTA countries. Final report.

Mincer J (1978) Family Migration Decisions. Journal of Political Economy, Vol. 86 (5): 749-773.

Pedersen P J, Pytlikova M, Smith N (2004) Selection or Network liiEffects? Migration Flows into 27 OECD Countries, 1990-2000. IZA Discussion Paper, No. 1104,p 46

Roy AD (1951) Some Thoughts on the Distribution of Earnings. Oxford Economic Papers, New Series, Vol. 3 (2): 135-146

Shuai X (2012) Does Commuting Lead to Migration? Regional Studies, Vol. 42 (3): 237-250

Sjaastad LA (1962) The Costs and Returns of Human Migration. The Journal of Political Economy, Vol. 70 (5): Part 2: Investment in Human Beings, pp. 80-93.

Statistics Estonia database. Available at: http://www.stat.ee, (2013, 2015).

Statistics Estonia (2013). Census Snapshots, Tallinn, 2013

Zaiceva A, Zimmermann KF (2008) Scale, Diversity, and Determinants of Labour Migration in

Europe. IZA Discussion Papers, No. 3595, p.37

Table 1 Age groups and the gender of workers moved from Estonia to the neighbour countries (% of country totals)

	Latvia		Russia		Finland		Sweden	
	Female	Male	Female	Male	Female	Male	Female	Male
15–20	9.80	9.46	12.52	8.79	9.82	10.98	9.43	10.55
21–25	20.95	15.88	21.21	18.88	8.71	22.11	15.13	22.60
26–30	8.78	10.47	6.64	12.15	3.14	13.91	5.70	12.79
31–35	3.72	6.08	2.80	6.26	1.81	8.72	1.77	7.47
36–...	4.73	10.14	2.06	8.69	6.26	14.54	3.73	10.83
Total %	47.97	52.03	45.23	54.77	29.74	70.26	35.76	64.24
Total No. of observations	142	154	484	586	1 790	4 229	383	688

Source: CV Keskus database, authors' calculations.

Table 2 Educational groups on the basis of the gender of workers moved from Estonia to the neighbour countries (% of country totals)

	Latvia		Russia		Finland		Sweden	
	Female	Male	Female	Male	Female	Male	Female	Male
Primary	3.52	5.19	1.65	4.78	5.14	10.24	3.39	8.43
Secondary	28.17	30.52	24.38	31.06	46.09	44.69	36.81	43.60
Vocational	19.72	17.53	14.46	20.99	20.56	31.66	24.54	29.94
Higher	34.51	30.52	43.18	32.42	11.40	5.63	18.02	8.72
Unknown	14.08	16.23	16.32	10.75	16.82	7.78	17.23	9.30

Source: CV Keskus data, authors' calculations.

Table 3 Shares of occupations of Estonian workers in neighbour countries (% of country totals)

	Latvia	Russia	Finland	Sweden	Total
Management, Professional, and Related Occupations	39.86	39.25	9.95	13.63	15.17
Service Occupations	11.82	9.91	6.89	11.76	8.07
Sales and Office Occupations	25.00	18.60	12.66	18.67	14.61
Natural Resources, Construction, and Maintenance Occupations	9.80	17.48	49.94	40.62	43.25
Production, Transportation, and Material Moving Occupations	13.51	14.77	20.55	15.31	18.91

Source: CV Keskus data, authors' calculations.

Table 4 Duration of job posts in neighbour countries (% of country totals)

Duration (months)	Latvia	Russia	Finland	Sweden	Total
…-3	13.18	9.25	27.43	24.28	24.23
4-12	28.72	24.77	36.85	40.06	35.44
13-24	21.28	19.44	17.05	16.90	17.48
25-48	17.91	21.68	13.36	11.39	14.32
49-…	18.92	24.86	5.32	7.38	8.53

Source: CV Keskus data, authors' calculations.

Table 5 Odds ratios from logistic regressions comparing East-West to East-East labour flows from Estonia

	Model 1	Model 2
Male	1.521***	0.960
	(0.178)	(0.137)
Ethnic minorities	0.060***	0.061***
	(0.007)	(0.008)
Age 15-20	(Reference group)	(Reference group)
Age 21-25	1.126	1.136
	(0.194)	(0.204)
Age 26-30	1.108	1.079
	(0.210)	(0.213)
Age 31-35	0.978	0.958
	(0.216)	(0.222)
Age 36-…	1.307	1.359
	(0.261)	(0.287)
Primary education	(Reference group)	(Reference group)
Secondary education	0.716	0.750
	(0.147)	(0.157)
Vocational education	0.839	0.892
	(0.178)	(0.195)
Higher education	0.130***	0.180***
	(0.029)	(0.042)
After joining EU	5.927***	4.040***
	(0.681)	(0.606)
English skills	1.102	1.193
	(0.133)	(0.153)
Managers and professionals	-	(Reference group)
Service	-	2.152***
		(0.454)
Sales and Office work	-	1.427
		(0.260)

	Model 1	Model 2
Natural resources, construction, maintenance	-	5.783***
		(0.899)
Production, transport, materials	-	5.711***
		(1.019)
Duration up to 3 months	-	(Reference group)
Duration 4-12 months	-	0.630**
		(0.110)
Duration 13-24 months	-	0.472***
		(0.092)
Duration 25-48 months	-	0.521**
		(0.109)
Duration over 48 months	-	0.375***
		(0.092)
Constant	8.660***	8.060***
	(2.150)	(2.669)
Number of observations	5273	5273
Akaike information criterion	2465.458	2286.785

Dependent variable equals 1 in case of East-West mobility and 0 in case of East-East mobility. *** denotes significance at 5% level.

Source: CV Keskus data, authors' calculations.

Appendix 1. Overview of the some socio-demographic characteristics of Estonian people working in neighbouring countries, as a %

		Latvia	**Russia**	**Finland**	**Sweden**	**Total**
Gender	Female	47.45	46.64	28.07	34.39	30.91
	Male	52.55	53.36	71.93	65.61	69.09
Ethnicity	Estonian	21.90	5.85	62.69	56.09	56.05
	Non-Estonian	54.74	77.61	12.16	18.18	19.50
	Unknown	23.36	16.54	25.14	25.73	24.45
Age at leaving		27.058.394	25.929.104	28.275.391	26.751.286	27.864.053
Education	Primary	20.07	26.37	21.72	19.47	21.79
	Secondary	31.39	25.50	43.52	42.45	41.56
	Vocational	17.88	10.70	28.21	28.04	26.45
	Higher	30.66	37.44	6.56	10.03	10.21
Before joining EU		**Latvia**	**Russia**	**Finland**	**Sweden**	**Total**
Gender	Female	45.83	43.46	32.62	48.82	38.20
	Male	54.17	56.54	67.38	51.18	61.80
Ethnicity	Estonian	15.28	3.85	47.65	52.13	37.73
	Non-Estonian	58.33	75.00	12.35	16.59	28.26
	Unknown	26.39	21.15	40.00	31.28	34.01
Age at leaving		26.958.333	25.292.308	27.308.725	26.199.052	26.700.311
Education	Primary	22.22	22.69	24.03	22.27	23.37
	Secondary	34.72	28.85	40.27	46.45	38.66

		Latvia	Russia	Finland	Sweden	Total
	Vocational	19.44	13.08	27.38	23.70	23.45
	Higher	23.61	35.38	8.32	7.58	14.52
After joining EU		**Latvia**	**Russia**	**Finland**	**Sweden**	**Total**
Gender	Female	48.02	48.16	27.57	31.20	29.80
	Male	51.98	51.84	72.43	68.80	70.20
Ethnicity	Estonian	24.26	6.80	64.36	56.96	58.84
	Non-Estonian	53.47	78.86	12.14	18.53	18.16
	Unknown	22.28	14.34	23.50	24.50	22.99
Education	Primary	19.31	28.13	21.46	18.85	21.54
	Secondary	30.20	23.90	43.88	41.57	42.00
	Vocational	17.33	9.56	28.30	29.01	26.91
	Higher	33.17	38.42	6.36	10.58	9.55

Source: CV Keskus data, authors' calculations.

Appendix 2. Job categories of workers in neighbouring countries (frequencies and %)

	Latvia		Russia		Finland		Sweden		Total	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Assisting / administration	14	5.11	55	6.84	88	1.18	54	4.63	211	2.17
Construction / Real estate	22	8.03	64	7.96	3,195	42.75	407	34.91	3,688	37.95
Electronics / Telecommunication	6	2.19	18	2.24	72	0.96	10	0.86	106	1.09
Energetics / Natural Resources	0	0	16	1.99	69	0.92	9	0.77	94	0.97
Finance	10	3.65	61	7.59	27	0.36	10	0.86	108	1.11
Media / New Media / Creative	18	6.57	26	3.23	24	0.32	8	0.69	76	0.78
IT / E-commerce	9	3.28	62	7.71	29	0.39	10	0.86	110	1.13
Management	31	11.31	49	6.09	57	0.76	19	1.63	156	1.61
Commerce	8	2.92	29	3.61	81	1.08	13	1.11	131	1.35

	Latvia		Russia		Finland		Sweden		Total	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Culture / Entertainment	7	2.55	33	4.10	35	0.47	12	1.03	87	0.90
Agriculture / Forestry / Fishing	3	1.09	4	0.50	550	7.36	69	5.92	626	6.44
Mechanics / Engineering	8	2.92	26	3.23	366	4.90	50	4.29	450	4.63
Sales / Retail	24	8.76	52	6.47	57	0.76	14	1.20	147	1.51
Law / Jurisprudence / Security	4	1.46	26	3.23	13	0.17	1	0.09	44	0.45
Public / Governmental service	1	0.36	10	1.24	8	0.11	4	0.34	23	0.24
Customer service	20	7.30	52	6.47	657	8.79	130	11.15	859	8.84
Healthcare / Pharmacy	4	1.46	11	1.37	87	1.16	27	2.32	129	1.33
Catering	15	5.47	20	2.49	236	3.16	32	2.74	303	3.12
Transportation / Logistics	16	5.84	33	4.10	326	4.36	57	4.89	432	4.45

	Latvia		Russia		Finland		Sweden		Total	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Marketing / Advertising / PR	17	6.20	50	6.22	25	0.33	6	0.51	98	1.01
Manufacturing / Production	12	4.38	48	5.97	1,248	16.70	136	11.66	1,444	14.86
Education / Science / Research	12	4.38	30	3.73	58	0.78	27	2.32	127	1.31

Source: CV Keskus data, authors' calculations.

Appendix 3. Job categories according to the US Bureau of Labour Statistics

Management, Professional, and Related Occupations includes the following categories from CV Keskus data:

- Energetics / Natural Resources
- Finance
- Media / New Media / Creative
- IT / E-commerce
- Management
- Culture / Entertainment
- Mechanics / Engineering
- Law / Jurisprudence / Security
- Marketing / Advertising / PR
- Education / Science / Research

Service Occupations includes the following categories of from CV Keskus data:

- Human Resources / Training
- Public / Governmental service
- Healthcare / Pharmacy
- geographic labour mobility, neighbouring countries, cross-country labour

flows, Estonia
- Catering
- Tourism / Hotels

Sales and Office Occupations includes the following categories of from CV Keskus data:
- Assisting / administration
- Commerce
- Sales / Retail
- Customer service

Natural Resources, Construction, and Maintenance Occupations includes the following categories of from CV Keskus data:
- Construction / Real estate
- Electronics / Telecommunication
- Agriculture / Forestry / Fishing

Production, Transportation, and Material Moving Occupations includes the following categories of from CV Keskus data:
- Transportation / Logistics
- Manufacturing / Production

Military workers were not reflected in CV Keskus data. Problems in categorizing mainly concerned such fields as electronics and telecommunications, energetics and natural resources, human resources and training, public and government services and advertising, marketing and PR. These categories made up less than 5% of all observations.

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PAPER

Global Public Goods and International Developmental Aid

Garima Sharma

Abstract The modalities of international development aid have formed one of the central themes of international governance discourses, since the historical provision of development aid to the recipient countries has been closely interlinked with governance conditionality calling for structural changes in these countries. Since the past decade, the governance modalities of developmental aid have assumed new dimensions, shaped by the emergence of the 'Global Public Goods' approach in the international development discourse. The purpose of this paper is to explore the conceptualization of international developmental aid through such an approach. It seeks to analyze whether the Global Public Goods approach provides an alternative to the hierarchical and unequal structure of the existing development aid discourse or reinforces it in new ways. This paper will thematically address three broad areas –re-framing the international developmental aid question through a public goods approach to examine the manner in which this issue is conceived in a global public goods framework; the extent to which this approach can be seen as an alternative by assessing the modalities of the relationship between development aid and global public goods and; finally, to interrogate the politics underpinning such an approach itself to problematize its ability to counter the traditional governance discourses.

Keywords Global public goods - International development - Aid financing - Governance

JEL Classification F50 F3 F1 F6 F5

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Introduction

The controversial role of foreign aid in discourses of international development is well known. The various debates within this discourse are widely defined according to the issues of the legitimacy of the shift from bilateral to multilateral lending, of the moral location of the agency of donors and recipients, reciprocity and the maintenance of a *status quo* order and of the relationship and effectiveness of this aid with respect to economic growth and social policy in developing countries. These debates, within the international development discourse, can be captured through the rationale of similar mechanisms on the basis of which the structure of international development aid is made feasible – the principle of compartmentalized exclusion through linearity in the transfer of resources between nation-states. Through such a transfer the stability of the donor-recipient relationship is preserved, whatever the costs of aid incurred.

This form of traditional aid financing is sharply different from the proposition of aid financing of global public goods. The central characteristic of these goods, much like the public goods, include non-rivalry[1] and non-excludability[2], resulting in 'market failure'. At the same time, unlike public goods, they cannot be optimally provided by the state, since they are in a global domain with cross-border spillovers, and require collective action. Given the necessity of collective action in the production, provision and consumption of these goods, in the case of aid financing of these goods, the donor-recipient divide gets considerably blurred. The blurring of traditional divisions due to the diffuse nature of these goods and the simultaneous inconceivability of aid financing of these goods, given certain conditions, is a paradox which leads to an affirmation of certain structural foundations of the idea of aid financing itself, even when applied to the supposedly radical framework of global public goods.

Changing Conceptions of Public Goods in the Discourses on International Developmental Aid

Policy discourses on international bilateral and multilateral aid effectiveness have primarily been legitimized through the implicit assumption of the effectiveness of such aid in institutionalizing the provision of basic public goods at the national level. Such an assumption is anchored along two lines:

1 Consumption of an additional unit of the good does not reduce its utility for others. For example, clean air.

2 The marginal cost of excluding an additional person from consuming the good is not equal to zero, so that nobody can be excluded from the consumption of the good.

First, the state in the recipient countries is characterized by a mode of a.) Progression/ transition/development and b.) Conditions of scarcity. Second, as such, the state needs an enabling policy environment, provided by a.) International aid institutions and b.) Changing politically-neutral, universalist discourses which anchor these aid modalities. Through all its processes and rationales, the structure of international aid and the discourses around it crucially rest on a moral assumption, which is premised on the logic that the processes of accountability, transparency and other important elements of state policy that they promote are crucial to an optimal and equitable provision of basic public goods.

Thus, the justification for international aid ultimately lies in the degree to which it is able to operationalize the substantial provision of public goods (Cook & Sachs, 1999). The fact that it has not been able to do so and has merely resulted in aid transfers, due to its complex politics, has increasingly led to the idea of aid financing of global public goods as a better alternative.

Restructuring International Aid through Global Public Goods: An alternative to traditional Aid?

The idea that a global public goods policy provides a definitive alternative to the international aid framework in international development remains contested. It has been indicated that only the terms of the debate of international aid have shifted and that global public goods can be viewed as being a part of the international aid framework –investment in global public goods is really a form of an investment in international developmental aid (Jayaraman & Kanbur, 1999). Underlying this line of argument is the idea that the dimensions of self-interest inherent in the logic of aid-giving by the donor countries has acquired radically different dimensions with increasing global interdependencies and the transnational and cross-border nature of the harms produced, such that the production of harm in the recipient country has substantial effects on the welfare of people in the donor countries –which is why donor countries would have an interest in a.) Strengthening public goods provision as a form of foreign aid and b.) Strengthening transfers or aid to enhance global public goods provision.

Whether or not, and in what proportion, countries will contribute to the provision of either incomes transfers (aid) or global public goods, depends, greatly, on the nature of the good –what is often referred to as the 'aggregation technologies' (Sandler, 2007), according to Jayaraman & Kanbur, 1999. The authors have highlighted three situations:

- If the good is simply 'additive' in nature, that is, a summation or aggregate

effort good, where one contribution is equally replaceable by another, then the donor country is likely to be indifferent to the choice between income transfers and global public goods. However, if the good is non-additive and efficiencies vary such that the donor is more efficient, it is likely that the donor will choose public goods provision over transfers. To the extent that this directly benefits the recipient, they can be regarded as a form of foreign aid.

- In case of weakest link goods, whose provision crucially depends on effective cooperation and contribution by the weakest country in the chain, the donor uses a combination of transfers and provision of global public goods.
- In case of best shot goods, whose provision depends on the single best effort of the well-equipped country or a group of such countries, the donor would clearly favour investment in public goods rather than any form of transfers.

As Jayaraman & Kanbur, 1999 argue, this framework shows that global public goods provision and transfers/ aid do not always go hand-in-hand. It is only under very limited conditions that the donor country would want to invest in international aid, apart from investing in the public good. In all probability, it would prefer to invest in the public good only, by the simple rationale of minimizing the additional cost of international aid, unless absolutely necessary (as in the case of weakest link goods).

This kind of a rationale for the provision of global public goods through aid financing gives rise to clear political implications. It is clear that the characterisation of aid financing through these types of goods needs to be interrogated rather than accepted in case of all goods.

Interrogating the provision of global public goods through aid financing

Aid financing of international public goods is markedly different from the manner in which financing for these goods, especially in the context of the summation or aggregate effort goods, has often been conceived in the policy application of the related literature. In case of these aggregate goods –forming the majority of global public goods, such as climate change mitigation –given the usually high immediate costs and highly diffuse immediate and uncertain future benefits, aid financing is, arguably, the least favored alternative. For instance, international negotiations on the provision of climate change mitigation are almost always conducted through the individualistic cost-benefit calculations by self-interested parties, such that even the issues of imperatives of development and justice are tailored to this broad

framework; aid financing is clearly a non-starter in such negotiations. It is only under certain conditions and for certain type of international public goods –weakest link and single best effort goods – that aid financing is favored. How, then, should we rationalize aid financing within a global public goods framework? It is clear that, given the circumscribed preferences for aid funding for certain type of global public goods, there is a clear departure from the traditional approach to international aid in two ways:

First, unlike the traditional mode of international aid financing, provision of international aid for global public goods is based on a notion of reciprocity, modelled through self-interest. In case of all types of global public goods, given that the benefits of the good are highly diffuse and non-excludable, all countries, including the donors, stand to benefit, in principle.[3]Aid financing, in the case of global public goods, is, thus, yielding material returns to the donor countries. This is unlike the case of traditional international development aid, where such an aid had to be accompanied by the additive of aid conditionality in order to be able to yield any such reciprocal benefits[4] to the donor countries.

Second, since aid implies lending or transfer of resources below market prices, aid itself becomes a form of public good which supposedly gives rise to substantial externalities for the donor countries. Given the nature of global public goods, it is not possible to impose conditionalities for their provision (weakest link and single best shot goods) or to clearly decide the identities of the particular donors and recipients.

Finally, it must be noted that the contribution of rich countries to the provision of global public goods can be construed as 'aid' only under certain conditions –if the rich countries are voluntarily willing to bear the short term costs of cooperation and provision of these goods, even if these costs are not commensurate with the near or future benefits, such as in the provision of goods like climate change mitigation, where short-term costs of cooperation and implementation are high, while the benefits are in the future and uncertain.[5]

3 It is in practical implementation that considerations such as incommensurability of cost and benefits, geopolitical and demographic and other special factors, intervene to filter the benefits of the good differently to different countries. But, in principle, given the non-exclusiveness of the good, all countries –donors and recipients –stand to benefit at least to a certain minimal extent.

4 These include benefits such as free market conditions in the recipient countries and a more accountable and rules-based political system –while the governance discourse of International Financial Institutions may tout these as benefits to the recipient countries, in reality, they are really enabling conditions to encourage greater investment in open markets for the donor countries. As such, the argument for the presence of reciprocity for aid is present here.

5 Currently, climate change negotiations can hardly fall under the category of an aid financed global public good.

Under such an understanding of 'aid', it is clear that the financing of weakest link goods and single best shot goods wilfully by the rich countries cannot be construed as a form of aid, as these are the kind of goods whose provision is imperative for the sustenance of the rich countries themselves –the benefits are absolute and the question of cost-benefit calculus does not arise in the first place. Arguably, then, we should speak of aid financing of global public goods only in the context of aggregate effort goods, and the argument for aid financing would be applicable to these goods, only if the rich countries are willing to shoulder the major costs of the provision of these goods, rather than go through the route of bargaining in international cooperation.

This explains why the idea of aid financing of global public goods has not favor with the developed countries (Carbone, 2007). The provision of these goods is vastly different from the traditional modes of aid financing, through either bilateral relationships or via multilateral institutions. Unlike these traditional modes, the benefits of aid financing of aggregate effort global public goods cannot be circumscribed effectively in the absence of institutional exclusion mechanisms or the presence of a sovereign political authority, and as such they demand so much more investment from the donor countries as is clearly incommensurate with even the diffuse and necessary benefits of these goods.

Clearly, then, under the given conditions, aid financing of global public goods cannot be envisioned as a clear alternative to traditional forms of aid.

How to Operationalize Global Public Goods through Aid – A new Alternative or an Additionality?

Operationalizing the provision of global public goods through aid financing can potentially involve three major alternatives:

1. Direct investment in global public goods as an alternative to traditional international aid financing.
2. Raising the aggregate amount of financing allocated by various international institutions and donor countries to aid, dividing it between global public goods and national public goods. Although this alternative signals the policy of raising additional financing for the purpose of global public goods vis-à-vis traditional aid, yet the additional amount of aid allocated separately for each of these purposes may not be proportional to the amount required or the amount that would have been allocated without division, if the financing was for only one of the either purposes.

3. Provision through the traditional policy, by tying aid conditionality more effectively to the conventional issue of public goods provision nationally, clearly giving preference to traditional mode of aid financing rather than a shift to global public goods. This assumes that the effective provision of national public goods would, in itself, improve the public goods provision at the global level.

Neither of these alternatives provides a comprehensive alternative in itself, as there are two crucial issues involved here:

First, to make our very first option of the sole aid investment in global public goods work, the option of provision of national public goods cannot be dismissed. This is because of two reasons:

1. The benefits of GPGs will be realizable only if their access is effectualised through the provision of national public goods in the relevant sectors (Velde, 2002). Therefore, arguably, the financing for GPGs cannot replace traditional aid, but has to be additional to it.

2. In case of weakest link global public goods, even if there is a substantial increase in the amount of aid allocated for the provision these goods (such as control of communicable diseases), it will remain ineffective and is likely to incur much higher future costs, since the provision of these goods at the global level crucially depends on their effective provision at the national level, up to the most vulnerable country.

Second, the issue of the state or a political authority remains central in both the perspectives of national as well as global public goods, and hence we should take cognizance of the idea that mechanisms of either conditionality or exclusion remain central to conceiving the relationship between global public goods and international aid. Moreover, the fact that the rich countries are reluctant to finance the provision of aggregate effort goods and would rather prefer traditional forms of international developmental aid only further reinforces the centrality of exclusion mechanisms to the logic of global public goods provision.

Given the centrality and desirability of exclusion mechanisms to the provision of international public goods by the donor countries, and the impossibility of operationalizing such a mode of exclusion at the global level, is it finally possible to herald the onset of an era of an uncontroversial mode of aid financing with the introduction of global public goods, where the donor countries would be fulfilling their obligations of aid without exclusion by conditionality and only a very minimum degree of reciprocity?

It is highly unlikely that a global public goods perspective can be conceived so optimistically as an alternative to the traditional discredited mode of aid financing.

This is because, while clearly not explicit, the logic of a certain kind of exclusion is inherent in the very rationale of the global public goods framework. When applied to the modalities of aid financing of global public goods for the benefit of the less developed countries, this rationale gives rise to profound structural political implications.

Implications of Aid Financing Model of Global Public Goods: The Politics of Trade-Offs

The emergence of investment in global public goods as an alternative to the promotion of international aid has given rise to a different kind of discourse, which underpins the modalities of international development. Discourses of international development, which have centered on international aid and governance, have ultimately relied for their effectiveness, albeit rhetorically, on the envisioning of basic needs and substantive outcomes as the public goods that they would ultimately deliver.

On the face of it, the policy discourse of global public goods radically restructures this narrative. Conceived as being normatively desirable goods, with a strong dimension of 'publicness' which fosters the idea of inclusion, the idea of global public goods appears to ground itself on equal public claims. This is markedly different from the politics of conditionalities and hierarchical relationships that characterized the governance discourses of international organizations, especially as they manifested in the politics of international developmental aid.

The pertinent question that, then, arises is whether the framework of global public goods provides an alternative restructuring of the governance discourse at the global level? In order to determine the space for alternative reconstructions offered by a global public goods approach, it is important to look beyond the policy rhetoric and interrogate the rationale behind the process by which such an approach is seen as becoming feasible.

Here, it is important to note that one of the main dimensions by which a global public goods approach can be seen to have policy workability is the dimension of the tradability of these goods, since global public goods have been conceived as being 'tradable' in the UN policy literature (Kaul, Grunberg, & Stern, 1999, p. 8). This dimension needs to be critically examined in order to see the possible developmental outcomes that it may lead to in global public goods governance, since it facilitates the homogenization of these goods in global policy. For instance, global public goods of financial stability and environmental sustainability can be conceived, on an equal footing, as being tradable, such that a reduction in the benefits to an actor accrued as a result of the production of one kind of good can be

offset by a corresponding, deliberate gain by that actor in another issue-area. This kind of a rationale has two main implications for international development:

First, negotiations on policies of international development become a zero sum, instead of a positive sum game. Whereas, politics of developmental policies like those of international aid have always been premised on positive sum outcomes, based on a transfer of assistance resources without any explicit intervention of the idea of material reciprocity[6], the politics of global public goods, in contrast, are structured on zero sum outcomes. The idea of tradability means that a country does not necessarily have to invest in global public goods by incurring the costs of such investment or transfer, as it can offset these costs by incurring benefits in another issue-area.

This raises the question of the effectiveness of a global public goods framework as an alternative to the international aid framework in development, when applied to specific problems like climate change mitigation. For instance, will not a positive sum outcome, though incurring more short-term costs for the individual actor, be more desirable and have less social cost in the long-term, than a zero sum outcome envisioned in a global public goods framework?

Second, and more importantly, the politics of trade-offs also has an implication in that it can now effectively signal a shift in policy emphasis from importance of outcomes to importance of processes. The fact that any good which is 'normatively desirable' (Bodansky, 2012) and possesses the properties of non-rivalry and non-excludability can be conceived as a global public good leads to a prior emphasis on the provision of just and accountable processes as a foremost global public good, in itself. For instance, UNDP, in one of its documents, clearly stated the following among its list of important global public goods – "Institutional infrastructure harmonized across borders to foster such goals as market efficiency, universal human rights, transparent and accountable governance, and harmonization of technical standards." (Kaul, Conceicao, Goulven, & Mendoza, 2002, p. 6).

Thus, while in the international development aid discourse these modalities were viewed through the much discredited and over-abused notion of conditionalities, which could never really gain legitimacy in the various frameworks of development, the global public goods framework radically altered the external dimensions associated with such conditionalities by transforming them into global public goods themselves.

6 This is not to disregard the notion of reciprocity in politics of international aid –it is prominent in many different ways (Hattori, 2003). However, the relevant point here is that these notions of reciprocity are structured, partially hegemonically, in discourses of power which lead to larger structural changes, such as perpetuation of status-quo of donor-recipient relationships. They are not, however, structured as immediate returns in terms of material reciprocity.

Given this kind of a conceptualization of global public goods and the manner in which the tradability of global public goods can lead to an articulation of the erstwhile conditionalities in traditional aid as global public goods themselves, the possibility of aid financing of aggregate effort global public goods, like climate change mitigation, would no longer appear as an averse proposition to the donor countries. At the same time, these political implications also make visible the fact that, in the final analysis –having dismissed the financing of weakest link and single best shot goods as a form of aid, and left only with aggregate effort goods –the idea of international aid, even when applied to the provision of global public goods, can, under the given conditions, only be feasibly conceived through the mechanisms of traditional modes of conditionality, albeit in different forms.

References

Bodansky D (2012) What's in a Concept? Global Public Goods, International Law and Legitimacy. The European Journal of International Law, Vol. 23 (3): 651-668

Carbone M (2007) Supporting or Resisting Global Public Good? The Policy Dimension of a Contested Concept. Global Governance, Vol. 13 (2): 179-198

Cook LD, Sachs J (1999) Regional Public Goods in International Assistance. In I. Kaul, I. Grunberg, & M. Stern, Global Public Goods: International Cooperation in the 21st Century (pp. 436-449) New York: Oxford University Press

Hattori T (2003) The moral politics of foreign aid. Review of International Studies , 229-247

Jayaraman R, Kanbur R (1999) International Public Goods and the Case for Foreign Aid. In I. Kaul, I. Grunberg, & M. A. Stern, Global Public Goods: International Cooperation in the 21st Century (pp. 418-435). New York: Oxford University Press

Kaul I, Conceicao P, Goulven KL, Mendoza RU (2002) Providing Global Public Goods: Managing Globalization: 25 Questions and Answers. New York: UNDP/ODS

Kau, I, Grunberg I, Stern M (1999) Global Public Goods: International Cooperation in the 21st Century: Questions and Answers. New York: United Nations Development Programme (UNDP)

Sandler T (2007, October) Retrieved from http://www.adbi.org/files/cpp.sandler.regional.public.goods.aid.development.pdf

Velde DW (2002, February) 'Aid financing for International Public Goods?'. Retrieved from Global Policy Forum: http://www.globalpolicy.org/images/pdfs/gpgfinancing.pdf

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PAPER

Principles and History of Islamic Finance

Carlo Mastrosimone

Abstract This article will give an overview of the fundamental principles of Islamic finance and wants to remember the history of Islamic financial system. To understand the current dynamics it is very important to know which Islamic countries have introduced an economic system based on Islamic law and which have introduced a dual system. It is also important to know where the first Islamic bank was born to understand the evolution of the spread of the Islamic banking system.

Keywords Zakat – Riba - Gharar - Maysir – Interest - Fatwa - Islamisation Bank

JEL Classification G20

Introduction

The model of Islamic finance is rooted in religious sources such as the Qur'an and the Sunna. The Holy Qur'an documents the word of God's which was revealed to Prophet Mohammed between 610 and 632 AD. The holy book covers all aspects of believer's life including his economic life and, as such, outlines the first rules regarding economic relations between believers and establishes the basics of the economic system.
The main elements of the Islamic economic and financial system are:

- Charity - *Zakat*
- Prohibition of interest - *Riba*
- Prohibition of economic uncertainty - *Gharar*
- Prohibition of speculation – *Maysir*

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Islam does not want to block or restrict the economic system but rather limit the dangers that can arise from it. The Islamic economic system aspires to reach development based on the real economy. For this reason, although money does have an important role, it is simply a tool through which payment can be made for the work done by people with the prohibition of capital accumulation. In Islam, money represents purchasing power, which is considered to be the only proper use of money. This purchasing power cannot be used to attain more purchasing power without undergoing the intermediate step of it being used for the purchase of goods and services.

The word *zakat* literally means "purification" or "growth" and corresponds to the payment of surplus wealth and profits produced by the believer in one year (R. Hamaui – M. Mauri 2009). In modern terms, it is a real asset tax on incomes and properties owned. This tax is necessary to fight poverty and support a community's growth. In the Islamic world, the person has the ownership of the properties as God's trustee in order to use them for the wealth of society and this brings us back to the concept of social responsibility. Other *zakat*'s purpose is to discourage the capital accumulation through a withdrawal of 2.5 per cent (F. Miglietta – A. Dell'Atti, 2009) and finally represents a good means of wealth redistribution. Other financial instrument prohibited by the Islamic law is the interest or *riba*. The Islamic jurists associate *riba* with the concept of unjust enrichment because it represents a form of gain that is not produced by human labor (C. Scattone 2010). A second definition of *riba* was given in 1980 during the Pakistan Council of Islamic Ideology for the elimination of the interest rate from the Pakistani economy.

The term *riba* includes the interest rate in all its manifestations, without distinction. In the Qur'an the prohibition of the interest is present in the second Sura, which shows that Islam gives a lot of freedom to believers to practice business but it indicates the boundaries that Muslims have to respect. Islamic scholars have identified two types of *riba* (R. Hamaui – M. Mauri 2009):

1) *Riba al-nasi'ah:* the interest rate is tied to the time that it takes to repay the debt.

2) *Riba al-fadl:* indicates the presence of the interest in the exchange of goods. This comes from a *hadith* where the Prophet Muhammad said that the transaction of sale is permitted only if it has as its object the exchange of: "Gold for gold, silver for silver, wheat for wheat, barley for barley dates for dates and salt for salt, like for like, equal for equal, hand to hand. If these types (*asnaf*) differ, then sell as you wish, if it is hand to hand" (Frank E. Vogel 2006).

The prohibition of interest has deep roots in the Islamic conception dating back to

the pre-Islamic period. During this period, known as *jahiliyya or* illiteracy, when people granted loans if the debt could not be repaid this was doubled.

According to modern Islamic thought, *riba* consists on a guaranteed interest rate and established before the economic result of the business financed. The problem is the split of the payment of the debt from the economic result. In the contemporary era, the interest rate is at the base of the world economy and it ensures gains for the credit institutions and in the West we could say that a system without interest could block the whole system. Even in the Islamic world a debate has begun on this topic, and Muslim scholars have tried to find a way to legitimise interest rates. In 1904, the Egyptian Mufti Muhammad 'Abduh affirmed the legality of the interest paid on the deposits with Egyptian post office's saving fund by defining interest as "lawful dividends resulting from a participation in the profits of a legal business".

His assertion is based on the idea that the money deposited would be used in legal activities and would have complied with the obligations arising from the principle of profits and losses sharing, and the State would act in a manner beneficial both to the depositor and to the community (C. Tripp 2006). In 1989, a *fatwa* of Egyptian Mufti Muhammad Sayyid Tantawi, head of the Al-Azhar University, justified and considered legitimate interest paid by the State on government securities because the funds were used for social purposes ensuring a public utility (F. Miglietta – A. Dell'Atti 2009).

Other two concepts prohibited by Islamic morality are: *gharar* and *maysir. Gharar* means uncertainty and risk, *maysir* means speculation (R. Hamaui - M. Mauri 2009). This prohibition was used to limit gambling and the creation of sales contracts that did not refer to the goods immediately traded. Today, the prohibition of *gharar* and *maysir* has significant use within the Islamic insurance contracts because, to be lawful, they have to provide mutual assistance and not prevent the hypothetical changes, because they are uncertain for man but not for God.

History of the Islamic Model: Egypt, Pakistan, Saudi Arabia, Iran, Malaysia

The contemporary history of the Arab and Muslim countries can be enclosed in two separate phases of European Imperialism in the Middle East, North Africa and Asia during the 19th and 20th centuries.

The first phase is represented by the invading power, which imposes to the local world, western social and economic traditions. The next stage is the decolonisation. Western states left nations based on the western model, linked to global economic system that reflected the values and interests of the colonial states.Between these two phases in the Islamic world a careful consideration about an economic morale was born that considered the financial transactions among men as a fundamental

part of God's plan; in order to avoid social divisions and ensure stability for the Muslim community, looking for alternative ways of development imposed from outside. In these areas the responses of local rulers were very different, such as the refusal of the systems imported during the colonial period or a gradual introduction of alternative models inspired by the fundamental principles of the Islamic religion. In this reflection, Islam represents a third way, replacing capitalism and socialism as an engine for growth and development. In fact, Islam does not provide any explicit plan for the economy, but it is possible to rethink the economic system in the light of religious education to create an authentic Islamic brand.

As argued by Muhammad Baqer al-Sadr (1935-1980) Islamic economics is not a science but a doctrine, because it does not explain the reason for the occurrence of certain economic events, but gives direction, based on the concepts of social justice, solidarity, sharing the profits and losses on the job (I. Warde 2010). The birth and development of the Islamic banking and financial system took place during the years of decolonisation and can be summarised into two main phases. The first coincides with the end of the Second World War and the beginning of the decolonisation, with the independence of Islamic countries that led to the realisation of the failure of the capitalist and the communist system regarding the political, economic and social needs of the Islamic world. The second phase begins with the Arab-Israeli War of 1973, followed by two major oil shocks of 1973 and 1979, generating huge surpluses of dollars especially for the benefit of the Gulf countries, and finally by the Iranian Revolution of 1979.

The modern idea of Islamic finance was born in India in 1940, thanks to the creator of the *Jamaat-i Islami*, Abul-'Ala Mawdudi, who popularised the term "Islamic Economics", arguing that the economy and finance are a fundamental part of the Islamic world and constitute an alternative model (I. Warde 2010).

Egypt

The birth of the Islamic bank and the financial system dates back to 1963 with the creation of the Local Mith Ghamr Saving Banks, based in Egypt, in Mith Ghamr, rural town in the Nile Delta. This bank was founded by the Egyptian Ahmad Al Najjar, who studied in Germany and tried to apply in Egypt the German model of Agricultural Savings Banks, which contributed to Germany's reconstruction after the Second World War (R. Hamaui – M. Mauri 2009).

For five years, the bank became the seat of a series of businesses, each of which was in accordance with Islamic principles in financial matters: deposit accounts that did not pay interest, interest-free loans, collection of *zakat* and social accounts and so on. This experiment lasted until 1971, when the Nasser Social Bank was

created, which resumed the spirit of Mith Ghamr Local Saving Banks. The process of Islamic banks' development in Egypt continued with the creation of the Faisal Islamic Bank of Egypt (FIBE) by the special Act n. 48 of 1977 (R. Wilson 1960) and in 1980 the Islamic International Bank for Investment and Development (IBID) was established, through a ministerial decree in accordance with the law n. 43 of 1974 (R. Wilson 1960). The IBID offered services like any other lending institution, like savings accounts and investment accounts and also it financed agricultural, commercial and industrial projects, working through the Islamic principles of profits and losses sharing and the prohibition of interest. Even during the Hosni Mubarak's regime the development of Islamic banks did not stop. In 1981, one of the Egyptian state-owned banks, Bank Misr, publicized the opening of a chain of branches all over Egypt, which would offered Islamic services according to the Holy Qur'an. Soon in Egypt appeared a plurality of conventional institutions that opened Islamic windows, many of which were part of the American and European finance, like Citibank, Union des Banques Suisses, HSBC and Deutsche Bank, succeeding in their advertising operation to ensure the separation between the Islamic section from the conventional.

Pakistan

In Pakistan, the process of Islamisation took place gradually after 1977, by the coup of General Zia ul-Haq. He announced that he wanted to Islamise the Pakistani economy because Pakistan, which means "land of the pure", was created in the name of Islam and will continue to live only by applying Islamic law (I. Warde 2010).

The plan proposed by the new dictator would be implemented in two phases. The first phase (1979 - 1984) would have introduced the payment of *zakat*, with a withdrawal of 2.5 per cent on saving accounts, new financial tools were introduced, government and corporate bonds, life insurance in accordance with the Shari'ah. The second phase (from 1984) involved the area of loans and investments in cash, with the elimination of *riba* from the national system. In fact, a legal gap remained that allowed the foreign currency deposits, loans granted to foreigners and the Pakistani public debt to operate on the basis of interest rates, creating, in effect, a parallel system (R. Wilson 1960). In September 1977 the Council Islamic Ideology (CII) was established, with the task of eliminating the interest from the whole economic system. Given the title of "Constitutional Advisory Body" by the Government, the CII was the first board to receive the authorisation to reform the financial system (R. Wilson 1960). Moreover, a panel of experts was created with the task of supporting the work of the CII which developed a report, "Report on the Elimination of Interest from the Economy". The Panel started to work in July 1979 when the three largest

Pakistani financial groups, the House Building Finance Corporation (HBFC), the Investment Corporation of Pakistan (ICP) and the National Investment Trust (NIT), were forced to convert their business, moving from a system based on interest to one completely conform to the dictates of Shari'ah (R. Wilson 1960). On June 1, 1980, the first changes to the banking system came into force, bringing the main measures of Islamisation. For four years there was the possibility to choose between a system based on the interest rate and a system based on Islamic law, but by July 1985, the whole system was declared fully Islamised.

This was true only for the population, while the state debt, loans to foreigners and foreign currency accounts were excluded, which continued to operate according to the conventional system. In January 1998, however, the Government decided to completely eliminate interest rates from the country's economic system. This decision was taken when the banking system was in serious difficulties because only 30 per cent of institutions continued to make profits. The banks decided to adapt, using 90 per cent Not Profit & Loss Sharing contracts (Not-PLS), which guaranteed more earnings than Profit & Loss Sharing contracts (PLS). The Pakistani Islamic banking industry today is growing thanks to the entry of new banks coming from the Gulf and between 2003 and 2004, the financial institutions that offer Islamic services has risen from 17 to 4738. Finally, since 2005 Kuwait decided to invest in Pakistan creating commercial banks as the Pak-Kuwait Group and Pak-Kuwait Takaful Insurance Group Co.Ltd. Since 2008, the Dubai Islamic Bank has been authorized to open fifty branches by 2011 (I.Warde 2010).

Saudi Arabia

The Arab-Israeli Wars and the oil shocks of 1973 and 1979 have given the possibility to Saudi Arabia to become the leader in the Middle East which gave a boost to the development of Islamic banking and financial system. Saudi Arabia was initially allied with the Egyptian President Nasser, supporting the policies of nationalization. Following to the French, English and Israeli military operation in Sinai during the "Suez Crisis", in order to prevent the nationalization of the Canal and the consequent approach of Nasser to the USSR, the Saudi King Sa'ud was induced to join the "Eisenhower Doctrine" (D. Atzori 2010), according to which the United States would guaranteed the safety and protection of Middle Eastern States from a possible Soviet interference.

The Nasser's persecution against the Muslim Brotherhood, in the course of 1960, many of them were forced to escape in Saudi Arabia, where they had the opportunity to spread their Islamic ideas especially among workers employed in the oil wells. These new extremist ideas penetrated inside the Saudi government and in-

stitutions and on March 28th, 1964, King Saud was forced to abdicate by his brother Faisal (D. Atzori 2010). The Nasser's defeat in 1967, during the war against Israel, known as "Six Days War", the Saudi establishment decided to take the leadership of the Islamic countries. In 1969 Saudi Arabia promoted the establishment of the Organization of the Islamic Conference (OIC), which brought together all the heads of State of the Islamic countries, establishing it in Jeddah. In addition the power of the Saudi Kingdom was further strengthened by the enormous revenues generated by increases in oil prices following the crisis of 1973. Faisal decided to invest these huge resources in the modernization of the country and also internationally. The tools that could be used were already ready; it was the Muslim World League and the OIC: both were used to promote the popularity of the Saudi Royal House and increase the cooperation between the Islamic countries, especially in the economic field.

After Nasser's death in 1970 and the seizure of power by Anwar al-Sadat, Saudi Arabia and Egypt knew a rapprochement. In 1972, a congress was held in Cairo between the various Arab heads of State which unanimously affirmed the application of Islamic law even in financial transactions. The goal was to raise the quality of life in the Islamic world by creating an international Islamic bank that would work for the development of the Muslim poor States (D. Atzori 2010). The new banking and financial systems received a boost in recent years thanks to the work of Faysal and his son Muhammad Al Faisal Al Sa'ud. In 1975, for will of finance ministers of some Arab states, during OCI section, the Islamic Development Bank (IDB) was established, with the intention of creating an institution to direct the funds towards the development of poor Islamic areas by providing interest-free loans and comply with the essential principles of Islamic economy. Another aim was to strengthen the training and expertise in financial matters and, more importantly, show to the world that there was an alternative to conventional capitalist system to support and finance economic growth. The IDB could rely on the immense economic power that came from the oil's sale and directing the proceeds to the less developed Muslim nations to strengthen social cohesion among Islamic states (D. Atzori 2010).

The authorized capital of the IDB amounted about 2 billion dinars. The greatest influx of money came from Saudi Arabia, which contributed by 200 million dinars, while Kuwait, Libya, United Arab Emirates by 100 million dinars each. For the poorest Muslim countries, such as Afghanistan, Mali, Mauritania, Niger, was asked a share of 2.5 million dinars (R. Wilson 1960).

Iraq and Iran didn't participate in the Conference and didn't support the creation of the Bank for purely political reasons because in the same year the Agreement of Algiers was signed to conclude the disputes that occurred along the border of the Shatt al-'Arab.

In 1977 the International Association of Islamic Banks (IAIB) was created,

chaired by Prince Muhammad as an institution of coordination and advice for the new Islamic banks, which still play a major role in the dissemination of economic and social principles of Islam.

The role of IAIB was to preserve and extend the spiritual and economic aspects of the community, to guarantee this aim the community was protected from economic marginalization, impoverishment, corruption and secularism. These ambitious ideals were believed to be achievable through various contractual instruments that banks possess to guarantee respect of Islamic economy.

Since 1980, important research centers about Islamic finance and economy were set up, including the Saleh Kamel Center for Islamic and Commercial Research, founded in 1979 from Sheikh Saleh Kamel, Professor at University of Al-Azhar. In 1981 the Prince Muhammad started the biggest project realized until then, founding the bank *Dar al-Mal al-Islami*, with an initial capital of $1 billion dollars.

The evolution of Islamic finance in Saudi Arabia was not without obstacles. The close alliance with the United States led to protests by religious extremists. Following the last oil shock of 1979, the Saudi government authorized to operate on its territory even conventional banks, prohibiting the use of their religious connotations for Islamic banks. Currently, in addition to *Dar al-Mal al-Islami* and the *Dallah Al Baraka*, in Arabia the only commercial Islamic bank that can operate on the territory is the Al Rajhi Banking and Investment Company (R. Wilson 1960).

Iran

Another Muslim country, but not Arab, which adopted a system based on the Shari'ah principles was Iran, which, following the Revolution of 1979, the seizure of power by the Ayatollah Khomeini and the birth of the Islamic Republic, nationalized and converted to Islam the whole banking sector.

In the early years of the revolutionary government of Ayatollah, his policy was focused on three main elements:

- the desire to achieve economic and financial independence, breaking with the Shah Mohammad Reza Pahlavs policies of centralizing and pro-Western;
- to end the ideological struggle that was dividing the Persian elite;
- to consolidate the revolution according to the principles of Islam.

In March 1979 a new Constitution was approved by referendum, which provided at the article 77 that all international treaties, conventions, contracts, agreements, were approved by Parliament, and at the article 81 prohibited the benefit on conces-

sions to foreigners for the creation of new companies, organizations operating in the commercial, industrial, agricultural, service sector and in oil extraction (I. Warde 2010).

In 1984 the «Law for usury-free banking operation» was enacted and eliminated the interest rate from the whole banking sector. Since interest rates were eliminated, the banks decided to adapt the Not Profit & Loss Sharing contracts, which guaranteed more profit in banking transactions. However, even in Iran interest rates have not been completely eliminated because it was used for foreign transactions. Only in 1985 the new financial system began to operate thanks to the education of approximately 20,000 employees on the Islamic banking and to the recovery of the economy due to the revival of oil exports to the allies. Since 1989, with the death of Ayatollah Khomeini, Iranian policy changed. The new ruling class decided to put an end to the Iran's isolation intensifying oil exports and investing the funds in the modernization of the country. In addition to this, loans and foreign investments were needed, reinterpreting the article 81 of the Constitution of 1979 affirming that the international contracts were no longer considered like that if one party was a Ministry or a Government agency, subject to the article 77 of the Constitution (I. Warde 2010). This allowed the opening to new foreign partners especially to the young Islamic Republics born from the USSR's dissolution in 1990 - 1991 and from the Gulf countries.

Since 1990, the Iranian government is committed to develop Islamic banking sector, receiving funds from other countries until the attacks on September 11th, 2001, when Iran became part of the black list drawn up by the United States and the United Nations. In March 2008, the UN Security Council passed the Resolution no. 1803 which stated that the States members had to supervise the activities of financial institutions in their territories and on all banks domiciled in Iran. In addition, the resolution specifically mentioned two Iranian banks such as *Bank Melli* and *Bank Sedarat*. Since 2007, these two banks along with *Bank Sepah* were hit by United States' sanctions for anti-proliferation and anti-terrorism reasons, in order to stop the funding of projects for the growth of nuclear power stations. The government of President Mahmoud Ahmadinejad has confirmed the official support the Islamic banking system, because Iran could become in the future an alternative model and guide in the Middle East region.

Malaysia

The Islamic finance cannot be placed only in the Middle East, but its spread includes also South East Asia. In 1963, in Malaysia *Tabung Hajj* was created, initially known as Muslim Pilgrims Management and Fund Board (PMFB), and this bank

was the first Malaysian Islamic institution. PMFB was born with the aim to collect and manage the savings of those who wanted to make the pilgrimage to Mecca and had considerable success: the resources amounted to 12.9 million Ringgit and in 1982 reached 338.7 million, while depositors grew from 47.970 to 535.900 (D. Atzori 2010).

The Malaysian Islamic banking system was also developed for socio-political reasons. Malaysia was ruled by the Chinese minority who controlled the whole country, although the majority of the population, Malay, was Muslim. The political opposition was led by young Muslims inspired by the theories of the intellectual Indo-Pakistani Mawdudi, demanding more power and especially the State's islamisation. The Malaysian government didn't ban the Islamic associations, although didn't accept their entry into politics. Since 1970 the main force of Government was the United National Organization (UNO), which promoted the Islamisation and at the same time supported the secular institutions. The process of Islamisation accelerated until 1980 by the Prime Minister Mahath Muhammad, who led the country towards a fast economic development (D. Atzori 2010). In these years workshops and study committees were established to analyse the examples of Islamic banking in the other countries. The main problem was the Law of 1973, which regulated the banking sector allowing the use of the interest rate. A committee was invited to study and reform the law in order to promote the spread of Islamic banks. In 1982 a bill was presented and passed with the name of "Islamic Bank Act," which entered into force on April 7th, 1983, and in 1984 was enacted the new Islamic insurance law, the Takaful Act (D. Atzori 2010).

By the Islamic Bank Act the Bank Islam Malaysia Berhad (BIMB) was created and the initial capital provided came from *Tabung Hajj* and Malaysian government, the major shareholder (D. Atzori 2010). At the same time the Central Bank of Malaysia created a Religious Supervision Committee, composed of members from the Scholar's Association of Islamic Religion. Even the Malaysian social structure was changing because the Malay middle class, predominantly Muslim, began to have greater economic power, following the development of the economy. Banking institutions and research centers on Islamic finance were created, giving employment to many young graduates and in 1983 the important International Islamic University in Kuala Lumpur was founded. The launch of the Islamic interbank money market in 1994 and the liberalization of the Islamic financial industry allowed more foreign participation and the growth of the whole system. Malaysia, through strict observance of Islamic precepts and efficient economic policies, managed to ensure the development of the economy until 1997, when it was involved in the Asian crisis. The government decided not to adopt the prescription of the International Monetary Fund, adopting measures to fight poverty, boosting enterprises' privatization and the industrial development, all focused on the possibility of using the funds of the

Islamic population.

The Malaysian politics had a great success also thanks to the events of September 11th, 2001, that urged the population to invest in domestic Islamic banks as a consequence of the freeze of Muslim funds. In 2005 the first foreign Islamic bank from the Middle East entered into Malaysian market and in 2008 the country's first Islamic banking subsidiary of a locally incorporated foreign bank was established. The issuance of licenses to foreign Islamic financial institutions promoted healthy competition and added to the dynamism of the Islamic financial industry. Furthermore, Malaysia hosts the Islamic Financial Services Board (IFSB). This international prudential standard - setting organisation promotes soundness and stability of the Islamic financial industry by issuing global prudential standards and guiding principles. Its international membership base includes regulatory and supervisory authorities, intergovernmental organisations and financial market players. The constant development of the Islamic financial system helped to transform Kuala Lumpur into a big financial center, making Malaysia a competitor of Saudi Arabia (D. Atzori 2010). The intelligent strategy implemented by the Central Bank of Malaysia spread Islamic Banking without creating the break that had occurred in other countries, creating confusion and disorientation in an industry that was unprepared for the change. Malaysia continues to contribute to the strengthening and soundness of global Islamic finance. Recent initiatives include participating in a Task Force on Liquidity Management and a Task Force on Islamic Finance and Global Financial Stability. Both these task forces were established by the IFSB and the Islamic Development Bank (IDB). The outcome of these task forces led to the establishment of the International Islamic Liquidity Management Corporation (IILM) to facilitate global cross - border liquidity management.

Current Situation

Since 1980 many things are changed starting with the banking deregulation launched by the American President Reagan and in the Arab world the International Association of Islamic Banks (IAIB) lost its monopoly on the control of Islamic finance. New financial centers began to compete against Saudi Arabia, such as Malaysia which created economic institutions to direct the new "financial policy" of the Islamic world (I. Warde 2010).

The spreading of the Islamic model has suffered several setbacks in the Middle East by the reduction oil exports during 1990, decrease of foreign trade, political instability in the Middle East, the excessive increase in spending for armaments and the Asian financial crisis. There has been an economic upturn with the attacks of September 11th, 2001, when many Islamic investors have preferred to repatriate

their capital because United States and United Nations have imposed the block of funds that were coming from Islamic countries because they were considered possible sources of financing of terrorists or any other terrorist groups that were threatening the West. On September 12th and 28th, 2001, the Security Council of the United Nations has approved the Resolutions n. 1368 and 1373, declaring that all the member States had to bring to justice the perpetrators, organizers and sponsors of the attacks, prevent and suppress the financing of terroristic acts, criminalize the provision and collection of funds and freeze the funds and other assets related to the execution of terroristic acts.

On the Islamic side, in response to the new wave of development, since 2002 institutions were created such as the Islamic Finance Services Board (IFSB), the International Islamic Financial Market (IIFM) and the Liquidity Management Center (LMC). To guarantee transparency and development for Islamic banks the Islamic Rating Agency and the Islamic International Rating Agency (IIRA) were created, based in Bahrain, supported by Saudi Arabia and Bahrain, to evaluate the accounts and the products marketed by the Islamic financial institutions, standards and guidelines issued by the institutions of regulation (L. Siagh 2008). Since 2005 the International Islamic Center for Reconciliation and Commercial Arbitration for Islamic Finance Industry was created in Dubai, regulating the financial and commercial disputes and since 2005 Malaysia has authorized to operate on its territory and its markets the Islamic banks from the Gulf countries (I. Warde 2010).

In the new millennium the Islamic finance manages assets with estimated value of 500 billion U.S. dollars, with average growth rates of 10-15 per cent a year. Thanks also to the action of many international institutions such as the International Monetary Fund (IMF), the World Bank (WB) and the World Trade Organization (WTO), which promote the free movement of capitals, the Islamic model was exported to the West, from the United States to England, France and Germany. At the base of this spread are both the intensification of migration flows to Western countries and the need to reinvest the proceeds of oil exports. Simultaneously to the developments of the Islamic Banking, the investments in Islamic insurance sector, Takaful in Arabic, and the issues of bonds through Islamic bonds, Sukuk in Arabic, are increased. In Western countries, where Muslim communities are significant, Shari'ah compliant products are traded by conventional financial institutions such as Citigroup, HSBC, Deutsche Bank, UBS, ABN Ambro, and BNP Paribas.

References

Vogel FE (2006) Islamic Finance: Personal and Enterprise Banking

Gimigliano G, Rotondo G (2006) La banca islamica e la disciplina bancaria europea, collana Seminari di Diritto Bancario e dei Mercati Finanziari n.4, Giuffrè Editore

Atzori D (2010) Fede e Mercato: verso una via islamica al capitalismo?, Il Mulino, Milano, 2010

Hamaui R, Mauri M (2009) Economia e Finanza islamica, Il Mulino, Milano

Miglietta F, Dell'Atti A (2009) Fondi sovrani arabi e Finanza islamica, Egea

Scattone C (2010) L'usura nel "verbo" religioso. L'Islam e la prassi bancaria moderna, Datanews, Roma

Siagh L (2008) L'Islam e il mondo degli affari, ETAS, 2008

Tripp C (2006) Islam and the Moral Economy. The Challenge of Capitalism, Cambridge University Press

Warde I (2010) Islamic Finance in the Global Economy, Edinburgh University Press

Wilson R (1960) Islamic Financial Markets, Routledge, New York

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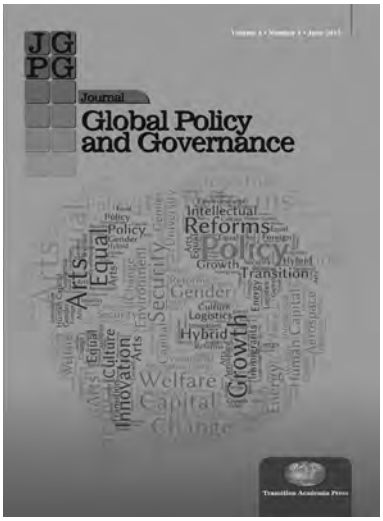

Journal of Global Policy and Governance
Aims and scope

Global governance is a challenge of our era and us as human beings no matter where we live and what values we believe in. After a 100 years of development, international relations are so closely and tightly knit. A problem in a community might affect the life of the people in a remote part of the world and its solution might also be in the hands of these people but can't be assumed outside the more global International Relations theories and practices approach, an interrelated already practiced at every policy decision making, economic and financial levels and first of all by the main powers.

How can we manage this complex of various relations matters for our life and common future? It is the time for us to invest our wisdom and energy to make global governance work now and to give a sense to the United Nations already reduced to a zero-sum-game playing on the major emergencies and conflicts due first of all to the obsolete veto system that would be at least extended to all the 15 countries of the Security Council, being them permanent or at rotation, with the weighting of votes bringing less hypocrite the present five Jalta powers partition already 70 years ago. We are talking of the world not existing anymore.

There is no simple way and framework for global governance. Global governance is a general term which means to think globally and act globally. It is complicated because problems might be local. It is complicated because problems might be also global. It is complicated because the solution of problems might be local but also in a global framework global. That is why we need to check issues case by case carefully. We need to sort out what solution is the best choice for the problem. We need to identify who should be the persons of good will taking the challenge and adding

their intellectual and scientific capabilities to the human destiny. We have to take an action worldwide. Global issues are definitely the subjects of global governance. Meanwhile, global governance takes care of issues with local reasons and local solution because we believe the experience might be helpful for people living in other parts of the world.

Interdependence of International Relations with finance, economy, technology, research and advanced knowledge until a few years ago unimaginable, new military might introduced by innovation must be some of the crucial challenges, where also our Journal Global Policy and Governance intends to contribute opening its pages, issue after issue, to faculty, experts, testimonies, articles and relevant review of books, junior researches working papers. But we know also that traditional conflicts would not have any perspective in the medium term and will bring to the defeat of the ones who are imagining a return to the past.

We intend to embrace and reach all the possible interested colleagues and fellows around the world, as choices and strategies in all the sectors involving public and private governance, nobody excluded, are under questioning and innovative evaluation. Global world is not anymore a provocative statement, a kind of utopian return to realism and the theories dominant up to the German reunification, the end of Soviet Union and the war in the Balkans have now become obsolete by definition.

Middle East, Black Sea, Eurasia, Ukraine, Baltic, Turkey have the capability to reshape the future. Even if they are now in the middle of the fire, soon the devastations and impressive mass killings will be overcome and reconstruction taking the lead in many of these countries.

But why not underline the successful 30 years development and growth of China, a unique case in the last 500 years. China is the third world power, after European Union and USA, and has now similar problems we have encountered and are still facing nowadays, needs to find a political solution to reforming and giving voice to an accountability to its almost 1 billion 500 million inhabitants.

We really have to rethink the International Relations and the theories of Global Governance and Policy Choices, accepting the pluralities of institutional architectures and ways to give voice and accountability to the citizens. The European Union represents a “non Statehood” institutional governance, without even a Constitution and the Sovereignty belonging to the member countries. Do you believe the EU will change its architecture established by the Treaty of Rome in the future? This is an illusion of the antagonists of the different strategies and policies that were adopted right up to the Euro and the high welfare and technologic standards already achieved, even in the face of a crisis on 2008 that from the Atlantic arrived to Europe three years later and is now affecting East Asia. By 2020 we will be out of this tunnel everywhere in the world.

To add a valuable contribution to this scientific debate is our very aim and scope

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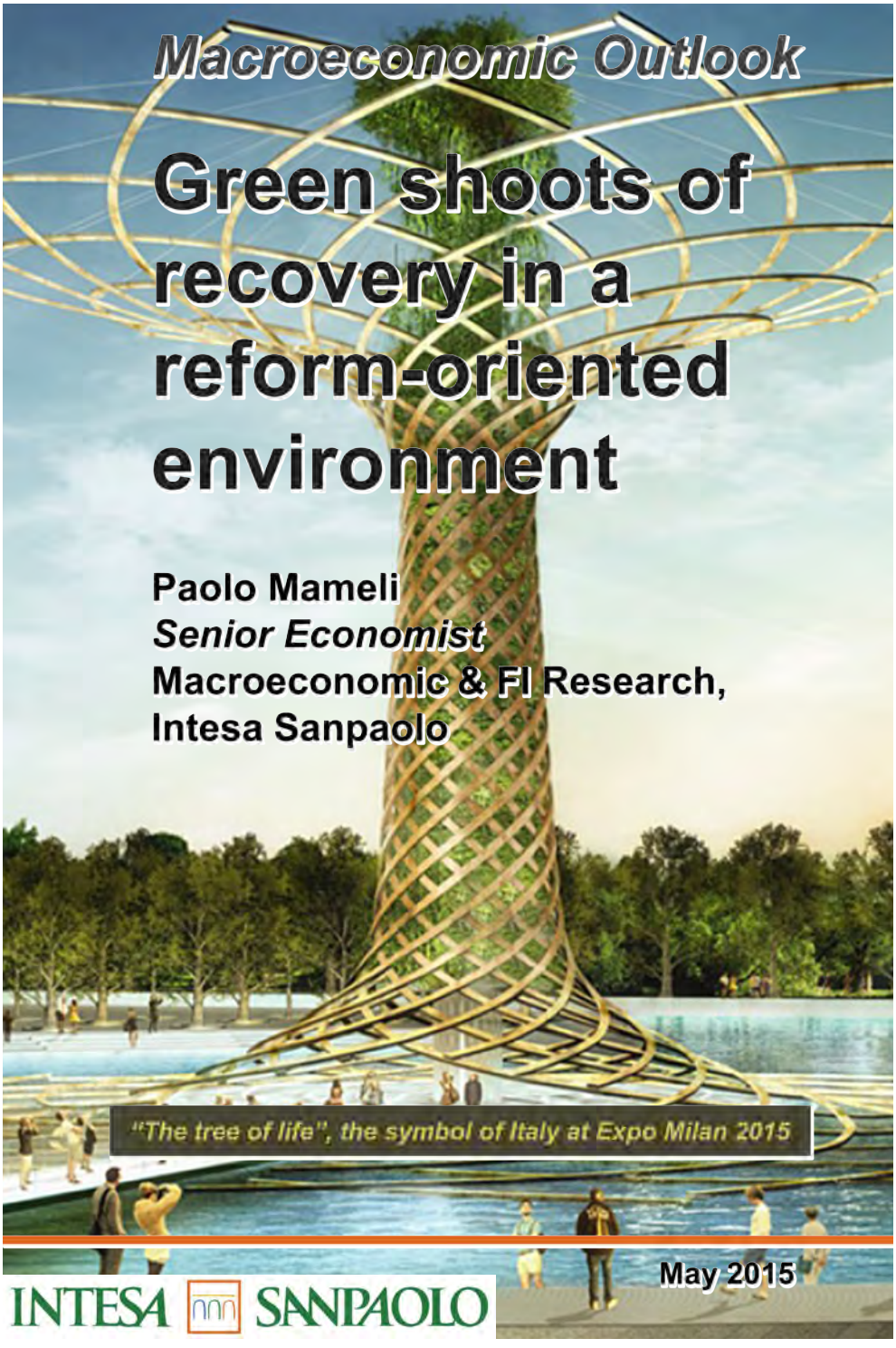

Macroeconomic Outlook

Green shoots of recovery in a reform-oriented environment

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"The tree of life", the symbol of Italy at Expo Milan 2015

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